

APPENDIX C2
Laboratory Reports
(Previous Investigations)



Professional Analytical Services

Am Test Inc.
13600 NE 126TH PL
Suite C
Kirkland, WA 98034
(425) 885-1664

Mar 14 2019
Advanced Analytical
2821 152nd Ave NE
Redmond, WA 98052
Attention: Val Ivanov

Dear Val Ivanov:

Enclosed please find the analytical data for your 715 DEXTER PH.II project.

The following is a cross correlation of client and laboratory identifications for your convenience.

Table with 4 columns: CLIENT ID, MATRIX, AMTEST ID, TEST. Row 1: HC-B2-2.5, Soil, 19-A002911, MET, Hg-CV

Your sample was received on Thursday, March 7, 2019. At the time of receipt, the sample was logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Handwritten signature of Aaron W. Young
Aaron W. Young
Laboratory Manager

Project #: C90305-2

BACT = Bacteriological
CONV = Conventionals

MET = Metals
ORG = Organics

NUT=Nutrients
DEM=Demand

MIN=Minerals

Am Test Inc.
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(425) 885-1664
www.amtestlab.com



Professional
Analytical
Services

ANALYSIS REPORT


Advanced Analytical
2821 152nd Ave NE
Redmond, WA 98052
Attention: Val Ivanov
Project Name: 715 DEXTER PH.II
Project #: C90305-2
All results reported on an as received basis.

Date Received: 03/07/19
Date Reported: 3/14/19

AMTEST Identification Number 19-A002911
Client Identification HC-B2-2.5
Sampling Date 02/26/19, 12:37

Total Metals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Acid Digestion	Y				SW-846 3050B	KQ	03/11/19
Silver	< 0.286	ug/g		0.29	EPA 6010D	KQ	03/12/19
Arsenic	2.73	ug/g		0.29	EPA 6010D	KQ	03/12/19
Barium	79.6	ug/g		0.029	EPA 6010D	KQ	03/12/19
Cadmium	2.000	ug/g		0.029	EPA 6010D	KQ	03/12/19
Chromium	32.4	ug/g		0.29	EPA 6010D	KQ	03/12/19
Lead	10.4	ug/g		0.57	EPA 6010D	KQ	03/12/19
Selenium	0.310	ug/g		0.29	EPA 6010D	KQ	03/12/19
Mercury	0.0279	ug/g		0.0100	SW-846 7471B	JH	03/11/19


Aaron W. Young
Laboratory Manager

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QC Summary for sample number: 19-A002911

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
19-A003124	Silver	ug/g	< 0.268	< 0.24	
19-A003124	Arsenic	ug/g	1.10	0.910	19.
19-A003124	Barium	ug/g	30.0	26.0	14.
19-A003124	Cadmium	ug/g	< 0.02685	< 0.02	
19-A003124	Chromium	ug/g	23.9	21.7	9.6
19-A002911	Mercury	ug/g	0.0279	0.0232	18.
19-A003124	Lead	ug/g	1.39	1.21	14.
19-A003124	Selenium	ug/g	< 0.268	< 0.24	

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
19-A003124	Silver	ug/g	< 0.268	43.9	51.0	86.08 %
19-A003124	Arsenic	ug/g	1.10	43.4	51.0	82.94 %
19-A003124	Barium	ug/g	30.0	81.0	51.0	100.00 %
19-A003124	Cadmium	ug/g	< 0.02685	41.40	51.00	81.18 %
19-A003124	Chromium	ug/g	23.9	72.6	51.0	95.49 %
19-A002911	Mercury	ug/g	0.0279	0.182	0.162	95.12 %
19-A003124	Lead	ug/g	1.39	42.0	51.0	79.63 %
19-A003124	Selenium	ug/g	< 0.268	40.2	51.0	78.82 %

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Silver	ug/g	0.200	0.198	99.0 %
Arsenic	ug/g	2.00	1.98	99.0 %
Barium	ug/g	0.800	0.811	101. %
Cadmium	ug/g	0.8000	0.7900	98.8 %
Chromium	ug/g	0.800	0.795	99.4 %
Mercury	ug/g	0.0025	0.0026	104. %
Lead	ug/g	0.80	0.81	101. %
Selenium	ug/g	2.00	2.01	100. %

BLANKS

ANALYTE	UNITS	RESULT
Silver	ug/g	< 0.5
Arsenic	ug/g	< 0.5
Barium	ug/g	< 0.05
Cadmium	ug/g	< 0.05
Chromium	ug/g	< 0.5

QC Summary for sample number: 19-A002911...

BLANKS continued....

ANALYTE	UNITS	RESULT
Mercury	ug/g	< 0.01
Lead	ug/g	< 1
Selenium	ug/g	< 0.5

Laboratory Job #

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Advanced Analytical Lab

Project Name: FIS Dexter Ph II

Project Manager: Pat Turner

Project Number: C90305-2 (19437-00)

Address: _____

Collector: _____

Phone: _____

Date of collection: 02/26/19

Fax: _____

Sample ID	Time	Matrix	Container type	Analytes										Notes, comments	# of containers										
				8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs			8081 Pesticides	RCRA 8 Metals	Lead	MTCAS Metals						
1	HC-B2-R.5	2911	Soil YOE																						
2																									
3																									
4																									
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

Relinquished by: V. J. VAVAN Date/Time: 03/07/19

Received by: [Signature] Date/Time: 3/7/19 12:00

Relinquished by: _____ Date/Time: _____

Received by: _____ Date/Time: _____

Sample receipt info:

Total # of containers:

Condition (temp, °C)

Seals (intact?, Y/N)

Comments:

Turnaround time:

ASAP Same day

24 hr

48 hr

Standard

Fe220 Clean



Professional Analytical Services

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(425) 885-1664

Mar 28 2019
Advanced Analytical
2821 152nd Ave NE
Redmond, WA 98052
Attention: Val Ivanov

Dear Val Ivanov:

Enclosed please find the analytical data for your 701 DEXTER project.

The following is a cross correlation of client and laboratory identifications for your convenience.

Table with 4 columns: CLIENT ID, MATRIX, AMTEST ID, TEST. Rows include HC-B1-3, HC-B1-5, and HC-B3-5.0 with corresponding matrix (Soil) and test results (MET, Hg-CV).

Your samples were received on Monday, March 11, 2019. At the time of receipt, the samples were logged in and properly maintained prior to the subsequent analysis.

The analytical procedures used at AmTest are well documented and are typically derived from the protocols of the EPA, USDA, FDA or the Army Corps of Engineers.

Following the analytical data you will find the Quality Control (QC) results.

Please note that the detection limits that are listed in the body of the report refer to the Practical Quantitation Limits (PQL's), as opposed to the Method Detection Limits (MDL's).

If you should have any questions pertaining to the data package, please feel free to contact me.

Sincerely,

Handwritten signature of Aaron W. Young
Aaron W. Young
Laboratory Manager

Project #: C90305-2

BACT = Bacteriological
CONV = Conventionals

MET = Metals
ORG = Organics

NUT=Nutrients
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 Services

ANALYSIS REPORT

Advanced Analytical
 2821 152nd Ave NE
 Redmond, WA 98052
 Attention: Val Ivanov
 Project Name: 701 DEXTER
 Project #: C90305-2
 All results reported on an as received basis.

Date Received: 03/11/19
 Date Reported: 3/28/19

AMTEST Identification Number 19-A003120
 Client Identification HC-B1-3
 Sampling Date

Total Metals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Acid Digestion	Y				SW-846 3050B	KQ	03/11/19
Silver	< 0.273	ug/g		0.27	EPA 6010D	KQ	03/12/19
Arsenic	1.43	ug/g		0.27	EPA 6010D	KQ	03/12/19
Barium	34.6	ug/g		0.027	EPA 6010D	KQ	03/12/19
Cadmium	< 0.0273	ug/g		0.027	EPA 6010D	KQ	03/12/19
Chromium	28.6	ug/g		0.27	EPA 6010D	KQ	03/12/19
Lead	1.59	ug/g		0.55	EPA 6010D	KQ	03/12/19
Selenium	< 0.273	ug/g		0.27	EPA 6010D	KQ	03/12/19
Mercury	0.0111	ug/g		0.0100	SW-846 7471B	SRW	03/22/19

Advanced Analytical
Project Name: 701 DEXTER
AmTest ID: 19-A003121

AMTEST Identification Number 19-A003121
Client Identification HC-B1-5
Sampling Date

Total Metals

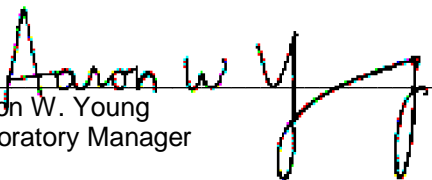
PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Acid Digestion	Y				SW-846 3050B	KQ	03/11/19
Silver	< 0.347	ug/g		0.35	EPA 6010D	KQ	03/12/19
Arsenic	1.62	ug/g		0.35	EPA 6010D	KQ	03/12/19
Barium	39.6	ug/g		0.035	EPA 6010D	KQ	03/12/19
Cadmium	< 0.0347	ug/g		0.035	EPA 6010D	KQ	03/12/19
Chromium	29.0	ug/g		0.35	EPA 6010D	KQ	03/12/19
Lead	1.76	ug/g		0.69	EPA 6010D	KQ	03/12/19
Selenium	< 0.347	ug/g		0.35	EPA 6010D	KQ	03/12/19
Mercury	0.0148	ug/g		0.0100	SW-846 7471B	SRW	03/22/19

Advanced Analytical
Project Name: 701 DEXTER
AmTest ID: 19-A003122

AMTEST Identification Number 19-A003122
Client Identification HC-B3-5.0
Sampling Date

Total Metals

PARAMETER	RESULT	UNITS	Q	D.L.	METHOD	ANALYST	DATE
Acid Digestion	Y				SW-846 3050B	KQ	03/11/19
Silver	< 0.272	ug/g		0.27	EPA 6010D	KQ	03/12/19
Arsenic	3.29	ug/g		0.27	EPA 6010D	KQ	03/12/19
Barium	102.	ug/g		0.027	EPA 6010D	KQ	03/12/19
Cadmium	< 0.02715	ug/g		0.027	EPA 6010D	KQ	03/12/19
Chromium	36.3	ug/g		0.27	EPA 6010D	KQ	03/12/19
Lead	5.05	ug/g		0.54	EPA 6010D	KQ	03/12/19
Selenium	0.340	ug/g		0.27	EPA 6010D	KQ	03/12/19
Mercury	0.0195	ug/g		0.0100	SW-846 7471B	SRW	03/22/19


Aaron W. Young
Laboratory Manager

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QC Summary for sample numbers: 19-A003120 to 19-A003122

DUPLICATES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	DUP VALUE	RPD
19-A003124	Silver	ug/g	< 0.268	< 0.24	
19-A003124	Arsenic	ug/g	1.10	0.910	19.
19-A003124	Barium	ug/g	30.0	26.0	14.
19-A003124	Cadmium	ug/g	< 0.02685	< 0.02	
19-A003124	Chromium	ug/g	23.9	21.7	9.6
19-A003158	Mercury	ug/g	0.0317	0.0233	31.
19-A003168	Mercury	ug/g	0.0304	0.0251	19.
19-A003178	Mercury	ug/g	0.188	0.175	7.2
19-A003188	Mercury	ug/g	0.0314	0.0326	3.8
19-A003198	Mercury	ug/g	< 0.01	< 0.01	
19-A003506	Mercury	ug/g	0.0555	0.0344	47.
19-A003124	Lead	ug/g	1.39	1.21	14.
19-A003124	Selenium	ug/g	< 0.268	< 0.24	

MATRIX SPIKES

SAMPLE #	ANALYTE	UNITS	SAMPLE VALUE	SMPL+ SPK	SPK AMT	RECOVERY
19-A003124	Silver	ug/g	< 0.268	43.9	51.0	86.08 %
19-A003124	Arsenic	ug/g	1.10	43.4	51.0	82.94 %
19-A003124	Barium	ug/g	30.0	81.0	51.0	100.00 %
19-A003124	Cadmium	ug/g	< 0.02685	41.40	51.00	81.18 %
19-A003124	Chromium	ug/g	23.9	72.6	51.0	95.49 %
19-A003134	Mercury	ug/g	0.181	0.400	0.220	99.55 %
19-A003144	Mercury	ug/g	0.0730	0.212	0.242	57.44 %
19-A003158	Mercury	ug/g	0.0317	0.196	0.229	71.75 %
19-A003168	Mercury	ug/g	0.0304	0.197	0.216	77.13 %
19-A003178	Mercury	ug/g	0.188	0.350	0.221	73.30 %
19-A003188	Mercury	ug/g	0.0314	0.135	0.200	51.80 %
19-A003198	Mercury	ug/g	< 0.01	0.163	0.210	77.62 %
19-A003506	Mercury	ug/g	0.0555	0.260	0.182	112.36 %
19-A003124	Lead	ug/g	1.39	42.0	51.0	79.63 %
19-A003124	Selenium	ug/g	< 0.268	40.2	51.0	78.82 %

QC Summary for sample numbers: 19-A003120 to 19-A003122...

STANDARD REFERENCE MATERIALS

ANALYTE	UNITS	TRUE VALUE	MEASURED VALUE	RECOVERY
Silver	ug/g	0.200	0.198	99.0 %
Arsenic	ug/g	2.00	1.98	99.0 %
Barium	ug/g	0.800	0.811	101. %
Cadmium	ug/g	0.8000	0.7900	98.8 %
Chromium	ug/g	0.800	0.795	99.4 %
Mercury	ug/g	0.0250	0.0246	98.4 %
Mercury	ug/g	0.0250	0.0252	101. %
Lead	ug/g	0.80	0.81	101. %
Selenium	ug/g	2.00	2.01	100. %

BLANKS

ANALYTE	UNITS	RESULT
Silver	ug/g	< 0.5
Arsenic	ug/g	< 0.5
Barium	ug/g	< 0.05
Cadmium	ug/g	< 0.05
Chromium	ug/g	< 0.5
Mercury	ug/g	< 0.01
Mercury	ug/g	< 0.01
Lead	ug/g	< 1
Selenium	ug/g	< 0.5

4078 148 Avenue NE
Redmond, WA 98052
(425) 702-8571
aachemlab@yahoo.com

Client: Advanced Analytical Lab

Project Name: 701 Dexter

Project Manager: Mr Turner AAL

Project Number: C90305-2 / C90309-2

Address: _____

Collector: _____

Phone: _____ Fax: _____

Date of collection: 02/28/19, 03/01/19

Sample ID	Time	Matrix	Container type	Analysis Parameters										Notes, comments	# of containers				
				8260 Volatiles	HVOC 8260	BTEX	BTEX/NWTPH-Gx	NWTPH-Gx	NWTPH-Dx	NWTPH-HCID	8270 Semivolatiles	8270 PAH	8082 PCBs			8081 Pesticides	RCRA 8 Metals	Lead	MTCAs Metals
1		HC-B1-3																3/20	1
2		HC-B1-5	Spill															21	1
3		HC-B3-5.0																22	1
4		HC-B4-10																23	1
5		HC-B4-45																24	1
6																			
7																			
8																			
9																			
10																			
11																			
12																			

Relinquished by:	Date/Time	Received by:	Date/Time
<u>W. Mann</u>	<u>03/11/19</u>	<u>JR</u>	<u>3/11/19</u>
Relinquished by:	Date/Time	Received by:	Date/Time

Sample receipt info: _____ Turnaround time: _____

Total # of containers: _____ Same day

Condition (temp, °C) 13.0 24 hr

Seals (intact?, Y/N) _____ 48 hr

Comments: _____ Standard 5-7 days



Environmental Testing Laboratory

March 22, 2019

*Angie Goodwin
Hart Crowser, Inc.
3131 Elliott Avenue, Suite 600
Seattle, WA 98121*

Dear Ms. Goodwin:

Please find enclosed the analytical data report for the *701 Dexter 19437-00 (C90318-2)* Project.

Samples were received on *March 18, 2019*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

A handwritten signature in blue ink that reads "V. Ivanov".

Val G. Ivanov, Ph.D.
Laboratory Manager

4078 148 Ave NE ■ Redmond, WA 98052
425.702-8571
E-mail: aachemlab@yahoo.com

Sample Custody Record

Samples Shipped to: AHL



C90318-2

Hart Crowser, Inc.
3131 Elliott Avenue, Suite 600
Seattle, Washington 98121
Office: 206.324.9530 • Fax 206.328.5581

JOB 19437-00 LAB NUMBER
PROJECT NAME 7th Deck Ph. #
HART CROWSER CONTACT Angie Gustafson
SAMPLED BY: MCS

REQUESTED ANALYSIS

VOCs
 TPH-L
 TPH-H

NO. OF CONTAINERS

OBSERVATIONS/COMMENTS/
COMPOSITING INSTRUCTIONS

LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX	ANALYSIS	NO. OF CONTAINERS	COMMENTS
	HC-R14W		3/15/14	16:35	Water	X X X	5	
	HC-G14W			15:15		X X X	↓	
	HC-Q34W			17:30		X X X		

SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:

TOTAL NUMBER OF CONTAINERS

SAMPLE RECEIPT INFORMATION

CUSTODY SEALS:

YES NO N/A

GOOD CONDITION YES NO

TEMPERATURE _____

SHIPMENT METHOD: HAND COURIER

DAY OVERNIGHT

RELINQUISHED BY: *[Signature]* DATE: 3/18/14 TIME: 7:00
 SIGNATURE: *[Signature]* TIME: 7:00
 PRINT NAME: Mike Smykowiak
 COMPANY: HC

RECEIVED BY: V. Nivoni DATE: 03/18/14 TIME: 13:30
 SIGNATURE: *[Signature]* TIME: 13:30
 PRINT NAME: John L
 COMPANY: HC

COOLER NO.: _____ STORAGE LOCATION: _____

See Lab Work Order No. _____
for Other Contract Requirements

TURNAROUND TIME:

24 HOURS 1 WEEK

48 HOURS STANDARD

72 HOURS OTHER _____

White to Lab Yellow to Project Manager Pink to Sample Custodian

Public Review Draft

AAL Job Number: C90318-2
Client: Hart Crowser, Inc.
Project Manager: Angie Goodwin
Client Project Name: 701 Dexter Ph. II
Client Project Number: 19437-00
Date received: 03/18/19

AAL Job Number: C90318-2
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter Ph. II
 Client Project Number: 19437-00
 Date received: 03/18/19

Analytical Results

8260B, µg/L		MTH BLK	LCS	HC-B1-GW	HC-B2-GW	HC-B3-GW
Matrix	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	03/19/19	03/19/19	03/19/19	03/19/19	03/19/19
MTBE	5.0	nd		nd	nd	nd
Chloromethane	1.0	nd		nd	nd	nd
Vinyl chloride(*)	0.2	nd		nd	nd	nd
Bromomethane	1.0	nd		nd	nd	nd
Chloroethane	1.0	nd		nd	nd	nd
Trichlorofluoromethane	1.0	nd		nd	nd	nd
1,1-Dichloroethene	1.0	nd		nd	nd	nd
Methylene chloride	1.0	nd		nd	nd	nd
trans-1,2-Dichloroethene	1.0	nd		nd	nd	nd
1,1-Dichloroethane	1.0	nd		nd	nd	nd
2,2-Dichloropropane	1.0	nd		nd	nd	nd
cis-1,2-Dichloroethene	1.0	nd		nd	nd	nd
Chloroform	1.0	nd		nd	nd	nd
1,1,1-Trichloroethane	1.0	nd		nd	nd	nd
Carbontetrachloride	1.0	nd		nd	nd	nd
1,1-Dichloropropene	1.0	nd		nd	nd	nd
Benzene	1.0	nd	88%	nd	nd	nd
1,2-Dichloroethane(EDC)	1.0	nd		nd	nd	nd
Trichloroethene	1.0	nd	84%	nd	nd	nd
1,2-Dichloropropane	1.0	nd		nd	nd	nd
Dibromomethane	1.0	nd		nd	nd	nd
Bromodichloromethane	1.0	nd		nd	nd	nd
cis-1,3-Dichloropropene	1.0	nd		nd	nd	nd
Toluene	1.0	nd	94%	nd	nd	nd
trans-1,3-Dichloropropene	1.0	nd		nd	nd	nd
1,1,2-Trichloroethane	1.0	nd		nd	nd	nd
Tetrachloroethene	1.0	nd		nd	nd	35
1,3-Dichloropropane	1.0	nd		nd	nd	nd
Dibromochloromethane	1.0	nd		nd	nd	nd
1,2-Dibromoethane (EDB)*	0.01	nd		nd	nd	nd
Chlorobenzene	1.0	nd	102%	nd	nd	nd
1,1,1,2-Tetrachloroethane	1.0	nd		nd	nd	nd
Ethylbenzene	1.0	nd		nd	nd	nd
Xylenes	1.0	nd		nd	nd	nd
Styrene	1.0	nd		nd	nd	nd
Bromoform	1.0	nd		nd	nd	nd
Isopropylbenzene	1.0	nd		nd	nd	nd
1,2,3-Trichloropropane	1.0	nd		nd	nd	nd
Bromobenzene	1.0	nd		nd	nd	nd
1,1,2,2-Tetrachloroethane	1.0	nd		nd	nd	nd
n-Propylbenzene	1.0	nd		nd	nd	nd
2-Chlorotoluene	1.0	nd		nd	nd	nd
4-Chlorotoluene	1.0	nd		nd	nd	nd
1,3,5-Trimethylbenzene	1.0	nd		nd	nd	nd
tert-Butylbenzene	1.0	nd		nd	nd	nd
1,2,4-Trimethylbenzene	1.0	nd		nd	nd	nd
sec-Butylbenzene	1.0	nd		nd	nd	nd
1,3-Dichlorobenzene	1.0	nd		nd	nd	nd

AAL Job Number: C90318-2
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter Ph. II
 Client Project Number: 19437-00
 Date received: 03/18/19

Analytical Results

8260B, µg/L		MTH BLK	LCS	HC-B1-GW	HC-B2-GW	HC-B3-GW
Matrix	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	03/19/19	03/19/19	03/19/19	03/19/19	03/19/19
MTBE	5.0	nd		nd	nd	nd
Isopropyltoluene	1.0	nd		nd	nd	nd
1,4-Dichlorobenzene	1.0	nd		nd	nd	nd
1,2-Dichlorobenzene	1.0	nd		nd	nd	nd
n-Butylbenzene	1.0	nd		nd	nd	nd
1,2-Dibromo-3-Chloropropane	1.0	nd		nd	nd	nd
1,2,4-Trichlorobenzene	1.0	nd		nd	nd	nd
Hexachloro-1,3-butadiene	1.0	nd		nd	nd	nd
Naphthalene	1.0	nd		nd	nd	nd
1,2,3-Trichlorobenzene	1.0	nd		nd	nd	nd

*-instrument detection limits

Surrogate recoveries

Dibromofluoromethane		97%	88%	91%	92%	90%
Toluene-d8		108%	89%	99%	94%	95%
1,2-Dichloroethane-d4		97%	99%	97%	102%	98%
4-Bromofluorobenzene		95%	97%	98%	100%	105%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 C - coelution with sample peaks
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

AAL Job Number: C90318-2
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter Ph. II
 Client Project Number: 19437-00
 Date received: 03/18/19

Analytical Results		MS	MSD	RPD
8260B, µg/L		HC-B3-GW	HC-B3-GW	HC-B3-GW
Matrix	Water	Water	Water	Water
Date analyzed	Reporting Limits	03/19/19	03/19/19	03/19/19

MTBE	5.0			
Chloromethane	1.0			
Vinyl chloride(*)	0.2			
Bromomethane	1.0			
Chloroethane	1.0			
Trichlorofluoromethane	1.0			
1,1-Dichloroethene	1.0			
Methylene chloride	1.0			
trans-1,2-Dichloroethene	1.0			
1,1-Dichloroethane	1.0			
2,2-Dichloropropane	1.0			
cis-1,2-Dichloroethene	1.0			
Chloroform	1.0			
1,1,1-Trichloroethane	1.0			
Carbontetrachloride	1.0			
1,1-Dichloropropene	1.0			
Benzene	1.0	82%	92%	12%
1,2-Dichloroethane(EDC)	1.0			
Trichloroethene	1.0	81%	87%	7%
1,2-Dichloropropane	1.0			
Dibromomethane	1.0			
Bromodichloromethane	1.0			
cis-1,3-Dichloropropene	1.0			
Toluene	1.0	87%	105%	19%
trans-1,3-Dichloropropene	1.0			
1,1,2-Trichloroethane	1.0			
Tetrachloroethene	1.0			
1,3-Dichloropropane	1.0			
Dibromochloromethane	1.0			
1,2-Dibromoethane (EDB)*	0.01			
Chlorobenzene	1.0	92%	110%	18%
1,1,1,2-Tetrachloroethane	1.0			
Ethylbenzene	1.0			
Xylenes	1.0			
Styrene	1.0			
Bromoform	1.0			
Isopropylbenzene	1.0			
1,2,3-Trichloropropane	1.0			
Bromobenzene	1.0			
1,1,2,2-Tetrachloroethane	1.0			
n-Propylbenzene	1.0			
2-Chlorotoluene	1.0			
4-Chlorotoluene	1.0			
1,3,5-Trimethylbenzene	1.0			
tert-Butylbenzene	1.0			
1,2,4-Trimethylbenzene	1.0			
sec-Butylbenzene	1.0			
1,3-Dichlorobenzene	1.0			

AAL Job Number: C90318-2
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter Ph. II
 Client Project Number: 19437-00
 Date received: 03/18/19

Analytical Results		MS	MSD	RPD
8260B, µg/L		HC-B3-GW	HC-B3-GW	HC-B3-GW
Matrix	Water	Water	Water	Water
Date analyzed	Reporting Limits	03/19/19	03/19/19	03/19/19

MTBE	5.0
Isopropyltoluene	1.0
1,4-Dichlorobenzene	1.0
1,2-Dichlorobenzene	1.0
n-Butylbenzene	1.0
1,2-Dibromo-3-Chloropropane	1.0
1,2,4-Trichlorobenzene	1.0
Hexachloro-1,3-butadiene	1.0
Naphthalene	1.0
1,2,3-Trichlorobenzene	1.0

*-instrument detection limits

Surrogate recoveries

Dibromofluoromethane	91%	86%
Toluene-d8	98%	85%
1,2-Dichloroethane-d4	101%	97%
4-Bromofluorobenzene	95%	99%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 C - coelution with sample peaks
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

AAL Job Number: C90318-2
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter Ph. II
 Client Project Number: 19437-00
 Date received: 03/18/19

Analytical Results						Dupl
NWTPH-Dx, mg/L		MTH BLK	HC-B1-GW	HC-B2-GW	HC-B3-GW	HC-B3-GW
Matrix	Water	Water	Water	Water	Water	Water
Date extracted	Reporting	03/19/19	03/19/19	03/19/19	03/19/19	03/19/19
Date analyzed	Limits	03/19/19	03/19/19	03/19/19	03/19/19	03/19/19
Kerosene/Jet fuel	0.20	nd	nd	nd	nd	nd
Diesel/Fuel oil	0.20	nd	nd	nd	nd	nd
Heavy oil	0.50	nd	nd	nd	nd	nd

Surrogate recoveries:

Fluorobiphenyl	85%	80%	78%	89%	102%
o-Terphenyl	80%	71%	88%	97%	105%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 na - not analyzed
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

AAL Job Number: C90318-2
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter Ph. II
 Client Project Number: 19437-00
 Date received: 03/18/19

Analytical Results							Dupl
NWTPH-Gx		MTH BLK	HC-B1-GW	HC-B2-GW	HC-B3-GW	HC-B3-GW	
Matrix	Water	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	03/20/19	03/20/19	03/20/19	03/20/19	03/20/19	03/20/19

NWTPH-Gx, mg/L							
Mineral spirits/Stoddard	0.10	nd	nd	nd	nd	nd	nd
Gasoline	0.10	nd	nd	nd	nd	nd	nd

Surrogate recoveries:							
Trifluorotoluene		92%	79%	83%	78%	86%	
Bromofluorobenzene		85%	85%	91%	84%	81%	

Data Qualifiers and Analytical Comments
 nd - not detected at listed reporting limits
 na - not analyzed
 C - coelution with sample peaks
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%



Environmental Testing Laboratory

April 0, 20193

*Angie Goodwin
Hart Crowser, Inc.
3131 Elliott Avenue, Suite 600
Seattle, WA 98121*

Dear Ms. Goodwin:

Please find enclosed the analytical data report for the *701 Dexter 19437-00 (C90401-1)* Project.

Samples were received on *April 01, 2019*. The results of the analyses are presented in the attached tables. Applicable reporting limits, QA/QC data and data qualifiers are included. A copy of the chain-of-custody and an invoice for the work is also enclosed.

ADVANCED ANALYTICAL LABORATORY appreciates the opportunity to provide analytical services for this project. Should there be any questions regarding this report, please contact me at (425) 702-8571.

It was a pleasure working with you, and we are looking forward to the next opportunity to work together.

Sincerely,

A handwritten signature in blue ink that reads "V. Ivanov".

Val G. Ivanov, Ph.D.
Laboratory Manager

4078 148 Ave NE ■ Redmond, WA 98052
425.702-8571
E-mail: aachemlab@yahoo.com

Sample Custody Record

Samples Shipped to: _____



HART CROWSNER

970401-1

Hart Crowsner, Inc.
3131 Elliott Avenue, Suite 600
Seattle, Washington 98121
Office: 206.324.9530 • Fax 206.328.5581

JOB <u>19437-00</u>		LAB NUMBER _____		REQUESTED ANALYSIS				NO. OF CONTAINERS		OBSERVATIONS/COMMENTS/ COMPOSITING INSTRUCTIONS
PROJECT NAME <u>701 Dexter</u>		HART CROWSER CONTACT <u>Angie Goodwin</u>		Chlorinated Solvents						
SAMPLED BY: <u>Coire McCabe</u>										
LAB NO.	SAMPLE ID	DESCRIPTION	DATE	TIME	MATRIX					
	HC-B2-GW		4/1/19	10:15	WATER				2	
	HC-B1-GW		4/1/19	10:55	WATER				2	
	HC-B3-GW		4/1/19	12:10	WATER				2	
RELINQUISHED BY		DATE	RECEIVED BY	DATE	SPECIAL SHIPMENT HANDLING OR STORAGE REQUIREMENTS:					
<u>Coire McCabe</u>		4/1/19	<u>Angie Goodwin</u>	04/01/19	14:45					
SIGNATURE <u>Coire McCabe</u>		TIME	SIGNATURE <u>Angie Goodwin</u>	TIME						
PRINT NAME <u>Coire McCabe</u>			PRINT NAME <u>Angie Goodwin</u>							
COMPANY <u>HC</u>		14:45	COMPANY							
RELINQUISHED BY		DATE	RECEIVED BY	DATE	COOLER NO.: _____ STORAGE LOCATION: _____					
SIGNATURE		TIME	SIGNATURE	TIME	See Lab Work Order No. _____ for Other Contract Requirements					
PRINT NAME			PRINT NAME							
COMPANY			COMPANY							
					TOTAL NUMBER OF CONTAINERS					
					SAMPLE RECEIPT INFORMATION					
					CUSTODY SEALS: <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> N/A					
					GOOD CONDITION: <input type="checkbox"/> YES <input type="checkbox"/> NO					
					TEMPERATURE: _____					
					SHIPMENT METHOD: <input type="checkbox"/> HAND <input type="checkbox"/> OVERNIGHT					
					<input type="checkbox"/> COURIER					
					TURNAROUND TIME: <input checked="" type="checkbox"/> 24 HOURS <input type="checkbox"/> 1 WEEK					
					<input type="checkbox"/> 48 HOURS <input type="checkbox"/> STANDARD					
					<input type="checkbox"/> 72 HOURS <input type="checkbox"/> OTHER _____					

White to Lab Yellow to Project Manager Pink to Sample Custodian

AAL Job Number: C90401-1
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter
 Client Project Number: 19437-00
 Date received: 04/01/19

Analytical Results

8260B, µg/L		MTH BLK	LCS	HC-B1-GW	HC-B2-GW	HC-B3-GW
Matrix	Water	Water	Water	Water	Water	Water
Date analyzed	Reporting Limits	04/01/19	04/01/19	04/01/19	04/01/19	04/01/19
Vinyl chloride(*)	0.2	nd		nd	nd	nd
trans-1,2-Dichloroethene	1.0	nd		nd	nd	nd
1,1-Dichloroethane	1.0	nd		nd	nd	nd
2,2-Dichloropropane	1.0	nd		nd	nd	nd
cis-1,2-Dichloroethene	1.0	nd		nd	nd	nd
1,1,1-Trichloroethane	1.0	nd		nd	nd	nd
1,2-Dichloroethane(EDC)	1.0	nd		nd	nd	nd
Trichloroethene	1.0	nd	81%	nd	nd	nd
Tetrachloroethene	1.0	nd		nd	nd	nd

*-instrument detection limits

Surrogate recoveries

Dibromofluoromethane	93%	89%	91%	91%	96%
1,2-Dichloroethane-d4	103%	88%	97%	94%	102%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 C - coelution with sample peaks
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

AAL Job Number: C90401-1
 Client: Hart Crowser, Inc.
 Project Manager: Angie Goodwin
 Client Project Name: 701 Dexter
 Client Project Number: 19437-00
 Date received: 04/01/19

Analytical Results		MS	MSD	RPD
8260B, µg/L		HC-B1-GW	HC-B1-GW	HC-B1-GW
Matrix	Water	Water	Water	Water
Date analyzed	Reporting Limits	04/01/19	04/01/19	04/01/19

Vinyl chloride(*)	0.2			
trans-1,2-Dichloroethene	1.0			
1,1-Dichloroethane	1.0			
2,2-Dichloropropane	1.0			
cis-1,2-Dichloroethene	1.0			
1,1,1-Trichloroethane	1.0			
1,2-Dichloroethane(EDC)	1.0			
Trichloroethene	1.0	87%	90%	4%
Tetrachloroethene	1.0			

*-instrument detection limits

Surrogate recoveries

Dibromofluoromethane	94%	93%
1,2-Dichloroethane-d4	96%	90%

Data Qualifiers and Analytical Comments

nd - not detected at listed reporting limits
 C - coelution with sample peaks
 Acceptable Recovery limits: 70% TO 130%
 Acceptable RPD limit: 30%

March 30, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L897678
Samples Received: 03/23/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 700 DEXTER AVE N SEATTLE WA
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹ Cp: Cover Page	1	¹ Cp
² Tc: Table of Contents	2	² Tc
³ Ss: Sample Summary	3	³ Ss
⁴ Cn: Case Narrative	5	⁴ Cn
⁵ Sr: Sample Results	6	⁵ Sr
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BB-8-032217 L897678-02	8	
MW113-032217 L897678-03	10	
MW115-032217 L897678-04	12	
MW112-032217 L897678-05	14	⁶ Qc
G12-032217 L897678-06	16	
TRIP BLANK-032217 L897678-07	18	⁷ Gl
⁶ Qc: Quality Control Summary	20	⁸ Al
Wet Chemistry by Method 2320 B-2011	20	
Wet Chemistry by Method 9056A	21	
Wet Chemistry by Method 9060A	23	
Metals (ICPMS) by Method 6020	24	
Volatile Organic Compounds (GC) by Method NWTPHGX	25	
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⁷ Gl: Glossary of Terms	34	
⁸ Al: Accreditations & Locations	35	
⁹ Sc: Chain of Custody	36	⁹ Sc



MW125-032217 L897678-01 GW

Collected by Karsten Springstead
Collected date/time 03/22/17 08:35
Received date/time 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG963909	1	03/30/17 00:57	03/30/17 00:57	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/28/17 16:29	03/28/17 16:29	JHH

1 Cp

2 Tc

3 Ss

BB-8-032217 L897678-02 GW

Collected by Karsten Springstead
Collected date/time 03/22/17 10:20
Received date/time 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG963928	1	03/25/17 08:17	03/25/17 08:17	AMC
Wet Chemistry by Method 9056A	WG963516	1	03/23/17 12:28	03/23/17 12:28	SAM
Wet Chemistry by Method 9060A	WG964268	1	03/27/17 19:12	03/27/17 19:12	SJM
Metals (ICPMS) by Method 6020	WG963864	1	03/24/17 19:01	03/27/17 02:33	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG963578	1	03/23/17 15:16	03/23/17 15:16	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/28/17 16:49	03/28/17 16:49	JHH

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

MW113-032217 L897678-03 GW

Collected by Karsten Springstead
Collected date/time 03/22/17 12:05
Received date/time 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG963928	1	03/25/17 10:48	03/25/17 10:48	AMC
Wet Chemistry by Method 9056A	WG963516	1	03/23/17 12:54	03/23/17 12:54	SAM
Wet Chemistry by Method 9060A	WG964268	1	03/27/17 19:35	03/27/17 19:35	SJM
Metals (ICPMS) by Method 6020	WG963864	1	03/24/17 19:01	03/27/17 02:36	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG963578	1	03/23/17 16:31	03/23/17 16:31	MJ
Volatile Organic Compounds (GC) by Method RSK175	WG964586	10	03/27/17 16:06	03/27/17 16:06	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/28/17 17:09	03/28/17 17:09	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	200	03/29/17 17:55	03/29/17 17:55	BMB

9 Sc

MW115-032217 L897678-04 GW

Collected by Karsten Springstead
Collected date/time 03/22/17 12:25
Received date/time 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG963928	1	03/25/17 10:55	03/25/17 10:55	AMC
Wet Chemistry by Method 9056A	WG963516	1	03/23/17 13:19	03/23/17 13:19	SAM
Wet Chemistry by Method 9060A	WG964268	1	03/27/17 19:51	03/27/17 19:51	SJM
Metals (ICPMS) by Method 6020	WG963864	1	03/24/17 19:01	03/27/17 02:39	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG963578	1	03/23/17 17:21	03/23/17 17:21	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/28/17 17:29	03/28/17 17:29	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/29/17 16:55	03/29/17 16:55	BMB

MW112-032217 L897678-05 GW

Collected by Karsten Springstead
Collected date/time 03/22/17 14:05
Received date/time 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG963928	1	03/25/17 08:52	03/25/17 08:52	AMC
Wet Chemistry by Method 9056A	WG963516	1	03/23/17 13:58	03/23/17 13:58	SAM
Wet Chemistry by Method 9060A	WG964268	1	03/27/17 20:08	03/27/17 20:08	SJM
Metals (ICPMS) by Method 6020	WG963864	1	03/24/17 19:01	03/26/17 22:51	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG963578	1	03/23/17 17:37	03/23/17 17:37	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/28/17 17:49	03/28/17 17:49	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/29/17 17:15	03/29/17 17:15	BMB



G12-032217 L897678-06 GW

Collected by Karsten Springstead
 Collected date/time 03/22/17 14:35
 Received date/time 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/28/17 18:09	03/28/17 18:09	JHH

¹ Cp

² Tc

³ Ss

TRIP BLANK-032217 L897678-07 GW

Collected by Karsten Springstead
 Collected date/time 03/22/17 00:00
 Received date/time 03/23/17 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG963909	1	03/30/17 02:26	03/30/17 02:26	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG964116	1	03/28/17 13:09	03/28/17 13:09	JHH

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	03/30/2017 00:57	WG963909
(S) a,a,a-Trifluorotoluene(FID) 97.5				77.0-122		03/30/2017 00:57	WG963909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.20	<u>B J</u>	1.05	25.0	1	03/28/2017 16:29	WG964116
Acrylonitrile	U		0.873	2.50	1	03/28/2017 16:29	WG964116
Benzene	U		0.0896	0.500	1	03/28/2017 16:29	WG964116
Bromobenzene	U		0.133	0.500	1	03/28/2017 16:29	WG964116
Bromodichloromethane	U		0.0800	0.500	1	03/28/2017 16:29	WG964116
Bromochloromethane	U		0.145	0.500	1	03/28/2017 16:29	WG964116
Bromoform	U		0.186	0.500	1	03/28/2017 16:29	WG964116
Bromomethane	U		0.157	0.500	1	03/28/2017 16:29	WG964116
n-Butylbenzene	U		0.143	0.500	1	03/28/2017 16:29	WG964116
sec-Butylbenzene	U		0.134	0.500	1	03/28/2017 16:29	WG964116
tert-Butylbenzene	U		0.183	0.500	1	03/28/2017 16:29	WG964116
Carbon disulfide	U		0.101	0.500	1	03/28/2017 16:29	WG964116
Carbon tetrachloride	U		0.159	0.500	1	03/28/2017 16:29	WG964116
Chlorobenzene	U	<u>J4</u>	0.140	0.500	1	03/28/2017 16:29	WG964116
Chlorodibromomethane	U		0.128	0.500	1	03/28/2017 16:29	WG964116
Chloroethane	U		0.141	0.500	1	03/28/2017 16:29	WG964116
2-Chloroethyl vinyl ether	U		0.877	2.50	1	03/28/2017 16:29	WG964116
Chloroform	U		0.0860	0.500	1	03/28/2017 16:29	WG964116
Chloromethane	U		0.153	0.500	1	03/28/2017 16:29	WG964116
2-Chlorotoluene	U		0.111	0.500	1	03/28/2017 16:29	WG964116
4-Chlorotoluene	U		0.0972	0.500	1	03/28/2017 16:29	WG964116
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	03/28/2017 16:29	WG964116
1,2-Dibromoethane	U		0.193	0.500	1	03/28/2017 16:29	WG964116
Dibromomethane	U		0.117	0.500	1	03/28/2017 16:29	WG964116
1,2-Dichlorobenzene	U		0.101	0.500	1	03/28/2017 16:29	WG964116
1,3-Dichlorobenzene	U		0.130	0.500	1	03/28/2017 16:29	WG964116
1,4-Dichlorobenzene	U		0.121	0.500	1	03/28/2017 16:29	WG964116
Dichlorodifluoromethane	U		0.127	0.500	1	03/28/2017 16:29	WG964116
1,1-Dichloroethane	U		0.114	0.500	1	03/28/2017 16:29	WG964116
1,2-Dichloroethane	U		0.108	0.500	1	03/28/2017 16:29	WG964116
1,1-Dichloroethene	U		0.188	0.500	1	03/28/2017 16:29	WG964116
cis-1,2-Dichloroethene	0.341	<u>J</u>	0.0933	0.500	1	03/28/2017 16:29	WG964116
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/28/2017 16:29	WG964116
1,2-Dichloropropane	U		0.190	0.500	1	03/28/2017 16:29	WG964116
1,1-Dichloropropene	U		0.128	0.500	1	03/28/2017 16:29	WG964116
1,3-Dichloropropane	U		0.147	0.500	1	03/28/2017 16:29	WG964116
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/28/2017 16:29	WG964116
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/28/2017 16:29	WG964116
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/28/2017 16:29	WG964116
2,2-Dichloropropane	U		0.0929	0.500	1	03/28/2017 16:29	WG964116
Di-isopropyl ether	U		0.0924	0.500	1	03/28/2017 16:29	WG964116
Ethylbenzene	U	<u>J4</u>	0.158	0.500	1	03/28/2017 16:29	WG964116
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/28/2017 16:29	WG964116
2-Hexanone	U		0.757	2.50	1	03/28/2017 16:29	WG964116
n-Hexane	U		0.305	1.00	1	03/28/2017 16:29	WG964116
Iodomethane	U		0.377	2.50	1	03/28/2017 16:29	WG964116
Isopropylbenzene	U		0.126	0.500	1	03/28/2017 16:29	WG964116
p-Isopropyltoluene	U		0.138	0.500	1	03/28/2017 16:29	WG964116
2-Butanone (MEK)	U		1.28	2.50	1	03/28/2017 16:29	WG964116



Collected date/time: 03/22/17 08:35

L897678

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	03/28/2017 16:29	WG964116
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	03/28/2017 16:29	WG964116
Methyl tert-butyl ether	U		0.102	0.500	1	03/28/2017 16:29	WG964116
Naphthalene	U		0.174	0.500	1	03/28/2017 16:29	WG964116
n-Propylbenzene	U		0.162	0.500	1	03/28/2017 16:29	WG964116
Styrene	U		0.117	0.500	1	03/28/2017 16:29	WG964116
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/28/2017 16:29	WG964116
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	03/28/2017 16:29	WG964116
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/28/2017 16:29	WG964116
Tetrachloroethene	0.285	J	0.199	0.500	1	03/28/2017 16:29	WG964116
Toluene	U		0.412	1.00	1	03/28/2017 16:29	WG964116
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/28/2017 16:29	WG964116
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/28/2017 16:29	WG964116
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/28/2017 16:29	WG964116
1,1,2-Trichloroethane	U		0.186	0.500	1	03/28/2017 16:29	WG964116
Trichloroethene	U		0.153	0.500	1	03/28/2017 16:29	WG964116
Trichlorofluoromethane	U		0.130	0.500	1	03/28/2017 16:29	WG964116
1,2,3-Trichloropropane	U		0.247	2.50	1	03/28/2017 16:29	WG964116
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/28/2017 16:29	WG964116
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/28/2017 16:29	WG964116
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/28/2017 16:29	WG964116
Vinyl acetate	U		0.645	2.50	1	03/28/2017 16:29	WG964116
Vinyl chloride	U		0.118	0.500	1	03/28/2017 16:29	WG964116
Xylenes, Total	U	J4	0.316	1.50	1	03/28/2017 16:29	WG964116
(S) Toluene-d8	109			80.0-120		03/28/2017 16:29	WG964116
(S) Dibromofluoromethane	105			76.0-123		03/28/2017 16:29	WG964116
(S) 4-Bromofluorobenzene	98.6			80.0-120		03/28/2017 16:29	WG964116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	254000		2710	20000	1	03/25/2017 08:17	WG963928

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7870		51.9	1000	1	03/23/2017 12:28	WG963516
Nitrate	3170		22.7	100	1	03/23/2017 12:28	WG963516
Sulfate	41500		77.4	5000	1	03/23/2017 12:28	WG963516

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2250		102	1000	1	03/27/2017 19:12	WG964268

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	125		15.0	100	1	03/27/2017 02:33	WG963864
Manganese	70.5		0.250	5.00	1	03/27/2017 02:33	WG963864

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	0.412	J	0.287	0.678	1	03/23/2017 15:16	WG963578
Ethane	U		0.296	1.29	1	03/23/2017 15:16	WG963578
Ethene	U		0.422	1.27	1	03/23/2017 15:16	WG963578

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.52	B J	1.05	25.0	1	03/28/2017 16:49	WG964116
Acrylonitrile	U		0.873	2.50	1	03/28/2017 16:49	WG964116
Benzene	U		0.0896	0.500	1	03/28/2017 16:49	WG964116
Bromobenzene	U		0.133	0.500	1	03/28/2017 16:49	WG964116
Bromodichloromethane	U		0.0800	0.500	1	03/28/2017 16:49	WG964116
Bromochloromethane	U		0.145	0.500	1	03/28/2017 16:49	WG964116
Bromoform	U		0.186	0.500	1	03/28/2017 16:49	WG964116
Bromomethane	U		0.157	0.500	1	03/28/2017 16:49	WG964116
n-Butylbenzene	U		0.143	0.500	1	03/28/2017 16:49	WG964116
sec-Butylbenzene	U		0.134	0.500	1	03/28/2017 16:49	WG964116
tert-Butylbenzene	U		0.183	0.500	1	03/28/2017 16:49	WG964116
Carbon disulfide	U		0.101	0.500	1	03/28/2017 16:49	WG964116
Carbon tetrachloride	U		0.159	0.500	1	03/28/2017 16:49	WG964116
Chlorobenzene	U	J4	0.140	0.500	1	03/28/2017 16:49	WG964116
Chlorodibromomethane	U		0.128	0.500	1	03/28/2017 16:49	WG964116
Chloroethane	U		0.141	0.500	1	03/28/2017 16:49	WG964116
2-Chloroethyl vinyl ether	U		0.877	2.50	1	03/28/2017 16:49	WG964116
Chloroform	U		0.0860	0.500	1	03/28/2017 16:49	WG964116
Chloromethane	U		0.153	0.500	1	03/28/2017 16:49	WG964116
2-Chlorotoluene	U		0.111	0.500	1	03/28/2017 16:49	WG964116
4-Chlorotoluene	U		0.0972	0.500	1	03/28/2017 16:49	WG964116
1,2-Dibromo-3-Chloropropane	U		1.325	1.00	1	03/28/2017 16:49	WG964116
1,2-Dibromoethane	U		0.193	0.500	1	03/28/2017 16:49	WG964116



Collected date/time: 03/22/17 10:20

L897678

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.117	0.500	1	03/28/2017 16:49	WG964116
1,2-Dichlorobenzene	U		0.101	0.500	1	03/28/2017 16:49	WG964116
1,3-Dichlorobenzene	U		0.130	0.500	1	03/28/2017 16:49	WG964116
1,4-Dichlorobenzene	U		0.121	0.500	1	03/28/2017 16:49	WG964116
Dichlorodifluoromethane	U		0.127	0.500	1	03/28/2017 16:49	WG964116
1,1-Dichloroethane	U		0.114	0.500	1	03/28/2017 16:49	WG964116
1,2-Dichloroethane	U		0.108	0.500	1	03/28/2017 16:49	WG964116
1,1-Dichloroethene	U		0.188	0.500	1	03/28/2017 16:49	WG964116
cis-1,2-Dichloroethene	3.10		0.0933	0.500	1	03/28/2017 16:49	WG964116
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/28/2017 16:49	WG964116
1,2-Dichloropropane	U		0.190	0.500	1	03/28/2017 16:49	WG964116
1,1-Dichloropropene	U		0.128	0.500	1	03/28/2017 16:49	WG964116
1,3-Dichloropropane	U		0.147	0.500	1	03/28/2017 16:49	WG964116
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/28/2017 16:49	WG964116
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/28/2017 16:49	WG964116
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/28/2017 16:49	WG964116
2,2-Dichloropropane	U		0.0929	0.500	1	03/28/2017 16:49	WG964116
Di-isopropyl ether	U		0.0924	0.500	1	03/28/2017 16:49	WG964116
Ethylbenzene	U	J4	0.158	0.500	1	03/28/2017 16:49	WG964116
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/28/2017 16:49	WG964116
2-Hexanone	U		0.757	2.50	1	03/28/2017 16:49	WG964116
n-Hexane	U		0.305	1.00	1	03/28/2017 16:49	WG964116
Iodomethane	U		0.377	2.50	1	03/28/2017 16:49	WG964116
Isopropylbenzene	U		0.126	0.500	1	03/28/2017 16:49	WG964116
p-Isopropyltoluene	U		0.138	0.500	1	03/28/2017 16:49	WG964116
2-Butanone (MEK)	U		1.28	2.50	1	03/28/2017 16:49	WG964116
Methylene Chloride	U		1.07	2.50	1	03/28/2017 16:49	WG964116
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	03/28/2017 16:49	WG964116
Methyl tert-butyl ether	U		0.102	0.500	1	03/28/2017 16:49	WG964116
Naphthalene	U		0.174	0.500	1	03/28/2017 16:49	WG964116
n-Propylbenzene	U		0.162	0.500	1	03/28/2017 16:49	WG964116
Styrene	U		0.117	0.500	1	03/28/2017 16:49	WG964116
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/28/2017 16:49	WG964116
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	03/28/2017 16:49	WG964116
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/28/2017 16:49	WG964116
Tetrachloroethene	30.4		0.199	0.500	1	03/28/2017 16:49	WG964116
Toluene	U		0.412	1.00	1	03/28/2017 16:49	WG964116
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/28/2017 16:49	WG964116
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/28/2017 16:49	WG964116
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/28/2017 16:49	WG964116
1,1,2-Trichloroethane	U		0.186	0.500	1	03/28/2017 16:49	WG964116
Trichloroethene	4.95		0.153	0.500	1	03/28/2017 16:49	WG964116
Trichlorofluoromethane	U		0.130	0.500	1	03/28/2017 16:49	WG964116
1,2,3-Trichloropropane	U		0.247	2.50	1	03/28/2017 16:49	WG964116
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/28/2017 16:49	WG964116
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/28/2017 16:49	WG964116
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/28/2017 16:49	WG964116
Vinyl acetate	U		0.645	2.50	1	03/28/2017 16:49	WG964116
Vinyl chloride	U		0.118	0.500	1	03/28/2017 16:49	WG964116
Xylenes, Total	U	J4	0.316	1.50	1	03/28/2017 16:49	WG964116
(S) Toluene-d8	110			80.0-120		03/28/2017 16:49	WG964116
(S) Dibromofluoromethane	103			76.0-123		03/28/2017 16:49	WG964116
(S) 4-Bromofluorobenzene	101			80.0-120		03/28/2017 16:49	WG964116

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	594000		2710	20000	1	03/25/2017 10:48	WG963928

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	65500		51.9	1000	1	03/23/2017 12:54	WG963516
Nitrate	29.5	J	22.7	100	1	03/23/2017 12:54	WG963516
Sulfate	55400		77.4	5000	1	03/23/2017 12:54	WG963516

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	27000		102	1000	1	03/27/2017 19:35	WG964268

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	7460		15.0	100	1	03/27/2017 02:36	WG963864
Manganese	757		0.250	5.00	1	03/27/2017 02:36	WG963864

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	3530		2.87	6.78	10	03/27/2017 16:06	WG964586
Ethane	U		0.296	1.29	1	03/23/2017 16:31	WG963578
Ethene	U		0.422	1.27	1	03/23/2017 16:31	WG963578

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.28	B J	1.05	25.0	1	03/28/2017 17:09	WG964116
Acrylonitrile	U		0.873	2.50	1	03/28/2017 17:09	WG964116
Benzene	2.60		0.0896	0.500	1	03/28/2017 17:09	WG964116
Bromobenzene	U		0.133	0.500	1	03/28/2017 17:09	WG964116
Bromodichloromethane	U		0.0800	0.500	1	03/28/2017 17:09	WG964116
Bromochloromethane	U		0.145	0.500	1	03/28/2017 17:09	WG964116
Bromoform	U		0.186	0.500	1	03/28/2017 17:09	WG964116
Bromomethane	U		0.157	0.500	1	03/28/2017 17:09	WG964116
n-Butylbenzene	U		0.143	0.500	1	03/28/2017 17:09	WG964116
sec-Butylbenzene	U		0.134	0.500	1	03/28/2017 17:09	WG964116
tert-Butylbenzene	U		0.183	0.500	1	03/28/2017 17:09	WG964116
Carbon disulfide	U		0.101	0.500	1	03/28/2017 17:09	WG964116
Carbon tetrachloride	U		0.159	0.500	1	03/28/2017 17:09	WG964116
Chlorobenzene	U	J4	0.140	0.500	1	03/28/2017 17:09	WG964116
Chlorodibromomethane	U		0.128	0.500	1	03/28/2017 17:09	WG964116
Chloroethane	U		0.141	0.500	1	03/28/2017 17:09	WG964116
2-Chloroethyl vinyl ether	U		0.877	2.50	1	03/28/2017 17:09	WG964116
Chloroform	U		0.0860	0.500	1	03/28/2017 17:09	WG964116
Chloromethane	U		0.153	0.500	1	03/28/2017 17:09	WG964116
2-Chlorotoluene	U		0.111	0.500	1	03/28/2017 17:09	WG964116
4-Chlorotoluene	U		0.0972	0.500	1	03/28/2017 17:09	WG964116
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	03/28/2017 17:09	WG964116
1,2-Dibromoethane	U		0.193	0.500	1	03/28/2017 17:09	WG964116



Collected date/time: 03/22/17 12:05

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.117	0.500	1	03/28/2017 17:09	WG964116
1,2-Dichlorobenzene	U		0.101	0.500	1	03/28/2017 17:09	WG964116
1,3-Dichlorobenzene	U		0.130	0.500	1	03/28/2017 17:09	WG964116
1,4-Dichlorobenzene	U		0.121	0.500	1	03/28/2017 17:09	WG964116
Dichlorodifluoromethane	U		0.127	0.500	1	03/28/2017 17:09	WG964116
1,1-Dichloroethane	U		0.114	0.500	1	03/28/2017 17:09	WG964116
1,2-Dichloroethane	U		0.108	0.500	1	03/28/2017 17:09	WG964116
1,1-Dichloroethene	10.7		0.188	0.500	1	03/28/2017 17:09	WG964116
cis-1,2-Dichloroethene	7280		18.7	100	200	03/29/2017 17:55	WG964116
trans-1,2-Dichloroethene	25.4		0.152	0.500	1	03/28/2017 17:09	WG964116
1,2-Dichloropropane	0.240	J	0.190	0.500	1	03/28/2017 17:09	WG964116
1,1-Dichloropropene	U		0.128	0.500	1	03/28/2017 17:09	WG964116
1,3-Dichloropropane	U		0.147	0.500	1	03/28/2017 17:09	WG964116
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/28/2017 17:09	WG964116
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/28/2017 17:09	WG964116
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/28/2017 17:09	WG964116
2,2-Dichloropropane	U		0.0929	0.500	1	03/28/2017 17:09	WG964116
Di-isopropyl ether	U		0.0924	0.500	1	03/28/2017 17:09	WG964116
Ethylbenzene	U	J4	0.158	0.500	1	03/28/2017 17:09	WG964116
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/28/2017 17:09	WG964116
2-Hexanone	U		0.757	2.50	1	03/28/2017 17:09	WG964116
n-Hexane	U		0.305	1.00	1	03/28/2017 17:09	WG964116
Iodomethane	U		0.377	2.50	1	03/28/2017 17:09	WG964116
Isopropylbenzene	U		0.126	0.500	1	03/28/2017 17:09	WG964116
p-Isopropyltoluene	U		0.138	0.500	1	03/28/2017 17:09	WG964116
2-Butanone (MEK)	U		1.28	2.50	1	03/28/2017 17:09	WG964116
Methylene Chloride	U		1.07	2.50	1	03/28/2017 17:09	WG964116
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	03/28/2017 17:09	WG964116
Methyl tert-butyl ether	U		0.102	0.500	1	03/28/2017 17:09	WG964116
Naphthalene	U		0.174	0.500	1	03/28/2017 17:09	WG964116
n-Propylbenzene	U		0.162	0.500	1	03/28/2017 17:09	WG964116
Styrene	U		0.117	0.500	1	03/28/2017 17:09	WG964116
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/28/2017 17:09	WG964116
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	03/28/2017 17:09	WG964116
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/28/2017 17:09	WG964116
Tetrachloroethene	U		0.199	0.500	1	03/28/2017 17:09	WG964116
Toluene	U		0.412	1.00	1	03/28/2017 17:09	WG964116
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/28/2017 17:09	WG964116
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/28/2017 17:09	WG964116
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/28/2017 17:09	WG964116
1,1,2-Trichloroethane	U		0.186	0.500	1	03/28/2017 17:09	WG964116
Trichloroethene	27.1		0.153	0.500	1	03/28/2017 17:09	WG964116
Trichlorofluoromethane	U		0.130	0.500	1	03/28/2017 17:09	WG964116
1,2,3-Trichloropropane	U		0.247	2.50	1	03/28/2017 17:09	WG964116
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/28/2017 17:09	WG964116
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/28/2017 17:09	WG964116
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/28/2017 17:09	WG964116
Vinyl acetate	U		0.645	2.50	1	03/28/2017 17:09	WG964116
Vinyl chloride	63.5		0.118	0.500	1	03/28/2017 17:09	WG964116
Xylenes, Total	U	J4	0.316	1.50	1	03/28/2017 17:09	WG964116
(S) Toluene-d8	109			80.0-120		03/29/2017 17:55	WG964116
(S) Toluene-d8	110			80.0-120		03/28/2017 17:09	WG964116
(S) Dibromofluoromethane	101			76.0-123		03/29/2017 17:55	WG964116
(S) Dibromofluoromethane	105			76.0-123		03/28/2017 17:09	WG964116
(S) 4-Bromofluorobenzene	99.7			80.0-120		03/28/2017 17:09	WG964116
(S) 4-Bromofluorobenzene	101			80.0-120		03/29/2017 17:55	WG964116

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	417000		2710	20000	1	03/25/2017 10:55	WG963928

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28500		51.9	1000	1	03/23/2017 13:19	WG963516
Nitrate	U		22.7	100	1	03/23/2017 13:19	WG963516
Sulfate	35900		77.4	5000	1	03/23/2017 13:19	WG963516

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7690		102	1000	1	03/27/2017 19:51	WG964268

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5690		15.0	100	1	03/27/2017 02:39	WG963864
Manganese	1320		0.250	5.00	1	03/27/2017 02:39	WG963864

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	215		0.287	0.678	1	03/23/2017 17:21	WG963578
Ethane	U		0.296	1.29	1	03/23/2017 17:21	WG963578
Ethene	U		0.422	1.27	1	03/23/2017 17:21	WG963578

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.67	<u>B J</u>	1.05	25.0	1	03/28/2017 17:29	WG964116
Acrylonitrile	U		0.873	2.50	1	03/28/2017 17:29	WG964116
Benzene	U		0.0896	0.500	1	03/28/2017 17:29	WG964116
Bromobenzene	U		0.133	0.500	1	03/28/2017 17:29	WG964116
Bromodichloromethane	U		0.0800	0.500	1	03/28/2017 17:29	WG964116
Bromochloromethane	U		0.145	0.500	1	03/28/2017 17:29	WG964116
Bromoform	U		0.186	0.500	1	03/28/2017 17:29	WG964116
Bromomethane	U		0.157	0.500	1	03/28/2017 17:29	WG964116
n-Butylbenzene	U		0.143	0.500	1	03/28/2017 17:29	WG964116
sec-Butylbenzene	U		0.134	0.500	1	03/28/2017 17:29	WG964116
tert-Butylbenzene	U		0.183	0.500	1	03/28/2017 17:29	WG964116
Carbon disulfide	U		0.101	0.500	1	03/28/2017 17:29	WG964116
Carbon tetrachloride	U		0.159	0.500	1	03/28/2017 17:29	WG964116
Chlorobenzene	U	<u>J4</u>	0.140	0.500	1	03/28/2017 17:29	WG964116
Chlorodibromomethane	U		0.128	0.500	1	03/28/2017 17:29	WG964116
Chloroethane	U		0.141	0.500	1	03/28/2017 17:29	WG964116
2-Chloroethyl vinyl ether	U		0.877	2.50	1	03/28/2017 17:29	WG964116
Chloroform	U		0.0860	0.500	1	03/28/2017 17:29	WG964116
Chloromethane	U		0.153	0.500	1	03/28/2017 17:29	WG964116
2-Chlorotoluene	U		0.111	0.500	1	03/28/2017 17:29	WG964116
4-Chlorotoluene	U		0.0972	0.500	1	03/28/2017 17:29	WG964116
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	03/28/2017 17:29	WG964116
1,2-Dibromoethane	U		0.193	0.500	1	03/28/2017 17:29	WG964116



Collected date/time: 03/22/17 12:25

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.117	0.500	1	03/28/2017 17:29	WG964116
1,2-Dichlorobenzene	U		0.101	0.500	1	03/28/2017 17:29	WG964116
1,3-Dichlorobenzene	U		0.130	0.500	1	03/28/2017 17:29	WG964116
1,4-Dichlorobenzene	U		0.121	0.500	1	03/28/2017 17:29	WG964116
Dichlorodifluoromethane	U		0.127	0.500	1	03/28/2017 17:29	WG964116
1,1-Dichloroethane	U		0.114	0.500	1	03/28/2017 17:29	WG964116
1,2-Dichloroethane	U		0.108	0.500	1	03/28/2017 17:29	WG964116
1,1-Dichloroethene	U		0.188	0.500	1	03/28/2017 17:29	WG964116
cis-1,2-Dichloroethene	0.643		0.0933	0.500	1	03/29/2017 16:55	WG964116
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/28/2017 17:29	WG964116
1,2-Dichloropropane	U		0.190	0.500	1	03/28/2017 17:29	WG964116
1,1-Dichloropropene	U		0.128	0.500	1	03/28/2017 17:29	WG964116
1,3-Dichloropropane	U		0.147	0.500	1	03/28/2017 17:29	WG964116
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/28/2017 17:29	WG964116
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/28/2017 17:29	WG964116
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/28/2017 17:29	WG964116
2,2-Dichloropropane	U		0.0929	0.500	1	03/28/2017 17:29	WG964116
Di-isopropyl ether	U		0.0924	0.500	1	03/28/2017 17:29	WG964116
Ethylbenzene	U	J4	0.158	0.500	1	03/28/2017 17:29	WG964116
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/28/2017 17:29	WG964116
2-Hexanone	U		0.757	2.50	1	03/28/2017 17:29	WG964116
n-Hexane	U		0.305	1.00	1	03/28/2017 17:29	WG964116
Iodomethane	U		0.377	2.50	1	03/28/2017 17:29	WG964116
Isopropylbenzene	U		0.126	0.500	1	03/28/2017 17:29	WG964116
p-Isopropyltoluene	U		0.138	0.500	1	03/28/2017 17:29	WG964116
2-Butanone (MEK)	U		1.28	2.50	1	03/28/2017 17:29	WG964116
Methylene Chloride	U		1.07	2.50	1	03/28/2017 17:29	WG964116
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	03/28/2017 17:29	WG964116
Methyl tert-butyl ether	U		0.102	0.500	1	03/28/2017 17:29	WG964116
Naphthalene	U		0.174	0.500	1	03/28/2017 17:29	WG964116
n-Propylbenzene	U		0.162	0.500	1	03/28/2017 17:29	WG964116
Styrene	U		0.117	0.500	1	03/28/2017 17:29	WG964116
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/28/2017 17:29	WG964116
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	03/28/2017 17:29	WG964116
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/28/2017 17:29	WG964116
Tetrachloroethene	U		0.199	0.500	1	03/28/2017 17:29	WG964116
Toluene	U		0.412	1.00	1	03/28/2017 17:29	WG964116
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/28/2017 17:29	WG964116
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/28/2017 17:29	WG964116
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/28/2017 17:29	WG964116
1,1,2-Trichloroethane	U		0.186	0.500	1	03/28/2017 17:29	WG964116
Trichloroethene	U		0.153	0.500	1	03/28/2017 17:29	WG964116
Trichlorofluoromethane	U		0.130	0.500	1	03/28/2017 17:29	WG964116
1,2,3-Trichloropropane	U		0.247	2.50	1	03/28/2017 17:29	WG964116
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/28/2017 17:29	WG964116
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/28/2017 17:29	WG964116
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/28/2017 17:29	WG964116
Vinyl acetate	U		0.645	2.50	1	03/28/2017 17:29	WG964116
Vinyl chloride	15.7		0.118	0.500	1	03/28/2017 17:29	WG964116
Xylenes, Total	U	J4	0.316	1.50	1	03/28/2017 17:29	WG964116
(S) Toluene-d8	108			80.0-120		03/29/2017 16:55	WG964116
(S) Toluene-d8	110			80.0-120		03/28/2017 17:29	WG964116
(S) Dibromofluoromethane	102			76.0-123		03/28/2017 17:29	WG964116
(S) Dibromofluoromethane	105			76.0-123		03/29/2017 16:55	WG964116
(S) 4-Bromofluorobenzene	99.7			80.0-120		03/28/2017 17:29	WG964116
(S) 4-Bromofluorobenzene	100			80.0-120		03/29/2017 16:55	WG964116

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	188000		2710	20000	1	03/25/2017 08:52	WG963928

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10600		51.9	1000	1	03/23/2017 13:58	WG963516
Nitrate	U		22.7	100	1	03/23/2017 13:58	WG963516
Sulfate	45200		77.4	5000	1	03/23/2017 13:58	WG963516

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1350		102	1000	1	03/27/2017 20:08	WG964268

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	238		15.0	100	1	03/26/2017 22:51	WG963864
Manganese	41.1		0.250	5.00	1	03/26/2017 22:51	WG963864

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	4.89		0.287	0.678	1	03/23/2017 17:37	WG963578
Ethane	U		0.296	1.29	1	03/23/2017 17:37	WG963578
Ethene	U		0.422	1.27	1	03/23/2017 17:37	WG963578

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.80	<u>B J</u>	1.05	25.0	1	03/28/2017 17:49	WG964116
Acrylonitrile	U		0.873	2.50	1	03/28/2017 17:49	WG964116
Benzene	U		0.0896	0.500	1	03/28/2017 17:49	WG964116
Bromobenzene	U		0.133	0.500	1	03/28/2017 17:49	WG964116
Bromodichloromethane	U		0.0800	0.500	1	03/28/2017 17:49	WG964116
Bromochloromethane	U		0.145	0.500	1	03/28/2017 17:49	WG964116
Bromoform	U		0.186	0.500	1	03/28/2017 17:49	WG964116
Bromomethane	U		0.157	0.500	1	03/28/2017 17:49	WG964116
n-Butylbenzene	U		0.143	0.500	1	03/28/2017 17:49	WG964116
sec-Butylbenzene	U		0.134	0.500	1	03/28/2017 17:49	WG964116
tert-Butylbenzene	U		0.183	0.500	1	03/28/2017 17:49	WG964116
Carbon disulfide	U		0.101	0.500	1	03/28/2017 17:49	WG964116
Carbon tetrachloride	U		0.159	0.500	1	03/28/2017 17:49	WG964116
Chlorobenzene	U	<u>J4</u>	0.140	0.500	1	03/28/2017 17:49	WG964116
Chlorodibromomethane	U		0.128	0.500	1	03/28/2017 17:49	WG964116
Chloroethane	U		0.141	0.500	1	03/28/2017 17:49	WG964116
2-Chloroethyl vinyl ether	U		0.877	2.50	1	03/28/2017 17:49	WG964116
Chloroform	U		0.0860	0.500	1	03/28/2017 17:49	WG964116
Chloromethane	U		0.153	0.500	1	03/28/2017 17:49	WG964116
2-Chlorotoluene	U		0.111	0.500	1	03/28/2017 17:49	WG964116
4-Chlorotoluene	U		0.0972	0.500	1	03/28/2017 17:49	WG964116
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	03/28/2017 17:49	WG964116
1,2-Dibromoethane	U		0.193	0.500	1	03/28/2017 17:49	WG964116



Collected date/time: 03/22/17 14:05

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.117	0.500	1	03/28/2017 17:49	WG964116
1,2-Dichlorobenzene	U		0.101	0.500	1	03/28/2017 17:49	WG964116
1,3-Dichlorobenzene	U		0.130	0.500	1	03/28/2017 17:49	WG964116
1,4-Dichlorobenzene	U		0.121	0.500	1	03/28/2017 17:49	WG964116
Dichlorodifluoromethane	U		0.127	0.500	1	03/28/2017 17:49	WG964116
1,1-Dichloroethane	U		0.114	0.500	1	03/28/2017 17:49	WG964116
1,2-Dichloroethane	U		0.108	0.500	1	03/28/2017 17:49	WG964116
1,1-Dichloroethene	U		0.188	0.500	1	03/28/2017 17:49	WG964116
cis-1,2-Dichloroethene	U		0.0933	0.500	1	03/29/2017 17:15	WG964116
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/28/2017 17:49	WG964116
1,2-Dichloropropane	U		0.190	0.500	1	03/28/2017 17:49	WG964116
1,1-Dichloropropene	U		0.128	0.500	1	03/28/2017 17:49	WG964116
1,3-Dichloropropane	U		0.147	0.500	1	03/28/2017 17:49	WG964116
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/28/2017 17:49	WG964116
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/28/2017 17:49	WG964116
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/28/2017 17:49	WG964116
2,2-Dichloropropane	U		0.0929	0.500	1	03/28/2017 17:49	WG964116
Di-isopropyl ether	U		0.0924	0.500	1	03/28/2017 17:49	WG964116
Ethylbenzene	U	J4	0.158	0.500	1	03/28/2017 17:49	WG964116
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/28/2017 17:49	WG964116
2-Hexanone	U		0.757	2.50	1	03/28/2017 17:49	WG964116
n-Hexane	U		0.305	1.00	1	03/28/2017 17:49	WG964116
Iodomethane	U		0.377	2.50	1	03/28/2017 17:49	WG964116
Isopropylbenzene	U		0.126	0.500	1	03/28/2017 17:49	WG964116
p-Isopropyltoluene	U		0.138	0.500	1	03/28/2017 17:49	WG964116
2-Butanone (MEK)	U		1.28	2.50	1	03/28/2017 17:49	WG964116
Methylene Chloride	U		1.07	2.50	1	03/28/2017 17:49	WG964116
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	03/28/2017 17:49	WG964116
Methyl tert-butyl ether	U		0.102	0.500	1	03/28/2017 17:49	WG964116
Naphthalene	U		0.174	0.500	1	03/28/2017 17:49	WG964116
n-Propylbenzene	U		0.162	0.500	1	03/28/2017 17:49	WG964116
Styrene	U		0.117	0.500	1	03/28/2017 17:49	WG964116
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/28/2017 17:49	WG964116
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	03/28/2017 17:49	WG964116
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/28/2017 17:49	WG964116
Tetrachloroethene	U		0.199	0.500	1	03/28/2017 17:49	WG964116
Toluene	U		0.412	1.00	1	03/28/2017 17:49	WG964116
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/28/2017 17:49	WG964116
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/28/2017 17:49	WG964116
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/28/2017 17:49	WG964116
1,1,2-Trichloroethane	U		0.186	0.500	1	03/28/2017 17:49	WG964116
Trichloroethene	U		0.153	0.500	1	03/28/2017 17:49	WG964116
Trichlorofluoromethane	U		0.130	0.500	1	03/28/2017 17:49	WG964116
1,2,3-Trichloropropane	U		0.247	2.50	1	03/28/2017 17:49	WG964116
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/28/2017 17:49	WG964116
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/28/2017 17:49	WG964116
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/28/2017 17:49	WG964116
Vinyl acetate	U		0.645	2.50	1	03/28/2017 17:49	WG964116
Vinyl chloride	U		0.118	0.500	1	03/28/2017 17:49	WG964116
Xylenes, Total	U	J4	0.316	1.50	1	03/28/2017 17:49	WG964116
(S) Toluene-d8	109			80.0-120		03/29/2017 17:15	WG964116
(S) Toluene-d8	112			80.0-120		03/28/2017 17:49	WG964116
(S) Dibromofluoromethane	102			76.0-123		03/28/2017 17:49	WG964116
(S) Dibromofluoromethane	102			76.0-123		03/29/2017 17:15	WG964116
(S) 4-Bromofluorobenzene	97.6			80.0-120		03/28/2017 17:49	WG964116
(S) 4-Bromofluorobenzene	101			80.0-120		03/29/2017 17:15	WG964116

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.41	<u>B</u> <u>J</u>	1.05	25.0	1	03/28/2017 18:09	WG964116
Acrylonitrile	U		0.873	2.50	1	03/28/2017 18:09	WG964116
Benzene	0.298	<u>J</u>	0.0896	0.500	1	03/28/2017 18:09	WG964116
Bromobenzene	U		0.133	0.500	1	03/28/2017 18:09	WG964116
Bromodichloromethane	U		0.0800	0.500	1	03/28/2017 18:09	WG964116
Bromochloromethane	U		0.145	0.500	1	03/28/2017 18:09	WG964116
Bromoform	U		0.186	0.500	1	03/28/2017 18:09	WG964116
Bromomethane	U		0.157	0.500	1	03/28/2017 18:09	WG964116
n-Butylbenzene	U		0.143	0.500	1	03/28/2017 18:09	WG964116
sec-Butylbenzene	U		0.134	0.500	1	03/28/2017 18:09	WG964116
tert-Butylbenzene	U		0.183	0.500	1	03/28/2017 18:09	WG964116
Carbon disulfide	U		0.101	0.500	1	03/28/2017 18:09	WG964116
Carbon tetrachloride	U		0.159	0.500	1	03/28/2017 18:09	WG964116
Chlorobenzene	U	<u>J</u> <u>4</u>	0.140	0.500	1	03/28/2017 18:09	WG964116
Chlorodibromomethane	U		0.128	0.500	1	03/28/2017 18:09	WG964116
Chloroethane	0.583		0.141	0.500	1	03/28/2017 18:09	WG964116
2-Chloroethyl vinyl ether	U		0.877	2.50	1	03/28/2017 18:09	WG964116
Chloroform	U		0.0860	0.500	1	03/28/2017 18:09	WG964116
Chloromethane	U		0.153	0.500	1	03/28/2017 18:09	WG964116
2-Chlorotoluene	U		0.111	0.500	1	03/28/2017 18:09	WG964116
4-Chlorotoluene	U		0.0972	0.500	1	03/28/2017 18:09	WG964116
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	03/28/2017 18:09	WG964116
1,2-Dibromoethane	U		0.193	0.500	1	03/28/2017 18:09	WG964116
Dibromomethane	U		0.117	0.500	1	03/28/2017 18:09	WG964116
1,2-Dichlorobenzene	U		0.101	0.500	1	03/28/2017 18:09	WG964116
1,3-Dichlorobenzene	U		0.130	0.500	1	03/28/2017 18:09	WG964116
1,4-Dichlorobenzene	U		0.121	0.500	1	03/28/2017 18:09	WG964116
Dichlorodifluoromethane	U		0.127	0.500	1	03/28/2017 18:09	WG964116
1,1-Dichloroethane	U		0.114	0.500	1	03/28/2017 18:09	WG964116
1,2-Dichloroethane	U		0.108	0.500	1	03/28/2017 18:09	WG964116
1,1-Dichloroethene	2.23		0.188	0.500	1	03/28/2017 18:09	WG964116
cis-1,2-Dichloroethene	130		0.0933	0.500	1	03/28/2017 18:09	WG964116
trans-1,2-Dichloroethene	2.85		0.152	0.500	1	03/28/2017 18:09	WG964116
1,2-Dichloropropane	U		0.190	0.500	1	03/28/2017 18:09	WG964116
1,1-Dichloropropene	U		0.128	0.500	1	03/28/2017 18:09	WG964116
1,3-Dichloropropane	U		0.147	0.500	1	03/28/2017 18:09	WG964116
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/28/2017 18:09	WG964116
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/28/2017 18:09	WG964116
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/28/2017 18:09	WG964116
2,2-Dichloropropane	U		0.0929	0.500	1	03/28/2017 18:09	WG964116
Di-isopropyl ether	U		0.0924	0.500	1	03/28/2017 18:09	WG964116
Ethylbenzene	U	<u>J</u> <u>4</u>	0.158	0.500	1	03/28/2017 18:09	WG964116
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/28/2017 18:09	WG964116
2-Hexanone	U		0.757	2.50	1	03/28/2017 18:09	WG964116
n-Hexane	U		0.305	1.00	1	03/28/2017 18:09	WG964116
Iodomethane	U		0.377	2.50	1	03/28/2017 18:09	WG964116
Isopropylbenzene	U		0.126	0.500	1	03/28/2017 18:09	WG964116
p-Isopropyltoluene	U		0.138	0.500	1	03/28/2017 18:09	WG964116
2-Butanone (MEK)	U		1.28	2.50	1	03/28/2017 18:09	WG964116
Methylene Chloride	U		1.07	2.50	1	03/28/2017 18:09	WG964116
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	03/28/2017 18:09	WG964116
Methyl tert-butyl ether	U		0.102	0.500	1	03/28/2017 18:09	WG964116
Naphthalene	U		0.174	0.500	1	03/28/2017 18:09	WG964116
n-Propylbenzene	U		0.162	0.500	1	03/28/2017 18:09	WG964116
Styrene	U		0.117	0.500	1	03/28/2017 18:09	WG964116
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/28/2017 18:09	WG964116

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	03/28/2017 18:09	WG964116
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/28/2017 18:09	WG964116
Tetrachloroethene	U		0.199	0.500	1	03/28/2017 18:09	WG964116
Toluene	U		0.412	1.00	1	03/28/2017 18:09	WG964116
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/28/2017 18:09	WG964116
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/28/2017 18:09	WG964116
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/28/2017 18:09	WG964116
1,1,2-Trichloroethane	U		0.186	0.500	1	03/28/2017 18:09	WG964116
Trichloroethene	0.474	J	0.153	0.500	1	03/28/2017 18:09	WG964116
Trichlorofluoromethane	U		0.130	0.500	1	03/28/2017 18:09	WG964116
1,2,3-Trichloropropane	U		0.247	2.50	1	03/28/2017 18:09	WG964116
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/28/2017 18:09	WG964116
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/28/2017 18:09	WG964116
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/28/2017 18:09	WG964116
Vinyl acetate	U		0.645	2.50	1	03/28/2017 18:09	WG964116
Vinyl chloride	41.9		0.118	0.500	1	03/28/2017 18:09	WG964116
Xylenes, Total	U	J4	0.316	1.50	1	03/28/2017 18:09	WG964116
(S) Toluene-d8	111			80.0-120		03/28/2017 18:09	WG964116
(S) Dibromofluoromethane	104			76.0-123		03/28/2017 18:09	WG964116
(S) 4-Bromofluorobenzene	100			80.0-120		03/28/2017 18:09	WG964116

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/22/17 00:00

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	03/30/2017 02:26	WG963909
(S) a,a,a-Trifluorotoluene(FID)	98.2			77.0-122		03/30/2017 02:26	WG963909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.84	<u>B J</u>	1.05	25.0	1	03/28/2017 13:09	WG964116
Acrylonitrile	U		0.873	2.50	1	03/28/2017 13:09	WG964116
Benzene	U		0.0896	0.500	1	03/28/2017 13:09	WG964116
Bromobenzene	U		0.133	0.500	1	03/28/2017 13:09	WG964116
Bromodichloromethane	U		0.0800	0.500	1	03/28/2017 13:09	WG964116
Bromochloromethane	U		0.145	0.500	1	03/28/2017 13:09	WG964116
Bromoform	U		0.186	0.500	1	03/28/2017 13:09	WG964116
Bromomethane	U		0.157	0.500	1	03/28/2017 13:09	WG964116
n-Butylbenzene	U		0.143	0.500	1	03/28/2017 13:09	WG964116
sec-Butylbenzene	U		0.134	0.500	1	03/28/2017 13:09	WG964116
tert-Butylbenzene	U		0.183	0.500	1	03/28/2017 13:09	WG964116
Carbon disulfide	U		0.101	0.500	1	03/28/2017 13:09	WG964116
Carbon tetrachloride	U		0.159	0.500	1	03/28/2017 13:09	WG964116
Chlorobenzene	U	<u>J4</u>	0.140	0.500	1	03/28/2017 13:09	WG964116
Chlorodibromomethane	U		0.128	0.500	1	03/28/2017 13:09	WG964116
Chloroethane	U		0.141	0.500	1	03/28/2017 13:09	WG964116
2-Chloroethyl vinyl ether	U		0.877	2.50	1	03/28/2017 13:09	WG964116
Chloroform	U		0.0860	0.500	1	03/28/2017 13:09	WG964116
Chloromethane	U		0.153	0.500	1	03/28/2017 13:09	WG964116
2-Chlorotoluene	U		0.111	0.500	1	03/28/2017 13:09	WG964116
4-Chlorotoluene	U		0.0972	0.500	1	03/28/2017 13:09	WG964116
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	03/28/2017 13:09	WG964116
1,2-Dibromoethane	U		0.193	0.500	1	03/28/2017 13:09	WG964116
Dibromomethane	U		0.117	0.500	1	03/28/2017 13:09	WG964116
1,2-Dichlorobenzene	U		0.101	0.500	1	03/28/2017 13:09	WG964116
1,3-Dichlorobenzene	U		0.130	0.500	1	03/28/2017 13:09	WG964116
1,4-Dichlorobenzene	U		0.121	0.500	1	03/28/2017 13:09	WG964116
Dichlorodifluoromethane	U		0.127	0.500	1	03/28/2017 13:09	WG964116
1,1-Dichloroethane	U		0.114	0.500	1	03/28/2017 13:09	WG964116
1,2-Dichloroethane	U		0.108	0.500	1	03/28/2017 13:09	WG964116
1,1-Dichloroethene	U		0.188	0.500	1	03/28/2017 13:09	WG964116
cis-1,2-Dichloroethene	U		0.0933	0.500	1	03/28/2017 13:09	WG964116
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/28/2017 13:09	WG964116
1,2-Dichloropropane	U		0.190	0.500	1	03/28/2017 13:09	WG964116
1,1-Dichloropropene	U		0.128	0.500	1	03/28/2017 13:09	WG964116
1,3-Dichloropropane	U		0.147	0.500	1	03/28/2017 13:09	WG964116
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/28/2017 13:09	WG964116
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/28/2017 13:09	WG964116
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/28/2017 13:09	WG964116
2,2-Dichloropropane	U		0.0929	0.500	1	03/28/2017 13:09	WG964116
Di-isopropyl ether	U		0.0924	0.500	1	03/28/2017 13:09	WG964116
Ethylbenzene	U	<u>J4</u>	0.158	0.500	1	03/28/2017 13:09	WG964116
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/28/2017 13:09	WG964116
2-Hexanone	U		0.757	2.50	1	03/28/2017 13:09	WG964116
n-Hexane	U		0.305	1.00	1	03/28/2017 13:09	WG964116
Iodomethane	U		0.377	2.50	1	03/28/2017 13:09	WG964116
Isopropylbenzene	U		0.126	0.500	1	03/28/2017 13:09	WG964116
p-Isopropyltoluene	U		0.138	0.500	1	03/28/2017 13:09	WG964116
2-Butanone (MEK)	U		1.28	2.50	1	03/28/2017 13:09	WG964116



Collected date/time: 03/22/17 00:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	03/28/2017 13:09	WG964116
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	03/28/2017 13:09	WG964116
Methyl tert-butyl ether	U		0.102	0.500	1	03/28/2017 13:09	WG964116
Naphthalene	U		0.174	0.500	1	03/28/2017 13:09	WG964116
n-Propylbenzene	U		0.162	0.500	1	03/28/2017 13:09	WG964116
Styrene	U		0.117	0.500	1	03/28/2017 13:09	WG964116
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/28/2017 13:09	WG964116
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	03/28/2017 13:09	WG964116
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/28/2017 13:09	WG964116
Tetrachloroethene	U		0.199	0.500	1	03/28/2017 13:09	WG964116
Toluene	U		0.412	1.00	1	03/28/2017 13:09	WG964116
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/28/2017 13:09	WG964116
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/28/2017 13:09	WG964116
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/28/2017 13:09	WG964116
1,1,2-Trichloroethane	U		0.186	0.500	1	03/28/2017 13:09	WG964116
Trichloroethene	U		0.153	0.500	1	03/28/2017 13:09	WG964116
Trichlorofluoromethane	U		0.130	0.500	1	03/28/2017 13:09	WG964116
1,2,3-Trichloropropane	U		0.247	2.50	1	03/28/2017 13:09	WG964116
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/28/2017 13:09	WG964116
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/28/2017 13:09	WG964116
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/28/2017 13:09	WG964116
Vinyl acetate	U		0.645	2.50	1	03/28/2017 13:09	WG964116
Vinyl chloride	U		0.118	0.500	1	03/28/2017 13:09	WG964116
Xylenes, Total	U	J4	0.316	1.50	1	03/28/2017 13:09	WG964116
(S) Toluene-d8	110			80.0-120		03/28/2017 13:09	WG964116
(S) Dibromofluoromethane	103			76.0-123		03/28/2017 13:09	WG964116
(S) 4-Bromofluorobenzene	99.8			80.0-120		03/28/2017 13:09	WG964116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3205870-1	03/25/17 08:09	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	3130	<u>1</u>	ug/l	ug/l
Alkalinity				2710	20000

L897678-02 Original Sample (OS) • Duplicate (DUP)

(OS) L897678-02	03/25/17 08:17 • (DUP) R3205870-8	03/25/17 08:26	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	254000	260000	1	2.00	%	20
Alkalinity								

L897906-06 Original Sample (OS) • Duplicate (DUP)

(OS) L897906-06	03/25/17 11:15 • (DUP) R3205870-11	03/25/17 11:21	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	677000	677000	1	1.00	%	20
Alkalinity								

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3205870-9	03/25/17 09:20 • (LCSD) R3205870-10	03/25/17 10:37	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	100000	94200	105000	94.0	105	%	85.0-115	10.0	20	%
Alkalinity												

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

ACCOUNT:

PES Environmental, Inc. - WA

PROJECT:

1413.001.02.002

SDG:

L897678

DATE/TIME:

03/30/17 14:30

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Method Blank (MB)

(MB) R3205596-1 03/23/17 07:22

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L897678-02 Original Sample (OS) • Duplicate (DUP)

(OS) L897678-02 03/23/17 12:28 • (DUP) R3205596-4 03/23/17 12:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Chloride	7870	7880	1	0		15
Nitrate	3770	3750	1	1		15
Sulfate	41500	41400	1	0		15

L897686-01 Original Sample (OS) • Duplicate (DUP)

(OS) L897686-01 03/23/17 15:03 • (DUP) R3205596-6 03/23/17 15:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Chloride	3530	3540	1	0		15
Nitrate	1810	1820	1	1		15
Sulfate	11700	11700	1	0		15

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3205596-2 03/23/17 07:35 • (LCSD) R3205596-3 03/23/17 07:48

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Chloride	40000	39300	39400	98	98	80-120			0	15
Nitrate	8000	8110	8120	101	102	80-120			0	15
Sulfate	40000	39900	40000	100	100	80-120			0	15

L897678-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L897678-03 03/23/17 12:54 • (MS) R3205596-5 03/23/17 13:07

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%	%	%	%
Chloride	50000	65500	112000	94	1	80-120	E
Nitrate	5000	29.5	4610	92	1	80-120	

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L897678-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L897678-03 03/23/17 12:54 • (MS) R3205596-5 03/23/17 13:07

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	55400	100000	90	1	80-120	E

L897674-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897674-04 03/23/17 19:09 • (MS) R3205596-9 03/23/17 19:21 • (MSD) R3205596-10 03/23/17 19:34

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	214000	5170000	5120000	99	98	100	80-120			1	15
Nitrate	5000	21800	536000	504000	103	97	100	80-120			6	15
Sulfate	50000	3960000	8890000	8820000	98	97	100	80-120			1	15

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc



Method Blank (MB)

(MB) R3206289-1	03/27/17 10:39																		
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL															
	ug/l		ug/l	ug/l															
TOC (Total Organic Carbon)	U		102		1000														

L897450-10 Original Sample (OS) • Duplicate (DUP)

(OS) L897450-10	03/27/17 15:29 • (DUP) R3206289-6	03/27/17 15:44																	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
	ug/l	ug/l	%	%		%													
TOC (Total Organic Carbon)	1470	1480	1	1		20													

L897678-05 Original Sample (OS) • Duplicate (DUP)

(OS) L897678-05	03/27/17 20:08 • (DUP) R3206289-7	03/27/17 20:26																	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
	ug/l	ug/l	%	%		%													
TOC (Total Organic Carbon)	1350	1450	1	7		20													

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206289-2	03/27/17 12:10 • (LCSD) R3206289-5	03/27/17 14:27																	
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits									
	ug/l	ug/l	ug/l	%	%	%			%	%									
TOC (Total Organic Carbon)	75000	72800	73000	97	97	85-115			0	20									

L897450-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897450-05	03/27/17 12:59 • (MS) R3206289-3	03/27/17 13:17 • (MSD) R3206289-4	03/27/17 13:35																
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits							
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%							
TOC (Total Organic Carbon)	50000	2610	52600	53400	100	101	1	80-120			1	20							

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3205986-1 03/26/17 22:40				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3205986-2 03/26/17 22:44 • (LCSD) R3205986-3 03/26/17 22:47										
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	4800	4790	96	96	80-120			0	20
Manganese	50.0	46.7	45.9	93	92	80-120			2	20

L897678-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L897678-05 03/26/17 22:51 • (MS) R3205986-5 03/26/17 22:58 • (MSD) R3205986-6 03/26/17 23:01												
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	238	4930	4890	94	93	1	75-125			1	20
Manganese	50.0	41.1	81.3	81.6	80	81	1	75-125			0	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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[L897678-01.07](#)

Method Blank (MB)

(MB) R3207028-3	03/29/17 23:38																			
	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL																
Analyte	ug/l		ug/l	ug/l																
Gasoline Range Organics-NWTPH	U		31.6	100																
(S) a,a,a-Trifluorotoluene(FID)	98.4		77.0-122																	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3207028-1	03/29/17 22:32 • (LCSD) R3207028-2	03/29/17 22:54																		
	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits										
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%										
Gasoline Range Organics-NWTPH	5500	5660	5940	103	108	72.0-134			4.97	20										
(S) a,a,a-Trifluorotoluene(FID)				103	103	77.0-122														

L897678-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897678-01	03/30/17 00:57 • (MS) R3207028-4	03/30/17 01:19 • (MSD) R3207028-5	03/30/17 01:41																	
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits								
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%								
Gasoline Range Organics-NWTPH	5500	U	2710	2300	49.3	41.9	1	23.0-159			16.2	20								
(S) a,a,a-Trifluorotoluene(FID)					94.0	94.3		77.0-122												

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L897678-02.03.04.05](#)

Method Blank (MB)

(MB) R3205647-1 03/23/17 12:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L897590-02 Original Sample (OS) • Duplicate (DUP)

(OS) L897590-02 03/23/17 13:36 • (DUP) R3205647-2 03/23/17 16:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	ND	0.000	1	0.000		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L897590-05 Original Sample (OS) • Duplicate (DUP)

(OS) L897590-05 03/23/17 17:04 • (DUP) R3205647-3 03/23/17 18:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	2090	238	1	159		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3205647-4 03/23/17 19:51 • (LCSD) R3205647-5 03/24/17 09:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	63.7	66.4	94.0	97.9	70.0-130			4.03	20
Ethane	129	114	119	88.7	92.1	70.0-130			3.76	20
Ethene	127	113	118	89.0	93.2	70.0-130			4.64	20

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2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L897678-03](#)

Method Blank (MB)

(MB) R3206377-1 03/27/17 15:17		MB Result		MB Qualifier		MB MDL		MB RDL	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287			0.678			

L897633-02 Original Sample (OS) • Duplicate (DUP)

(OS) L897633-02 03/27/17 16:56 • (DUP) R3206377-2 03/27/17 21:55		Original Result		DUP Result		Dilution		DUP RPD		DUP Qualifier		DUP RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
Methane	10200	10700	50	4.68				20					

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206377-3 03/27/17 22:12 • (LCSD) R3206377-4 03/27/17 22:29		Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Methane	67.8	66.8	67.7	98.5	99.8			70.0-130					1.33								20

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5 Sr
6 Qc
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Method Blank (MB)

(MB) R3206693-3 03/28/17 10:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	2.11	J	1.05	25.0
Acrylonitrile	U		0.873	2.50
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	0.500
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	0.500
2-Chloroethyl vinyl ether	U		0.877	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	0.500
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	1.00
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	0.500
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500

1 Cp
2 Tc
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(MB) R3206693-3 03/28/17 10:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	2.50
n-Hexane	U		0.305	1.00
Iodomethane	U		0.377	2.50
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	2.50
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.204	J	0.174	0.500
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	1.00
1,2,3-Trichlorobenzene	0.255	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	0.500
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	2.50
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	fff			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) 4-Bromofluorobenzene	102			80.0-120

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206693-1 03/28/17 09:33 • (LCSD) R3206693-2 03/28/17 09:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	153	165	123	132	10.0-160			7.11	23
Acrylonitrile	125	123	131	98.5	105	60.0-142			6.50	20
Benzene	25.0	20.2	21.6	81.0	86.4	69.0-123			6.50	20
Bromobenzene	25.0	20.3	22.5	81.4	90.2	79.0-120			10.3	20
Bromodichloromethane	25.0	22.6	24.1	90.6	96.2	76.0-120			6.03	20
Bromochloromethane	25.0	20.2	21.3	80.7	85.3	76.0-122			5.62	20
Bromoform	25.0	19.9	21.6	79.5	86.4	67.0-132			8.22	20
Bromomethane	25.0	24.0	24.1	95.8	96.5	18.0-160			0.760	20
n-Butylbenzene	25.0	22.0	23.5	87.9	94.0	72.0-126			6.66	20
sec-Butylbenzene	25.0	20.0	21.7	80.0	86.7	74.0-121			8.07	20
tert-Butylbenzene	25.0	20.0	21.9	80.1	87.7	75.0-122			9.10	20
Carbon disulfide	25.0	17.9	18.8	71.8	75.1	55.0-127			4.53	20
Carbon tetrachloride	25.0	21.0	22.6	84.0	90.4	63.0-122			7.38	20
Chlorobenzene	25.0	19.7	21.5	78.7	86.1	79.0-121			9.01	20
Chlorodibromomethane	25.0	21.1	23.0	84.3	92.2	75.0-125	J4		8.84	20
Chloroethane	25.0	24.6	25.8	98.5	103	47.0-152			4.82	20
2-Chloroethyl vinyl ether	125	137	147	109	118	10.0-160			7.24	22
Chloroform	25.0	21.7	23.0	86.9	92.2	72.0-121			5.95	20
Chloromethane	25.0	24.6	24.4	98.2	97.7	48.0-139			0.560	20
2-Chlorotoluene	25.0	20.2	22.4	80.9	89.5	74.0-122			10.1	20
4-Chlorotoluene	25.0	20.5	22.6	81.8	90.4	79.0-120			9.96	20
1,2-Dibromo-3-Chloropropane	25.0	18.2	19.3	73.0	77.4	64.0-127			5.86	20
1,2-Dibromoethane	25.0	20.1	21.8	80.5	87.2	77.0-123			7.94	20
Dibromomethane	25.0	22.3	23.4	89.3	93.6	78.0-120			4.76	20
1,2-Dichlorobenzene	25.0	20.6	22.1	82.3	88.2	80.0-120			6.90	20
1,3-Dichlorobenzene	25.0	19.3	20.9	77.1	83.5	72.0-123			7.88	20
1,4-Dichlorobenzene	25.0	20.1	22.0	80.3	88.1	77.0-120			9.24	20
Dichlorodifluoromethane	25.0	27.2	24.6	109	98.2	49.0-155			10.2	20
1,1-Dichloroethane	25.0	22.4	23.7	89.4	94.8	70.0-126			5.84	20
1,2-Dichloroethane	25.0	23.9	25.1	95.7	100	67.0-126			4.63	20
1,1-Dichloroethene	25.0	21.9	22.7	87.6	90.8	64.0-129			3.64	20
cis-1,2-Dichloroethene	25.0	21.0	22.4	83.8	89.6	73.0-120			6.65	20
trans-1,2-Dichloroethene	25.0	19.7	20.6	79.0	82.3	71.0-121			4.15	20
1,2-Dichloropropane	25.0	22.9	25.3	91.8	101	75.0-125			9.66	20
1,1-Dichloropropene	25.0	21.0	22.7	84.1	90.6	71.0-129			7.53	20
1,3-Dichloropropene	25.0	21.0	22.4	84.0	89.8	80.0-121			6.70	20
cis-1,3-Dichloropropene	25.0	24.3	25.6	97.1	102	79.0-123			5.13	20
trans-1,3-Dichloropropene	25.0	23.5	25.4	94.1	102	74.0-127			7.77	20
trans-1,4-Dichloro-2-butene	25.0	20.7	21.7	82.6	86.7	55.0-134			4.88	20
2,2-Dichloropropane	25.0	22.5	24.4	89.9	97.7	60.0-125			8.39	20

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3206693-1 03/28/17 09:33 • (LCSD) R3206693-2 03/28/17 09:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	25.0	24.5	26.8	97.9	107	59.0-133			9.12	20
Ethylbenzene	25.0	19.1	20.8	76.3	83.4	77.0-120	J4		8.88	20
Hexachloro-1,3-butadiene	25.0	19.7	21.5	78.7	86.0	64.0-131			8.79	20
2-Hexanone	125	129	138	103	110	58.0-147			6.93	20
n-Hexane	25.0	18.1	19.2	72.5	76.7	56.0-124			5.68	20
Iodomethane	125	124	130	99.6	104	57.0-140			4.14	20
Isopropylbenzene	25.0	19.9	22.1	79.8	88.2	75.0-120			10.1	20
p-Isopropyltoluene	25.0	20.3	22.0	81.2	88.0	74.0-126			8.10	20
2-Butanone (MEK)	125	147	155	117	124	37.0-158			5.35	20
Methylene Chloride	25.0	19.4	20.7	77.4	82.9	66.0-121			6.86	20
4-Methyl-2-pentanone (MIBK)	125	150	159	120	127	59.0-143			5.43	20
Methyl tert-butyl ether	25.0	23.6	25.4	94.5	101	64.0-123			7.18	20
Naphthalene	25.0	18.2	19.8	72.8	79.3	62.0-128			8.60	20
p-Propylbenzene	25.0	20.3	22.4	81.2	89.4	79.0-120			9.70	20
Styrene	25.0	21.2	23.1	84.7	92.6	78.0-124			8.85	20
1,1,2-Tetrachloroethane	25.0	20.8	22.5	83.0	90.0	75.0-122			8.03	20
1,1,2,2-Tetrachloroethane	25.0	20.1	22.0	80.6	87.9	71.0-122			8.68	20
1,1,2-Trichlorotrifluoroethane	25.0	23.5	24.9	94.2	99.7	61.0-136			5.67	20
Tetrachloroethene	25.0	19.0	20.7	76.1	82.8	70.0-127			8.45	20
Toluene	25.0	20.2	21.4	80.8	85.7	77.0-120			5.88	20
1,2,3-Trichlorobenzene	25.0	17.2	19.0	68.7	75.9	61.0-133			9.91	20
1,2,4-Trichlorobenzene	25.0	18.9	19.9	75.7	79.7	69.0-129			5.10	20
1,1,1-Trichloroethane	25.0	22.1	23.7	88.2	94.9	68.0-122			7.33	20
1,1,2-Trichloroethane	25.0	19.8	21.4	79.4	85.8	78.0-120			7.72	20
Trichloroethene	25.0	20.6	21.5	82.6	86.0	78.0-120			4.03	20
Trichlorofluoromethane	25.0	26.2	26.7	105	107	56.0-137			1.58	20
1,2,3-Trichloropropane	25.0	20.6	22.2	82.3	88.9	72.0-124			7.68	20
1,2,4-Trimethylbenzene	25.0	20.3	22.1	81.3	88.4	75.0-120			8.40	20
1,2,3-Trimethylbenzene	25.0	21.1	22.7	84.3	91.0	75.0-120			7.58	20
1,3,5-Trimethylbenzene	25.0	20.1	21.9	80.4	87.5	75.0-120			8.49	20
Vinyl acetate	125	139	149	111	119	46.0-160			6.86	20
Vinyl chloride	25.0	27.2	26.7	109	107	64.0-133			2.02	20
Xylenes, Total	75.0	56.9	62.9	75.9	83.9	77.0-120	J4		10.0	20
(S) Toluene-d8				110	110	80.0-120				
(S) Dibromofluoromethane				104	104	76.0-123				
(S) 4-Bromofluorobenzene				97.6	99.9	80.0-120				

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L897952-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897952-03 03/28/17 19:09 • (MS) R3206693-4 03/28/17 19:29 • (MSD) R3206693-5 03/28/17 19:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	3.09	86.2	89.9	66.5	69.5	1	10.0-139			4.23	25
Acrylonitrile	125	U	153	153	122	122	1	46.0-159			0.0900	23
Benzene	25.0	U	24.1	23.1	96.4	92.3	1	34.0-147			4.35	20
Bromobenzene	25.0	U	25.0	23.7	100	94.6	1	51.0-137			5.55	20
Bromodichloromethane	25.0	U	27.2	26.1	109	105	1	52.0-135			3.82	20
Bromochloromethane	25.0	U	25.7	23.2	103	93.0	1	53.0-138			10.0	20
Bromoform	25.0	U	26.0	25.6	104	102	1	50.0-146			1.53	20
Bromomethane	25.0	U	26.4	24.1	106	96.3	1	10.0-160			9.34	23
n-Butylbenzene	25.0	U	25.5	25.5	102	102	1	50.0-144			0.0200	20
sec-Butylbenzene	25.0	U	24.3	23.3	97.1	93.4	1	48.0-143			3.92	20
tert-Butylbenzene	25.0	U	24.3	23.4	97.1	93.7	1	50.0-142			3.54	20
Carbon disulfide	25.0	U	20.2	18.6	80.7	74.5	1	10.0-147			8.03	20
Carbon tetrachloride	25.0	U	25.5	24.5	102	97.9	1	41.0-138			4.30	20
Chlorobenzene	25.0	U	23.9	22.5	95.4	89.9	1	52.0-141			5.93	20
Chlorodibromomethane	25.0	U	25.8	24.8	103	99.2	1	54.0-142			3.91	20
Chloroethane	25.0	U	27.7	26.2	111	105	1	23.0-160			5.47	20
2-Chloroethyl vinyl ether	125	U	ND	ND	0.000	0.000	1	10.0-160	J6	J6	0.000	40
Chloroform	25.0	U	26.6	24.6	106	98.3	1	50.0-139			7.76	20
Chloromethane	25.0	U	27.2	25.5	109	102	1	14.0-151			6.48	20
2,2-Chlorotoluene	25.0	U	24.5	23.4	97.8	93.7	1	48.0-142			4.27	20
4-Chlorotoluene	25.0	U	24.5	23.2	98.0	92.7	1	52.0-139			5.61	20
1,2-Dibromo-3-Chloropropane	25.0	U	23.4	23.9	93.5	95.4	1	49.0-144			1.99	24
1,2-Dibromoethane	25.0	U	24.3	23.6	97.3	94.2	1	54.0-140			3.22	20
Dibromomethane	25.0	U	26.1	25.7	104	103	1	53.0-138			1.67	20
1,2-Dichlorobenzene	25.0	U	24.2	24.0	96.9	95.9	1	56.0-139			1.05	20
1,3-Dichlorobenzene	25.0	U	23.4	22.7	93.7	90.9	1	50.0-141			3.01	20
1,4-Dichlorobenzene	25.0	U	23.9	23.2	95.5	92.9	1	53.0-136			2.73	20
Dichlorodifluoromethane	25.0	U	30.3	28.2	121	113	1	20.0-160			7.15	21
1,1-Dichloroethane	25.0	U	27.3	25.4	109	101	1	47.0-143			7.40	20
1,2-Dichloroethane	25.0	U	28.7	28.0	115	112	1	47.0-141			2.66	20
1,1-Dichloroethene	25.0	U	26.2	25.1	105	100	1	31.0-148			4.37	20
cis-1,2-Dichloroethene	25.0	2.63	28.1	25.6	102	91.8	1	43.0-142			9.27	20
trans-1,2-Dichloroethene	25.0	U	23.6	21.6	94.3	86.4	1	36.0-141			8.76	20
1,2-Dichloropropane	25.0	U	27.7	26.8	111	107	1	51.0-141			3.38	20
1,1-Dichloropropene	25.0	U	24.4	22.9	97.6	91.4	1	42.0-146			6.48	20
1,3-Dichloropropene	25.0	U	25.3	24.6	101	98.3	1	58.0-139			2.86	20
cis-1,3-Dichloropropene	25.0	U	25.9	25.3	104	101	1	53.0-139			2.63	20
trans-1,3-Dichloropropene	25.0	U	27.4	26.6	110	106	1	51.0-143			3.10	20
trans-1,4-Dichloro-2-butene	25.0	U	22.4	21.0	89.5	84.1	1	40.0-150			6.21	21
2,2-Dichloropropane	25.0	U	27.8	25.5	111	102	1	43.0-139			8.81	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

L897952-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L897952-03 03/28/17 19:09 • (MS) R3206693-4 03/28/17 19:29 • (MSD) R3206693-5 03/28/17 19:49

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	25.0	U	31.4	29.8	126	119	1	44.0-144			5.01	20
Ethylbenzene	25.0	U	23.2	22.1	92.8	88.2	1	42.0-147			5.08	20
Hexachloro-1,3-butadiene	25.0	U	23.4	24.0	93.5	96.1	1	44.0-146			2.80	21
2-Hexanone	125	U	119	124	94.8	98.9	1	36.0-145			4.16	23
n-Hexane	25.0	0.306	20.9	20.2	82.3	79.5	1	13.0-145			3.41	20
Iodomethane	125	U	148	135	118	108	1	30.0-151			9.18	20
Isopropylbenzene	25.0	U	24.3	23.3	97.1	93.3	1	48.0-141			3.96	20
p-Isopropyltoluene	25.0	U	24.1	23.4	96.4	93.5	1	49.0-146			3.02	20
2-Butanone (MEK)	125	U	115	122	92.2	97.3	1	12.0-149			5.41	24
Methylene Chloride	25.0	U	24.2	22.6	96.7	90.6	1	42.0-135			6.50	20
4-Methyl-2-pentanone (MIBK)	125	U	161	168	129	134	1	44.0-160			3.97	22
Methyl tert-butyl ether	25.0	U	30.1	28.4	120	114	1	42.0-142			5.67	20
Naphthalene	25.0	U	20.9	23.3	83.5	93.4	1	42.0-146			11.2	24
n-Propylbenzene	25.0	U	24.6	23.4	98.5	93.5	1	47.0-144			5.12	20
Styrene	25.0	U	25.2	23.3	101	93.2	1	47.0-147			7.65	20
1,1,1,2-Tetrachloroethane	25.0	U	25.6	24.5	102	98.0	1	52.0-140			4.18	20
1,1,2,2-Tetrachloroethane	25.0	U	25.5	25.9	102	104	1	46.0-149			1.39	20
1,1,2-Trichlorotrifluoroethane	25.0	U	28.6	26.8	114	107	1	40.0-151			6.40	21
Tetrachloroethene	25.0	0.566	23.5	21.8	91.9	84.9	1	38.0-147			7.73	20
Toluene	25.0	U	24.2	22.7	96.6	90.8	1	42.0-141			6.21	20
1,2,3-Trichlorobenzene	25.0	U	19.3	21.2	77.2	84.7	1	45.0-145			9.27	22
1,2,4-Trichlorobenzene	25.0	U	20.9	21.7	83.8	86.7	1	49.0-147			3.51	21
1,1,1-Trichloroethane	25.0	U	27.0	25.4	108	102	1	46.0-140			5.94	20
1,1,2-Trichloroethane	25.0	U	24.2	23.8	97.0	95.3	1	54.0-139			1.80	20
Trichloroethene	25.0	0.355	24.4	23.3	96.4	91.9	1	32.0-156			4.69	20
Trichlorofluoromethane	25.0	U	30.6	28.3	122	113	1	32.0-152			7.70	20
1,2,3-Trichloropropane	25.0	U	25.8	25.6	103	102	1	54.0-143			0.930	21
1,2,4-Trimethylbenzene	25.0	U	23.9	23.0	95.5	92.0	1	41.0-146			3.76	20
1,2,3-Trimethylbenzene	25.0	U	24.5	24.4	97.9	97.4	1	48.0-138			0.420	20
1,3,5-Trimethylbenzene	25.0	U	24.2	23.2	96.8	92.6	1	44.0-143			4.44	20
Vinyl acetate	125	U	170	170	136	136	1	30.0-160			0.0400	20
Vinyl chloride	25.0	5.22	35.1	32.8	119	110	1	24.0-153			6.56	20
Xylenes, Total	75.0	U	69.6	65.6	92.8	87.5	1	41.0-148			5.92	20
(S) Toluene-d8					111	108		80.0-120				
(S) Dibromofluoromethane					105	102		76.0-123				
(S) 4-Bromofluorobenzene					101	97.0		80.0-120				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Public Review Draft



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier Description

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

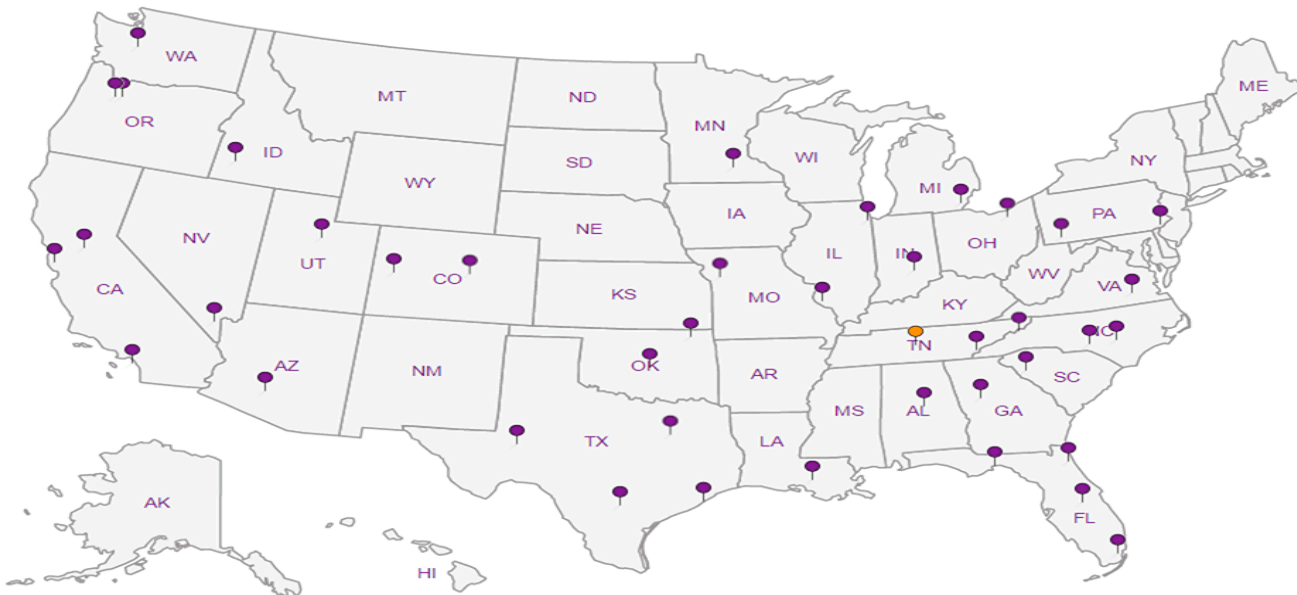
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Email To: bhaldeaman@pesenv.com

Report to:
Bill Haldeaman

Project
Description: **American Linen Supply**

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.02.002

Lab Project #
PESENVSWA-141300102

Collected by (print):
Kirsten Springstead

Site/Facility ID #
700 DEXTER AVE N SEATTLE

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on ice: N Y X

Same Day Five Day X
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

*NO3,Cl,SO4,Alk 250mlHDPE-NoPres
NWTPHGX 40mlAmb HCl
TOC 250mlAmb-HCl
Total Fe Mn 6020 250mlHDPE-HNO3
low level 8260C 40mlAmb-HCl
low level RSK175 40mlAmb-HCl

Analysis / Container / Preservative

Chain of Custody Page 1 of 1



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-258-8888
Phone: 800-787-5839
Fax: 615-258-5839

L# **1897678**
C235

Accrnum: PESENVSWA
Template: T121414
Prelgrn: P592684
TSR: 110 - Brian Ford
PB: 3-13-17
Shipped Via: FedEx Ground
Remarks: Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*NO3,Cl,SO4,Alk 250mlHDPE-NoPres	NWTPHGX 40mlAmb HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	low level 8260C 40mlAmb-HCl	low level RSK175 40mlAmb-HCl
MW125-032217	Grab	GW	22.5	3-22-17	835	6		X				
BB-8-032217	Grab	GW	35	3-22-17	1020	9	X	X	X	X	X	
MW113-032217	Grab	GW	75	3-22-17	1205	9	X	X	X	X	X	
MW115-032217	Grab	GW	40	3-22-17	1225	9	X	X	X	X	X	
MW112-032217	Grab	GW	70	3-22-17	1405	9	X	X	X	X	X	
GL2-032217	Grab	GW	9	3-22-17	1435	4						
JRAP BLANK-032217	Grab	GW	-	-	-	1						

Remarks: *Nitrate has a 48 hour hold time

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Waste Water
DW - Drinking Water
OT - Other

Samples returned via:
UPS _____ FedEx _____ Courier _____

Tracking # **7176 9011 7100**

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC seal present/Intact: Y N
COC signed/accurate: Y N
Bottles active/Intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
VQA zero headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature)
[Signature]

Date: **3-22-17** Time: **1530**

Received by: (Signature)
[Signature]

Trip Blank Received: Yes No
HCL / MeOH TBA

If preservation required by LogIn: Date/Time

Relinquished by: (Signature)

Date: _____ Time: _____

Received for lab by: (Signature)
[Signature]

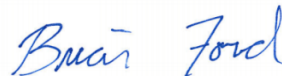
Temp: **22.42** °C Bottles Received: **46**
Date: **3-23-17** Time: **0900**

Hold: _____ Condition: **NCF / OK**

PES Environmental, Inc.- WA

Sample Delivery Group: L899176
Samples Received: 03/30/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 700 DEXTER AVE N SEATTLE WA
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW130-032917 L899176-01 GW

Collected by C. DeBoer
Collected date/time 03/29/17 09:55
Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG965753	1	03/30/17 15:01	03/30/17 15:01	AMC
Wet Chemistry by Method 9056A	WG965688	1	03/30/17 15:33	03/30/17 15:33	SAM
Wet Chemistry by Method 9060A	WG966665	1	04/04/17 16:07	04/04/17 16:07	SJM
Metals (ICPMS) by Method 6020	WG966238	1	04/05/17 10:13	04/07/17 16:36	LAT
Volatile Organic Compounds (GC) by Method NWTPHGX	WG966455	5	04/05/17 08:49	04/05/17 08:49	JAH
Volatile Organic Compounds (GC) by Method RSK175	WG966794	1	04/04/17 02:20	04/04/17 02:20	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	20	04/05/17 21:53	04/05/17 21:53	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	200	04/06/17 18:03	04/06/17 18:03	JHH

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

MW128-032917 L899176-02 GW

Collected by C. DeBoer
Collected date/time 03/29/17 10:00
Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG965753	1	03/30/17 15:17	03/30/17 15:17	AMC
Wet Chemistry by Method 9056A	WG965688	1	03/30/17 15:51	03/30/17 15:51	SAM
Wet Chemistry by Method 9060A	WG966665	1	04/04/17 16:20	04/04/17 16:20	SJM
Metals (ICPMS) by Method 6020	WG966238	1	04/05/17 10:13	04/07/17 15:21	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG966794	1	04/04/17 02:37	04/04/17 02:37	MJ
Volatile Organic Compounds (GC) by Method RSK175	WG967102	50	04/04/17 16:30	04/04/17 16:30	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/05/17 22:14	04/05/17 22:14	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/06/17 18:16	04/06/17 18:16	JHH

6 Qc

7 Gl

8 Al

9 Sc

MW124-032917 L899176-03 GW

Collected by C. DeBoer
Collected date/time 03/29/17 12:05
Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/05/17 22:34	04/05/17 22:34	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/06/17 18:28	04/06/17 18:28	JHH

MW109-032917 L899176-04 GW

Collected by C. DeBoer
Collected date/time 03/29/17 12:00
Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG965753	1	03/30/17 15:23	03/30/17 15:23	AMC
Wet Chemistry by Method 9056A	WG965688	1	03/30/17 16:28	03/30/17 16:28	SAM
Wet Chemistry by Method 9060A	WG966665	1	04/04/17 16:39	04/04/17 16:39	SJM
Metals (ICPMS) by Method 6020	WG966238	1	04/05/17 10:13	04/07/17 15:24	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG966794	1	04/04/17 04:00	04/04/17 04:00	MJ
Volatile Organic Compounds (GC) by Method RSK175	WG967102	10	04/04/17 16:46	04/04/17 16:46	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/05/17 22:55	04/05/17 22:55	LRL

MW119-032917 L899176-05 GW

Collected by C. DeBoer
Collected date/time 03/29/17 13:55
Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG965753	1	03/30/17 15:30	03/30/17 15:30	AMC
Wet Chemistry by Method 9056A	WG965688	1	03/30/17 17:05	03/30/17 17:05	SAM
Wet Chemistry by Method 9060A	WG966665	1	04/04/17 16:55	04/04/17 16:55	SJM
Metals (ICPMS) by Method 6020	WG966238	1	04/05/17 10:13	04/07/17 15:35	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG966794	1	04/04/17 04:17	04/04/17 04:17	MJ
Volatile Organic Compounds (GC) by Method RSK175	WG967102	10	04/04/17 17:03	04/04/17 17:03	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/05/17 23:15	04/05/17 23:15	LRL



MW102-032917 L899176-06 GW

Collected by C. DeBoer
 Collected date/time 03/29/17 14:10
 Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/05/17 23:36	04/05/17 23:36	LRL

¹ Cp

² Tc

³ Ss

MW301-032917 L899176-07 GW

Collected by C. DeBoer
 Collected date/time 03/29/17 14:50
 Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/05/17 23:56	04/05/17 23:56	LRL

⁴ Cn

⁵ Sr

TRIP BLANK L899176-08 GW

Collected by C. DeBoer
 Collected date/time 03/29/17 00:00
 Received date/time 03/30/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG966455	1	04/05/17 01:08	04/05/17 01:08	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG966572	1	04/05/17 17:10	04/05/17 17:10	LRL

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	276000		2710	20000	1	03/30/2017 15:01	WG965753

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	100000		51.9	1000	1	03/30/2017 15:33	WG965688
Nitrate	U		22.7	100	1	03/30/2017 15:33	WG965688
Sulfate	7070		77.4	5000	1	03/30/2017 15:33	WG965688

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10700		102	1000	1	04/04/2017 16:07	WG966665

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1190		15.0	100	1	04/07/2017 16:36	WG966238
Manganese	555		0.250	5.00	1	04/07/2017 16:36	WG966238

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	8890		158	500	5	04/05/2017 08:49	WG966455
(S) a,a,a-Trifluorotoluene(FID) 109				77.0-122		04/05/2017 08:49	WG966455

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	619		0.287	0.678	1	04/04/2017 02:20	WG966794
Ethane	1.62		0.296	1.29	1	04/04/2017 02:20	WG966794
Ethene	30.0		0.422	1.27	1	04/04/2017 02:20	WG966794

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	23.7	J	21.0	500	20	04/05/2017 21:53	WG966572
Acrylonitrile	U		17.5	50.0	20	04/05/2017 21:53	WG966572
Benzene	U		1.79	10.0	20	04/05/2017 21:53	WG966572
Bromobenzene	U		2.66	10.0	20	04/05/2017 21:53	WG966572
Bromodichloromethane	U		1.60	10.0	20	04/05/2017 21:53	WG966572
Bromochloromethane	U		2.90	10.0	20	04/05/2017 21:53	WG966572
Bromoform	U		3.72	10.0	20	04/05/2017 21:53	WG966572
Bromomethane	U		3.14	10.0	20	04/05/2017 21:53	WG966572
n-Butylbenzene	U		2.86	10.0	20	04/05/2017 21:53	WG966572
sec-Butylbenzene	U		2.68	10.0	20	04/05/2017 21:53	WG966572
tert-Butylbenzene	U		3.66	10.0	20	04/05/2017 21:53	WG966572
Carbon disulfide	U		2.02	10.0	20	04/05/2017 21:53	WG966572
Carbon tetrachloride	U		3.18	10.0	20	04/05/2017 21:53	WG966572
Chlorobenzene	U		2.80	10.0	20	04/05/2017 21:53	WG966572
Chlorodibromomethane	U		2.56	10.0	20	04/05/2017 21:53	WG966572
Chloroethane	U		2.82	10.0	20	04/05/2017 21:53	WG966572



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
2-Chloroethyl vinyl ether	U		17.5	50.0	20	04/05/2017 21:53	WG966572
Chloroform	U		1.72	10.0	20	04/05/2017 21:53	WG966572
Chloromethane	U		3.06	10.0	20	04/05/2017 21:53	WG966572
2-Chlorotoluene	U		2.22	10.0	20	04/05/2017 21:53	WG966572
4-Chlorotoluene	U		1.94	10.0	20	04/05/2017 21:53	WG966572
1,2-Dibromo-3-Chloropropane	U		6.50	20.0	20	04/05/2017 21:53	WG966572
1,2-Dibromoethane	U		3.86	10.0	20	04/05/2017 21:53	WG966572
Dibromomethane	U		2.34	10.0	20	04/05/2017 21:53	WG966572
1,2-Dichlorobenzene	U		2.02	10.0	20	04/05/2017 21:53	WG966572
1,3-Dichlorobenzene	U		2.60	10.0	20	04/05/2017 21:53	WG966572
1,4-Dichlorobenzene	U		2.42	10.0	20	04/05/2017 21:53	WG966572
Dichlorodifluoromethane	U		2.54	10.0	20	04/05/2017 21:53	WG966572
1,1-Dichloroethane	U		2.28	10.0	20	04/05/2017 21:53	WG966572
1,2-Dichloroethane	U		2.16	10.0	20	04/05/2017 21:53	WG966572
1,1-Dichloroethene	102		3.76	10.0	20	04/05/2017 21:53	WG966572
cis-1,2-Dichloroethene	7880		18.7	100	200	04/06/2017 18:03	WG966572
trans-1,2-Dichloroethene	39.3		3.04	10.0	20	04/05/2017 21:53	WG966572
1,2-Dichloropropane	U		3.80	10.0	20	04/05/2017 21:53	WG966572
1,1-Dichloropropene	U		2.56	10.0	20	04/05/2017 21:53	WG966572
1,3-Dichloropropane	U		2.94	10.0	20	04/05/2017 21:53	WG966572
cis-1,3-Dichloropropene	U		1.95	10.0	20	04/05/2017 21:53	WG966572
trans-1,3-Dichloropropene	U		4.44	10.0	20	04/05/2017 21:53	WG966572
trans-1,4-Dichloro-2-butene	U	JO	5.14	100	20	04/05/2017 21:53	WG966572
2,2-Dichloropropane	U		1.86	10.0	20	04/05/2017 21:53	WG966572
Di-isopropyl ether	U		1.85	10.0	20	04/05/2017 21:53	WG966572
Ethylbenzene	U		3.16	10.0	20	04/05/2017 21:53	WG966572
Hexachloro-1,3-butadiene	U		3.14	20.0	20	04/05/2017 21:53	WG966572
2-Hexanone	U		15.1	50.0	20	04/05/2017 21:53	WG966572
n-Hexane	U		6.10	20.0	20	04/05/2017 21:53	WG966572
Iodomethane	U		7.54	50.0	20	04/05/2017 21:53	WG966572
Isopropylbenzene	U		2.52	10.0	20	04/05/2017 21:53	WG966572
p-Isopropyltoluene	U		2.76	10.0	20	04/05/2017 21:53	WG966572
2-Butanone (MEK)	U		25.6	50.0	20	04/05/2017 21:53	WG966572
Methylene Chloride	U		21.4	50.0	20	04/05/2017 21:53	WG966572
4-Methyl-2-pentanone (MIBK)	U		16.5	50.0	20	04/05/2017 21:53	WG966572
Methyl tert-butyl ether	U		2.04	10.0	20	04/05/2017 21:53	WG966572
Naphthalene	U		3.48	10.0	20	04/05/2017 21:53	WG966572
n-Propylbenzene	U		3.24	10.0	20	04/05/2017 21:53	WG966572
Styrene	U		2.34	10.0	20	04/05/2017 21:53	WG966572
1,1,1,2-Tetrachloroethane	U		2.40	10.0	20	04/05/2017 21:53	WG966572
1,1,2,2-Tetrachloroethane	U		2.60	10.0	20	04/05/2017 21:53	WG966572
1,1,2-Trichlorotrifluoroethane	U		3.28	10.0	20	04/05/2017 21:53	WG966572
Tetrachloroethene	721		39.8	100	200	04/06/2017 18:03	WG966572
Toluene	U		8.24	20.0	20	04/05/2017 21:53	WG966572
1,2,3-Trichlorobenzene	U		3.28	10.0	20	04/05/2017 21:53	WG966572
1,2,4-Trichlorobenzene	U		7.10	10.0	20	04/05/2017 21:53	WG966572
1,1,1-Trichloroethane	U		1.88	10.0	20	04/05/2017 21:53	WG966572
1,1,2-Trichloroethane	U		3.72	10.0	20	04/05/2017 21:53	WG966572
Trichloroethene	830		30.6	100	200	04/06/2017 18:03	WG966572
Trichlorofluoromethane	U		2.60	10.0	20	04/05/2017 21:53	WG966572
1,2,3-Trichloropropane	U		4.94	50.0	20	04/05/2017 21:53	WG966572
1,2,4-Trimethylbenzene	U		2.46	10.0	20	04/05/2017 21:53	WG966572
1,2,3-Trimethylbenzene	U		1.48	10.0	20	04/05/2017 21:53	WG966572
1,3,5-Trimethylbenzene	U		2.48	10.0	20	04/05/2017 21:53	WG966572
Vinyl acetate	U		12.9	50.0	20	04/05/2017 21:53	WG966572
Vinyl chloride	186		2.36	10.0	20	04/05/2017 21:53	WG966572

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/29/17 09:55

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Xylenes, Total	U		6.32	30.0	20	04/05/2017 21:53	WG966572
(S) Toluene-d8	102			80.0-120		04/05/2017 21:53	WG966572
(S) Toluene-d8	103			80.0-120		04/06/2017 18:03	WG966572
(S) Dibromofluoromethane	105			76.0-123		04/05/2017 21:53	WG966572
(S) Dibromofluoromethane	106			76.0-123		04/06/2017 18:03	WG966572
(S) 4-Bromofluorobenzene	91.6			80.0-120		04/05/2017 21:53	WG966572
(S) 4-Bromofluorobenzene	97.3			80.0-120		04/06/2017 18:03	WG966572

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	387000		2710	20000	1	03/30/2017 15:17	WG965753

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	15900		51.9	1000	1	03/30/2017 15:51	WG965688
Nitrate	U		22.7	100	1	03/30/2017 15:51	WG965688
Sulfate	U		77.4	5000	1	03/30/2017 15:51	WG965688

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4840		102	1000	1	04/04/2017 16:20	WG966665

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	10500		15.0	100	1	04/07/2017 15:21	WG966238
Manganese	227		0.250	5.00	1	04/07/2017 15:21	WG966238

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	12600		14.4	33.9	50	04/04/2017 16:30	WG967102
Ethane	13.2		0.296	1.29	1	04/04/2017 02:37	WG966794
Ethene	64.8		0.422	1.27	1	04/04/2017 02:37	WG966794

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/05/2017 22:14	WG966572
Acrylonitrile	U		0.873	2.50	1	04/05/2017 22:14	WG966572
Benzene	U		0.0896	0.500	1	04/05/2017 22:14	WG966572
Bromobenzene	U		0.133	0.500	1	04/05/2017 22:14	WG966572
Bromodichloromethane	U		0.0800	0.500	1	04/05/2017 22:14	WG966572
Bromochloromethane	U		0.145	0.500	1	04/05/2017 22:14	WG966572
Bromoform	U		0.186	0.500	1	04/05/2017 22:14	WG966572
Bromomethane	U		0.157	0.500	1	04/05/2017 22:14	WG966572
n-Butylbenzene	U		0.143	0.500	1	04/05/2017 22:14	WG966572
sec-Butylbenzene	U		0.134	0.500	1	04/05/2017 22:14	WG966572
tert-Butylbenzene	U		0.183	0.500	1	04/05/2017 22:14	WG966572
Carbon disulfide	U		0.101	0.500	1	04/05/2017 22:14	WG966572
Carbon tetrachloride	U		0.159	0.500	1	04/05/2017 22:14	WG966572
Chlorobenzene	U		0.140	0.500	1	04/05/2017 22:14	WG966572
Chlorodibromomethane	U		0.128	0.500	1	04/05/2017 22:14	WG966572
Chloroethane	U		0.141	0.500	1	04/05/2017 22:14	WG966572
2-Chloroethyl vinyl ether	U		0.877	2.50	1	04/05/2017 22:14	WG966572
Chloroform	U		0.0860	0.500	1	04/05/2017 22:14	WG966572
Chloromethane	U		0.153	0.500	1	04/05/2017 22:14	WG966572
2-Chlorotoluene	U		0.111	0.500	1	04/05/2017 22:14	WG966572
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2017 22:14	WG966572
1,2-Dibromo-3-Chloropropane	U		1.325	1.00	1	04/05/2017 22:14	WG966572
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2017 22:14	WG966572

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/29/17 10:00

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.117	0.500	1	04/05/2017 22:14	WG966572
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2017 22:14	WG966572
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2017 22:14	WG966572
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2017 22:14	WG966572
Dichlorodifluoromethane	U		0.127	0.500	1	04/05/2017 22:14	WG966572
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2017 22:14	WG966572
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2017 22:14	WG966572
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2017 22:14	WG966572
cis-1,2-Dichloroethene	7.16		0.0933	0.500	1	04/06/2017 18:16	WG966572
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2017 22:14	WG966572
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2017 22:14	WG966572
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2017 22:14	WG966572
1,3-Dichloropropane	U		0.147	0.500	1	04/05/2017 22:14	WG966572
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2017 22:14	WG966572
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2017 22:14	WG966572
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	04/05/2017 22:14	WG966572
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2017 22:14	WG966572
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2017 22:14	WG966572
Ethylbenzene	U		0.158	0.500	1	04/05/2017 22:14	WG966572
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2017 22:14	WG966572
2-Hexanone	U		0.757	2.50	1	04/05/2017 22:14	WG966572
n-Hexane	U		0.305	1.00	1	04/05/2017 22:14	WG966572
Iodomethane	U		0.377	2.50	1	04/05/2017 22:14	WG966572
Isopropylbenzene	U		0.126	0.500	1	04/05/2017 22:14	WG966572
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2017 22:14	WG966572
2-Butanone (MEK)	U		1.28	2.50	1	04/05/2017 22:14	WG966572
Methylene Chloride	U		1.07	2.50	1	04/05/2017 22:14	WG966572
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	04/05/2017 22:14	WG966572
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2017 22:14	WG966572
Naphthalene	U		0.174	0.500	1	04/05/2017 22:14	WG966572
n-Propylbenzene	U		0.162	0.500	1	04/05/2017 22:14	WG966572
Styrene	U		0.117	0.500	1	04/05/2017 22:14	WG966572
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2017 22:14	WG966572
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2017 22:14	WG966572
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2017 22:14	WG966572
Tetrachloroethene	U		0.199	0.500	1	04/06/2017 18:16	WG966572
Toluene	U		0.412	1.00	1	04/05/2017 22:14	WG966572
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2017 22:14	WG966572
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2017 22:14	WG966572
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2017 22:14	WG966572
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2017 22:14	WG966572
Trichloroethene	U		0.153	0.500	1	04/06/2017 18:16	WG966572
Trichlorofluoromethane	U		0.130	0.500	1	04/05/2017 22:14	WG966572
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2017 22:14	WG966572
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2017 22:14	WG966572
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2017 22:14	WG966572
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2017 22:14	WG966572
Vinyl acetate	U		0.645	2.50	1	04/05/2017 22:14	WG966572
Vinyl chloride	72.4		0.118	0.500	1	04/05/2017 22:14	WG966572
Xylenes, Total	U		0.316	1.50	1	04/05/2017 22:14	WG966572
(S) Toluene-d8	99.9			80.0-120		04/05/2017 22:14	WG966572
(S) Toluene-d8	103			80.0-120		04/06/2017 18:16	WG966572
(S) Dibromofluoromethane	104			76.0-123		04/05/2017 22:14	WG966572
(S) Dibromofluoromethane	107			76.0-123		04/06/2017 18:16	WG966572
(S) 4-Bromofluorobenzene	89.0			80.0-120		04/05/2017 22:14	WG966572
(S) 4-Bromofluorobenzene	96.4			80.0-120		04/06/2017 18:16	WG966572

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.35	J	1.05	25.0	1	04/05/2017 22:34	WG966572
Acrylonitrile	U		0.873	2.50	1	04/05/2017 22:34	WG966572
Benzene	U		0.0896	0.500	1	04/05/2017 22:34	WG966572
Bromobenzene	U		0.133	0.500	1	04/05/2017 22:34	WG966572
Bromodichloromethane	U		0.0800	0.500	1	04/05/2017 22:34	WG966572
Bromochloromethane	U		0.145	0.500	1	04/05/2017 22:34	WG966572
Bromoform	U		0.186	0.500	1	04/05/2017 22:34	WG966572
Bromomethane	U		0.157	0.500	1	04/05/2017 22:34	WG966572
n-Butylbenzene	U		0.143	0.500	1	04/05/2017 22:34	WG966572
sec-Butylbenzene	U		0.134	0.500	1	04/05/2017 22:34	WG966572
tert-Butylbenzene	U		0.183	0.500	1	04/05/2017 22:34	WG966572
Carbon disulfide	U		0.101	0.500	1	04/05/2017 22:34	WG966572
Carbon tetrachloride	U		0.159	0.500	1	04/05/2017 22:34	WG966572
Chlorobenzene	U		0.140	0.500	1	04/05/2017 22:34	WG966572
Chlorodibromomethane	U		0.128	0.500	1	04/05/2017 22:34	WG966572
Chloroethane	U		0.141	0.500	1	04/05/2017 22:34	WG966572
2-Chloroethyl vinyl ether	U		0.877	2.50	1	04/05/2017 22:34	WG966572
Chloroform	1.37		0.0860	0.500	1	04/05/2017 22:34	WG966572
Chloromethane	U		0.153	0.500	1	04/05/2017 22:34	WG966572
2-Chlorotoluene	U		0.111	0.500	1	04/05/2017 22:34	WG966572
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2017 22:34	WG966572
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	04/05/2017 22:34	WG966572
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2017 22:34	WG966572
Dibromomethane	U		0.117	0.500	1	04/05/2017 22:34	WG966572
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2017 22:34	WG966572
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2017 22:34	WG966572
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2017 22:34	WG966572
Dichlorodifluoromethane	U		0.127	0.500	1	04/05/2017 22:34	WG966572
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2017 22:34	WG966572
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2017 22:34	WG966572
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2017 22:34	WG966572
cis-1,2-Dichloroethene	0.661		0.0933	0.500	1	04/06/2017 18:28	WG966572
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2017 22:34	WG966572
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2017 22:34	WG966572
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2017 22:34	WG966572
1,3-Dichloropropane	U		0.147	0.500	1	04/05/2017 22:34	WG966572
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2017 22:34	WG966572
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2017 22:34	WG966572
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	04/05/2017 22:34	WG966572
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2017 22:34	WG966572
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2017 22:34	WG966572
Ethylbenzene	U		0.158	0.500	1	04/05/2017 22:34	WG966572
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2017 22:34	WG966572
2-Hexanone	U		0.757	2.50	1	04/05/2017 22:34	WG966572
n-Hexane	U		0.305	1.00	1	04/05/2017 22:34	WG966572
Iodomethane	U		0.377	2.50	1	04/05/2017 22:34	WG966572
Isopropylbenzene	U		0.126	0.500	1	04/05/2017 22:34	WG966572
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2017 22:34	WG966572
2-Butanone (MEK)	U		1.28	2.50	1	04/05/2017 22:34	WG966572
Methylene Chloride	U		1.07	2.50	1	04/05/2017 22:34	WG966572
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	04/05/2017 22:34	WG966572
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2017 22:34	WG966572
Naphthalene	U		0.174	0.500	1	04/05/2017 22:34	WG966572
n-Propylbenzene	U		0.162	0.500	1	04/05/2017 22:34	WG966572
Styrene	U		0.117	0.500	1	04/05/2017 22:34	WG966572
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2017 22:34	WG966572

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 03/29/17 12:05

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2017 22:34	WG966572
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2017 22:34	WG966572
Tetrachloroethene	1.60		0.199	0.500	1	04/05/2017 22:34	WG966572
Toluene	0.785	<u>BJ</u>	0.412	1.00	1	04/05/2017 22:34	WG966572
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2017 22:34	WG966572
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2017 22:34	WG966572
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2017 22:34	WG966572
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2017 22:34	WG966572
Trichloroethene	0.596		0.153	0.500	1	04/05/2017 22:34	WG966572
Trichlorofluoromethane	U		0.130	0.500	1	04/05/2017 22:34	WG966572
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2017 22:34	WG966572
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2017 22:34	WG966572
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2017 22:34	WG966572
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2017 22:34	WG966572
Vinyl acetate	U		0.645	2.50	1	04/05/2017 22:34	WG966572
Vinyl chloride	U		0.118	0.500	1	04/05/2017 22:34	WG966572
Xylenes, Total	U		0.316	1.50	1	04/05/2017 22:34	WG966572
(S) Toluene-d8	102			80.0-120		04/05/2017 22:34	WG966572
(S) Toluene-d8	104			80.0-120		04/06/2017 18:28	WG966572
(S) Dibromofluoromethane	107			76.0-123		04/06/2017 18:28	WG966572
(S) Dibromofluoromethane	108			76.0-123		04/05/2017 22:34	WG966572
(S) 4-Bromofluorobenzene	91.2			80.0-120		04/05/2017 22:34	WG966572
(S) 4-Bromofluorobenzene	98.0			80.0-120		04/06/2017 18:28	WG966572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	498000		2710	20000	1	03/30/2017 15:23	WG965753

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	6900		51.9	1000	1	03/30/2017 16:28	WG965688
Nitrate	25.5	J	22.7	100	1	03/30/2017 16:28	WG965688
Sulfate	31400		77.4	5000	1	03/30/2017 16:28	WG965688

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10800		102	1000	1	04/04/2017 16:39	WG966665

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	12000		15.0	100	1	04/07/2017 15:24	WG966238
Manganese	3010		0.250	5.00	1	04/07/2017 15:24	WG966238

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	2000		2.87	6.78	10	04/04/2017 16:46	WG967102
Ethane	7.21		0.296	1.29	1	04/04/2017 04:00	WG966794
Ethene	U		0.422	1.27	1	04/04/2017 04:00	WG966794

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/05/2017 22:55	WG966572
Acrylonitrile	U		0.873	2.50	1	04/05/2017 22:55	WG966572
Benzene	U		0.0896	0.500	1	04/05/2017 22:55	WG966572
Bromobenzene	U		0.133	0.500	1	04/05/2017 22:55	WG966572
Bromodichloromethane	U		0.0800	0.500	1	04/05/2017 22:55	WG966572
Bromochloromethane	U		0.145	0.500	1	04/05/2017 22:55	WG966572
Bromoform	U		0.186	0.500	1	04/05/2017 22:55	WG966572
Bromomethane	U		0.157	0.500	1	04/05/2017 22:55	WG966572
n-Butylbenzene	U		0.143	0.500	1	04/05/2017 22:55	WG966572
sec-Butylbenzene	U		0.134	0.500	1	04/05/2017 22:55	WG966572
tert-Butylbenzene	U		0.183	0.500	1	04/05/2017 22:55	WG966572
Carbon disulfide	U		0.101	0.500	1	04/05/2017 22:55	WG966572
Carbon tetrachloride	U		0.159	0.500	1	04/05/2017 22:55	WG966572
Chlorobenzene	U		0.140	0.500	1	04/05/2017 22:55	WG966572
Chlorodibromomethane	U		0.128	0.500	1	04/05/2017 22:55	WG966572
Chloroethane	U		0.141	0.500	1	04/05/2017 22:55	WG966572
2-Chloroethyl vinyl ether	U		0.877	2.50	1	04/05/2017 22:55	WG966572
Chloroform	U		0.0860	0.500	1	04/05/2017 22:55	WG966572
Chloromethane	U		0.153	0.500	1	04/05/2017 22:55	WG966572
2-Chlorotoluene	U		0.111	0.500	1	04/05/2017 22:55	WG966572
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2017 22:55	WG966572
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	04/05/2017 22:55	WG966572
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2017 22:55	WG966572

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/29/17 12:00

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.117	0.500	1	04/05/2017 22:55	WG966572
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2017 22:55	WG966572
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2017 22:55	WG966572
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2017 22:55	WG966572
Dichlorodifluoromethane	U		0.127	0.500	1	04/05/2017 22:55	WG966572
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2017 22:55	WG966572
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2017 22:55	WG966572
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2017 22:55	WG966572
cis-1,2-Dichloroethene	12.6		0.0933	0.500	1	04/05/2017 22:55	WG966572
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2017 22:55	WG966572
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2017 22:55	WG966572
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2017 22:55	WG966572
1,3-Dichloropropane	U		0.147	0.500	1	04/05/2017 22:55	WG966572
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2017 22:55	WG966572
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2017 22:55	WG966572
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	04/05/2017 22:55	WG966572
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2017 22:55	WG966572
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2017 22:55	WG966572
Ethylbenzene	U		0.158	0.500	1	04/05/2017 22:55	WG966572
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2017 22:55	WG966572
2-Hexanone	U		0.757	2.50	1	04/05/2017 22:55	WG966572
n-Hexane	U		0.305	1.00	1	04/05/2017 22:55	WG966572
Iodomethane	U		0.377	2.50	1	04/05/2017 22:55	WG966572
Isopropylbenzene	U		0.126	0.500	1	04/05/2017 22:55	WG966572
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2017 22:55	WG966572
2-Butanone (MEK)	U		1.28	2.50	1	04/05/2017 22:55	WG966572
Methylene Chloride	U		1.07	2.50	1	04/05/2017 22:55	WG966572
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	04/05/2017 22:55	WG966572
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2017 22:55	WG966572
Naphthalene	U		0.174	0.500	1	04/05/2017 22:55	WG966572
n-Propylbenzene	U		0.162	0.500	1	04/05/2017 22:55	WG966572
Styrene	U		0.117	0.500	1	04/05/2017 22:55	WG966572
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2017 22:55	WG966572
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2017 22:55	WG966572
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2017 22:55	WG966572
Tetrachloroethene	U		0.199	0.500	1	04/05/2017 22:55	WG966572
Toluene	U		0.412	1.00	1	04/05/2017 22:55	WG966572
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2017 22:55	WG966572
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2017 22:55	WG966572
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2017 22:55	WG966572
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2017 22:55	WG966572
Trichloroethene	0.198	J	0.153	0.500	1	04/05/2017 22:55	WG966572
Trichlorofluoromethane	U		0.130	0.500	1	04/05/2017 22:55	WG966572
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2017 22:55	WG966572
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2017 22:55	WG966572
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2017 22:55	WG966572
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2017 22:55	WG966572
Vinyl acetate	U		0.645	2.50	1	04/05/2017 22:55	WG966572
Vinyl chloride	3.49		0.118	0.500	1	04/05/2017 22:55	WG966572
Xylenes, Total	U		0.316	1.50	1	04/05/2017 22:55	WG966572
(S) Toluene-d8	102			80.0-120		04/05/2017 22:55	WG966572
(S) Dibromofluoromethane	105			76.0-123		04/05/2017 22:55	WG966572
(S) 4-Bromofluorobenzene	90.8			80.0-120		04/05/2017 22:55	WG966572

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	255000		2710	20000	1	03/30/2017 15:30	WG965753

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	20500		51.9	1000	1	03/30/2017 17:05	WG965688
Nitrate	164		22.7	100	1	03/30/2017 17:05	WG965688
Sulfate	14900		77.4	5000	1	03/30/2017 17:05	WG965688

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6840		102	1000	1	04/04/2017 16:55	WG966665

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	17100		15.0	100	1	04/07/2017 15:35	WG966238
Manganese	2980		0.250	5.00	1	04/07/2017 15:35	WG966238

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	819		2.87	6.78	10	04/04/2017 17:03	WG967102
Ethane	U		0.296	1.29	1	04/04/2017 04:17	WG966794
Ethene	U		0.422	1.27	1	04/04/2017 04:17	WG966794

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.28	J	1.05	25.0	1	04/05/2017 23:15	WG966572
Acrylonitrile	U		0.873	2.50	1	04/05/2017 23:15	WG966572
Benzene	0.139	J	0.0896	0.500	1	04/05/2017 23:15	WG966572
Bromobenzene	U		0.133	0.500	1	04/05/2017 23:15	WG966572
Bromodichloromethane	U		0.0800	0.500	1	04/05/2017 23:15	WG966572
Bromochloromethane	U		0.145	0.500	1	04/05/2017 23:15	WG966572
Bromoform	U		0.186	0.500	1	04/05/2017 23:15	WG966572
Bromomethane	U		0.157	0.500	1	04/05/2017 23:15	WG966572
n-Butylbenzene	U		0.143	0.500	1	04/05/2017 23:15	WG966572
sec-Butylbenzene	U		0.134	0.500	1	04/05/2017 23:15	WG966572
tert-Butylbenzene	U		0.183	0.500	1	04/05/2017 23:15	WG966572
Carbon disulfide	U		0.101	0.500	1	04/05/2017 23:15	WG966572
Carbon tetrachloride	U		0.159	0.500	1	04/05/2017 23:15	WG966572
Chlorobenzene	U		0.140	0.500	1	04/05/2017 23:15	WG966572
Chlorodibromomethane	U		0.128	0.500	1	04/05/2017 23:15	WG966572
Chloroethane	U		0.141	0.500	1	04/05/2017 23:15	WG966572
2-Chloroethyl vinyl ether	U		0.877	2.50	1	04/05/2017 23:15	WG966572
Chloroform	U		0.0860	0.500	1	04/05/2017 23:15	WG966572
Chloromethane	U		0.153	0.500	1	04/05/2017 23:15	WG966572
2-Chlorotoluene	U		0.111	0.500	1	04/05/2017 23:15	WG966572
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2017 23:15	WG966572
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	04/05/2017 23:15	WG966572
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2017 23:15	WG966572

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/29/17 13:55

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Dibromomethane	U		0.117	0.500	1	04/05/2017 23:15	WG966572
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2017 23:15	WG966572
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2017 23:15	WG966572
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2017 23:15	WG966572
Dichlorodifluoromethane	U		0.127	0.500	1	04/05/2017 23:15	WG966572
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2017 23:15	WG966572
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2017 23:15	WG966572
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2017 23:15	WG966572
cis-1,2-Dichloroethene	42.9		0.0933	0.500	1	04/05/2017 23:15	WG966572
trans-1,2-Dichloroethene	0.334	J	0.152	0.500	1	04/05/2017 23:15	WG966572
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2017 23:15	WG966572
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2017 23:15	WG966572
1,3-Dichloropropane	U		0.147	0.500	1	04/05/2017 23:15	WG966572
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2017 23:15	WG966572
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2017 23:15	WG966572
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	04/05/2017 23:15	WG966572
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2017 23:15	WG966572
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2017 23:15	WG966572
Ethylbenzene	U		0.158	0.500	1	04/05/2017 23:15	WG966572
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2017 23:15	WG966572
2-Hexanone	U		0.757	2.50	1	04/05/2017 23:15	WG966572
n-Hexane	U		0.305	1.00	1	04/05/2017 23:15	WG966572
Iodomethane	U		0.377	2.50	1	04/05/2017 23:15	WG966572
Isopropylbenzene	U		0.126	0.500	1	04/05/2017 23:15	WG966572
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2017 23:15	WG966572
2-Butanone (MEK)	U		1.28	2.50	1	04/05/2017 23:15	WG966572
Methylene Chloride	U		1.07	2.50	1	04/05/2017 23:15	WG966572
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	04/05/2017 23:15	WG966572
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2017 23:15	WG966572
Naphthalene	U		0.174	0.500	1	04/05/2017 23:15	WG966572
n-Propylbenzene	U		0.162	0.500	1	04/05/2017 23:15	WG966572
Styrene	U		0.117	0.500	1	04/05/2017 23:15	WG966572
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2017 23:15	WG966572
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2017 23:15	WG966572
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2017 23:15	WG966572
Tetrachloroethene	5.47		0.199	0.500	1	04/05/2017 23:15	WG966572
Toluene	U		0.412	1.00	1	04/05/2017 23:15	WG966572
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2017 23:15	WG966572
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2017 23:15	WG966572
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2017 23:15	WG966572
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2017 23:15	WG966572
Trichloroethene	10.7		0.153	0.500	1	04/05/2017 23:15	WG966572
Trichlorofluoromethane	U		0.130	0.500	1	04/05/2017 23:15	WG966572
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2017 23:15	WG966572
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2017 23:15	WG966572
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2017 23:15	WG966572
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2017 23:15	WG966572
Vinyl acetate	U		0.645	2.50	1	04/05/2017 23:15	WG966572
Vinyl chloride	0.272	J	0.118	0.500	1	04/05/2017 23:15	WG966572
Xylenes, Total	U		0.316	1.50	1	04/05/2017 23:15	WG966572
(S) Toluene-d8	101			80.0-120		04/05/2017 23:15	WG966572
(S) Dibromofluoromethane	107			76.0-123		04/05/2017 23:15	WG966572
(S) 4-Bromofluorobenzene	88.5			80.0-120		04/05/2017 23:15	WG966572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.36	J	1.05	25.0	1	04/05/2017 23:36	WG966572
Acrylonitrile	U		0.873	2.50	1	04/05/2017 23:36	WG966572
Benzene	U		0.0896	0.500	1	04/05/2017 23:36	WG966572
Bromobenzene	U		0.133	0.500	1	04/05/2017 23:36	WG966572
Bromodichloromethane	U		0.0800	0.500	1	04/05/2017 23:36	WG966572
Bromochloromethane	U		0.145	0.500	1	04/05/2017 23:36	WG966572
Bromoform	U		0.186	0.500	1	04/05/2017 23:36	WG966572
Bromomethane	U		0.157	0.500	1	04/05/2017 23:36	WG966572
n-Butylbenzene	U		0.143	0.500	1	04/05/2017 23:36	WG966572
sec-Butylbenzene	U		0.134	0.500	1	04/05/2017 23:36	WG966572
tert-Butylbenzene	U		0.183	0.500	1	04/05/2017 23:36	WG966572
Carbon disulfide	0.161	J	0.101	0.500	1	04/05/2017 23:36	WG966572
Carbon tetrachloride	U		0.159	0.500	1	04/05/2017 23:36	WG966572
Chlorobenzene	U		0.140	0.500	1	04/05/2017 23:36	WG966572
Chlorodibromomethane	U		0.128	0.500	1	04/05/2017 23:36	WG966572
Chloroethane	U		0.141	0.500	1	04/05/2017 23:36	WG966572
2-Chloroethyl vinyl ether	U		0.877	2.50	1	04/05/2017 23:36	WG966572
Chloroform	U		0.0860	0.500	1	04/05/2017 23:36	WG966572
Chloromethane	U		0.153	0.500	1	04/05/2017 23:36	WG966572
2-Chlorotoluene	U		0.111	0.500	1	04/05/2017 23:36	WG966572
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2017 23:36	WG966572
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	04/05/2017 23:36	WG966572
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2017 23:36	WG966572
Dibromomethane	U		0.117	0.500	1	04/05/2017 23:36	WG966572
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2017 23:36	WG966572
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2017 23:36	WG966572
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2017 23:36	WG966572
Dichlorodifluoromethane	U		0.127	0.500	1	04/05/2017 23:36	WG966572
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2017 23:36	WG966572
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2017 23:36	WG966572
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2017 23:36	WG966572
cis-1,2-Dichloroethene	0.223	J	0.0933	0.500	1	04/05/2017 23:36	WG966572
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2017 23:36	WG966572
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2017 23:36	WG966572
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2017 23:36	WG966572
1,3-Dichloropropane	U		0.147	0.500	1	04/05/2017 23:36	WG966572
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2017 23:36	WG966572
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2017 23:36	WG966572
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	04/05/2017 23:36	WG966572
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2017 23:36	WG966572
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2017 23:36	WG966572
Ethylbenzene	U		0.158	0.500	1	04/05/2017 23:36	WG966572
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2017 23:36	WG966572
2-Hexanone	U		0.757	2.50	1	04/05/2017 23:36	WG966572
n-Hexane	U		0.305	1.00	1	04/05/2017 23:36	WG966572
Iodomethane	U		0.377	2.50	1	04/05/2017 23:36	WG966572
Isopropylbenzene	U		0.126	0.500	1	04/05/2017 23:36	WG966572
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2017 23:36	WG966572
2-Butanone (MEK)	U		1.28	2.50	1	04/05/2017 23:36	WG966572
Methylene Chloride	U		1.07	2.50	1	04/05/2017 23:36	WG966572
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	04/05/2017 23:36	WG966572
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2017 23:36	WG966572
Naphthalene	U		0.174	0.500	1	04/05/2017 23:36	WG966572
n-Propylbenzene	U		0.162	0.500	1	04/05/2017 23:36	WG966572
Styrene	U		0.117	0.500	1	04/05/2017 23:36	WG966572
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2017 23:36	WG966572

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 03/29/17 14:10

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2017 23:36	WG966572
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2017 23:36	WG966572
Tetrachloroethene	U		0.199	0.500	1	04/05/2017 23:36	WG966572
Toluene	U		0.412	1.00	1	04/05/2017 23:36	WG966572
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2017 23:36	WG966572
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2017 23:36	WG966572
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2017 23:36	WG966572
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2017 23:36	WG966572
Trichloroethene	U		0.153	0.500	1	04/05/2017 23:36	WG966572
Trichlorofluoromethane	U		0.130	0.500	1	04/05/2017 23:36	WG966572
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2017 23:36	WG966572
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2017 23:36	WG966572
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2017 23:36	WG966572
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2017 23:36	WG966572
Vinyl acetate	U		0.645	2.50	1	04/05/2017 23:36	WG966572
Vinyl chloride	U		0.118	0.500	1	04/05/2017 23:36	WG966572
Xylenes, Total	U		0.316	1.50	1	04/05/2017 23:36	WG966572
(S) Toluene-d8	102			80.0-120		04/05/2017 23:36	WG966572
(S) Dibromofluoromethane	106			76.0-123		04/05/2017 23:36	WG966572
(S) 4-Bromofluorobenzene	92.4			80.0-120		04/05/2017 23:36	WG966572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.21	J	1.05	25.0	1	04/05/2017 23:56	WG966572
Acrylonitrile	U		0.873	2.50	1	04/05/2017 23:56	WG966572
Benzene	U		0.0896	0.500	1	04/05/2017 23:56	WG966572
Bromobenzene	U		0.133	0.500	1	04/05/2017 23:56	WG966572
Bromodichloromethane	U		0.0800	0.500	1	04/05/2017 23:56	WG966572
Bromochloromethane	U		0.145	0.500	1	04/05/2017 23:56	WG966572
Bromoform	U		0.186	0.500	1	04/05/2017 23:56	WG966572
Bromomethane	U		0.157	0.500	1	04/05/2017 23:56	WG966572
n-Butylbenzene	U		0.143	0.500	1	04/05/2017 23:56	WG966572
sec-Butylbenzene	U		0.134	0.500	1	04/05/2017 23:56	WG966572
tert-Butylbenzene	U		0.183	0.500	1	04/05/2017 23:56	WG966572
Carbon disulfide	U		0.101	0.500	1	04/05/2017 23:56	WG966572
Carbon tetrachloride	U		0.159	0.500	1	04/05/2017 23:56	WG966572
Chlorobenzene	U		0.140	0.500	1	04/05/2017 23:56	WG966572
Chlorodibromomethane	U		0.128	0.500	1	04/05/2017 23:56	WG966572
Chloroethane	U		0.141	0.500	1	04/05/2017 23:56	WG966572
2-Chloroethyl vinyl ether	U		0.877	2.50	1	04/05/2017 23:56	WG966572
Chloroform	1.30		0.0860	0.500	1	04/05/2017 23:56	WG966572
Chloromethane	U		0.153	0.500	1	04/05/2017 23:56	WG966572
2-Chlorotoluene	U		0.111	0.500	1	04/05/2017 23:56	WG966572
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2017 23:56	WG966572
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	04/05/2017 23:56	WG966572
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2017 23:56	WG966572
Dibromomethane	U		0.117	0.500	1	04/05/2017 23:56	WG966572
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2017 23:56	WG966572
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2017 23:56	WG966572
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2017 23:56	WG966572
Dichlorodifluoromethane	U		0.127	0.500	1	04/05/2017 23:56	WG966572
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2017 23:56	WG966572
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2017 23:56	WG966572
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2017 23:56	WG966572
cis-1,2-Dichloroethene	0.600		0.0933	0.500	1	04/05/2017 23:56	WG966572
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2017 23:56	WG966572
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2017 23:56	WG966572
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2017 23:56	WG966572
1,3-Dichloropropane	U		0.147	0.500	1	04/05/2017 23:56	WG966572
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2017 23:56	WG966572
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2017 23:56	WG966572
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	04/05/2017 23:56	WG966572
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2017 23:56	WG966572
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2017 23:56	WG966572
Ethylbenzene	U		0.158	0.500	1	04/05/2017 23:56	WG966572
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2017 23:56	WG966572
2-Hexanone	U		0.757	2.50	1	04/05/2017 23:56	WG966572
n-Hexane	U		0.305	1.00	1	04/05/2017 23:56	WG966572
Iodomethane	U		0.377	2.50	1	04/05/2017 23:56	WG966572
Isopropylbenzene	U		0.126	0.500	1	04/05/2017 23:56	WG966572
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2017 23:56	WG966572
2-Butanone (MEK)	U		1.28	2.50	1	04/05/2017 23:56	WG966572
Methylene Chloride	U		1.07	2.50	1	04/05/2017 23:56	WG966572
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	04/05/2017 23:56	WG966572
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2017 23:56	WG966572
Naphthalene	U		0.174	0.500	1	04/05/2017 23:56	WG966572
n-Propylbenzene	U		0.162	0.500	1	04/05/2017 23:56	WG966572
Styrene	U		0.117	0.500	1	04/05/2017 23:56	WG966572
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2017 23:56	WG966572

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 03/29/17 14:50

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2017 23:56	WG966572
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2017 23:56	WG966572
Tetrachloroethene	1.22		0.199	0.500	1	04/05/2017 23:56	WG966572
Toluene	0.675	<u>B J</u>	0.412	1.00	1	04/05/2017 23:56	WG966572
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2017 23:56	WG966572
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2017 23:56	WG966572
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2017 23:56	WG966572
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2017 23:56	WG966572
Trichloroethene	0.433	<u>J</u>	0.153	0.500	1	04/05/2017 23:56	WG966572
Trichlorofluoromethane	U		0.130	0.500	1	04/05/2017 23:56	WG966572
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2017 23:56	WG966572
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2017 23:56	WG966572
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2017 23:56	WG966572
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2017 23:56	WG966572
Vinyl acetate	U		0.645	2.50	1	04/05/2017 23:56	WG966572
Vinyl chloride	U		0.118	0.500	1	04/05/2017 23:56	WG966572
Xylenes, Total	U		0.316	1.50	1	04/05/2017 23:56	WG966572
(S) Toluene-d8	102			80.0-120		04/05/2017 23:56	WG966572
(S) Dibromofluoromethane	108			76.0-123		04/05/2017 23:56	WG966572
(S) 4-Bromofluorobenzene	90.3			80.0-120		04/05/2017 23:56	WG966572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/05/2017 01:08	WG966455
(S) a,a,a-Trifluorotoluene(FID) 102				77.0-122		04/05/2017 01:08	WG966455

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/05/2017 17:10	WG966572
Acrylonitrile	U		0.873	2.50	1	04/05/2017 17:10	WG966572
Benzene	U		0.0896	0.500	1	04/05/2017 17:10	WG966572
Bromobenzene	U		0.133	0.500	1	04/05/2017 17:10	WG966572
Bromodichloromethane	U		0.0800	0.500	1	04/05/2017 17:10	WG966572
Bromochloromethane	U		0.145	0.500	1	04/05/2017 17:10	WG966572
Bromoform	U		0.186	0.500	1	04/05/2017 17:10	WG966572
Bromomethane	U		0.157	0.500	1	04/05/2017 17:10	WG966572
n-Butylbenzene	U		0.143	0.500	1	04/05/2017 17:10	WG966572
sec-Butylbenzene	U		0.134	0.500	1	04/05/2017 17:10	WG966572
tert-Butylbenzene	U		0.183	0.500	1	04/05/2017 17:10	WG966572
Carbon disulfide	U		0.101	0.500	1	04/05/2017 17:10	WG966572
Carbon tetrachloride	U		0.159	0.500	1	04/05/2017 17:10	WG966572
Chlorobenzene	U		0.140	0.500	1	04/05/2017 17:10	WG966572
Chlorodibromomethane	U		0.128	0.500	1	04/05/2017 17:10	WG966572
Chloroethane	U		0.141	0.500	1	04/05/2017 17:10	WG966572
2-Chloroethyl vinyl ether	U		0.877	2.50	1	04/05/2017 17:10	WG966572
Chloroform	U		0.0860	0.500	1	04/05/2017 17:10	WG966572
Chloromethane	U		0.153	0.500	1	04/05/2017 17:10	WG966572
2-Chlorotoluene	U		0.111	0.500	1	04/05/2017 17:10	WG966572
4-Chlorotoluene	U		0.0972	0.500	1	04/05/2017 17:10	WG966572
1,2-Dibromo-3-Chloropropane	U		0.325	1.00	1	04/05/2017 17:10	WG966572
1,2-Dibromoethane	U		0.193	0.500	1	04/05/2017 17:10	WG966572
Dibromomethane	U		0.117	0.500	1	04/05/2017 17:10	WG966572
1,2-Dichlorobenzene	U		0.101	0.500	1	04/05/2017 17:10	WG966572
1,3-Dichlorobenzene	U		0.130	0.500	1	04/05/2017 17:10	WG966572
1,4-Dichlorobenzene	U		0.121	0.500	1	04/05/2017 17:10	WG966572
Dichlorodifluoromethane	U		0.127	0.500	1	04/05/2017 17:10	WG966572
1,1-Dichloroethane	U		0.114	0.500	1	04/05/2017 17:10	WG966572
1,2-Dichloroethane	U		0.108	0.500	1	04/05/2017 17:10	WG966572
1,1-Dichloroethene	U		0.188	0.500	1	04/05/2017 17:10	WG966572
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/05/2017 17:10	WG966572
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/05/2017 17:10	WG966572
1,2-Dichloropropane	U		0.190	0.500	1	04/05/2017 17:10	WG966572
1,1-Dichloropropene	U		0.128	0.500	1	04/05/2017 17:10	WG966572
1,3-Dichloropropane	U		0.147	0.500	1	04/05/2017 17:10	WG966572
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/05/2017 17:10	WG966572
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/05/2017 17:10	WG966572
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	04/05/2017 17:10	WG966572
2,2-Dichloropropane	U		0.0929	0.500	1	04/05/2017 17:10	WG966572
Di-isopropyl ether	U		0.0924	0.500	1	04/05/2017 17:10	WG966572
Ethylbenzene	U		0.158	0.500	1	04/05/2017 17:10	WG966572
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/05/2017 17:10	WG966572
2-Hexanone	U		0.757	2.50	1	04/05/2017 17:10	WG966572
n-Hexane	U		0.305	1.00	1	04/05/2017 17:10	WG966572
Iodomethane	U		0.377	2.50	1	04/05/2017 17:10	WG966572
Isopropylbenzene	U		0.126	0.500	1	04/05/2017 17:10	WG966572
p-Isopropyltoluene	U		0.138	0.500	1	04/05/2017 17:10	WG966572
2-Butanone (MEK)	U		1.28	2.50	1	04/05/2017 17:10	WG966572



Collected date/time: 03/29/17 00:00

L899176

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/05/2017 17:10	WG966572
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50	1	04/05/2017 17:10	WG966572
Methyl tert-butyl ether	U		0.102	0.500	1	04/05/2017 17:10	WG966572
Naphthalene	0.279	J	0.174	0.500	1	04/05/2017 17:10	WG966572
n-Propylbenzene	U		0.162	0.500	1	04/05/2017 17:10	WG966572
Styrene	U		0.117	0.500	1	04/05/2017 17:10	WG966572
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/05/2017 17:10	WG966572
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/05/2017 17:10	WG966572
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/05/2017 17:10	WG966572
Tetrachloroethene	U		0.199	0.500	1	04/05/2017 17:10	WG966572
Toluene	U		0.412	1.00	1	04/05/2017 17:10	WG966572
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/05/2017 17:10	WG966572
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/05/2017 17:10	WG966572
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/05/2017 17:10	WG966572
1,1,2-Trichloroethane	U		0.186	0.500	1	04/05/2017 17:10	WG966572
Trichloroethene	U		0.153	0.500	1	04/05/2017 17:10	WG966572
Trichlorofluoromethane	U		0.130	0.500	1	04/05/2017 17:10	WG966572
1,2,3-Trichloropropane	U		0.247	2.50	1	04/05/2017 17:10	WG966572
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/05/2017 17:10	WG966572
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/05/2017 17:10	WG966572
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/05/2017 17:10	WG966572
Vinyl acetate	U		0.645	2.50	1	04/05/2017 17:10	WG966572
Vinyl chloride	U		0.118	0.500	1	04/05/2017 17:10	WG966572
Xylenes, Total	U		0.316	1.50	1	04/05/2017 17:10	WG966572
(S) Toluene-d8	101			80.0-120		04/05/2017 17:10	WG966572
(S) Dibromofluoromethane	106			76.0-123		04/05/2017 17:10	WG966572
(S) 4-Bromofluorobenzene	91.5			80.0-120		04/05/2017 17:10	WG966572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3207223-2	03/30/17 14:51										
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL							
	ug/l	ug/l	ug/l	ug/l							
Alkalinity	3070	J	2710	20000							

L899176-01 Original Sample (OS) • Duplicate (DUP)

(OS) L899176-01	03/30/17 15:01 • (DUP) R3207223-4	03/30/17 15:10									
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits					
	ug/l	ug/l	%	%	%	%					
Alkalinity	276000	281000	1	2.00		20					

L899203-12 Original Sample (OS) • Duplicate (DUP)

(OS) L899203-12	03/30/17 17:58 • (DUP) R3207223-7	03/30/17 18:06									
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits					
	ug/l	ug/l	%	%	%	%					
Alkalinity	116000	118000	1	2.00		20					

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3207223-5	03/30/17 16:18 • (LCSD) R3207223-6	03/30/17 17:36									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits	
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	
Alkalinity	100000	88600	90100	89.0	90.0	85.0-115			2.00	20	



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Method Blank (MB)

Analyte	MB Result		MB Qualifier		MB MDL		MB RDL	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	
Chloride	U	U	51.9	1000				
Nitrate	U	U	22.7	100				
Sulfate	U	U	77.4	5000				

L899168-03 Original Sample (OS) • Duplicate (DUP)

Analyte	Original Result		DUP Result		Dilution		DUP RPD		DUP Qualifier		DUP RPD Limits	
	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	
Chloride	79500	80200	80200	80200	1	1	1	15				
Nitrate	2080	2150	2150	2150	1	3	3	15				
Sulfate	82000	80500	80500	80500	1	2	2	15				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	
Chloride	40000	39500	39500	39400	39400	39400	99	99	99	99	80-120	80-120	0	0	0	0	15	15
Nitrate	8000	8170	8170	8190	8190	8190	102	102	102	102	80-120	80-120	0	0	0	0	15	15
Sulfate	40000	40100	40100	39900	39900	39900	100	100	100	100	80-120	80-120	0	0	0	0	15	15

L899168-04 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount		Original Result		MS Result		MS Rec.		Dilution		Rec. Limits		MS Qualifier	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	
Chloride	50000	12400	12400	60500	60500	60500	96	96	1	1	80-120	80-120		
Nitrate	5000	668	668	5580	5580	5580	98	98	1	1	80-120	80-120		
Sulfate	50000	6980	6980	58900	58900	58900	104	104	1	1	80-120	80-120		

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc. - WA

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Method Blank (MB)

(MB) R3208217-1	04/04/17 08:26	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	U	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)		U	102		1000

L899068-01 Original Sample (OS) • Duplicate (DUP)

(OS) L899068-01	04/04/17 10:11 • (DUP) R3208217-3	04/04/17 10:25			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	10700	10800	1	1	20

L899255-05 Original Sample (OS) • Duplicate (DUP)

(OS) L899255-05	04/04/17 17:59 • (DUP) R3208217-7	04/04/17 18:14			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	5690	5660	1	1	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3208217-2	04/04/17 09:21 • (LCSD) R3208217-4	04/04/17 11:16							
Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%
TOC (Total Organic Carbon)	75000	71300	71600	95	95	85-115	95	0	20

L899157-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L899157-02	04/04/17 10:58 • (MS) R3208217-5	04/04/17 12:25 • (MSD) R3208217-6	04/04/17 12:43								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	417	48500	47400	96	94	1	80-120		2	20

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	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3209215-1 04/07/17 11:04				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.263	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3209215-2 04/07/17 11:07 • (LCSD) R3209215-3 04/07/17 11:11									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	5420	5330	108	107	80-120			2	20
Manganese	50.0	52.4	52.2	105	104	80-120			0	20

L899122-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L899122-01 04/07/17 11:15 • (MS) R3209215-5 04/07/17 11:21 • (MSD) R3209215-6 04/07/17 11:25											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	28200	34400	33900	124	113	1	75-125			2	20
Manganese	50.0	2070	2170	2160	189	180	1	75-125	V	V	0	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L899176-01.08](#)

Method Blank (MB)

(MB) R3208800-3	04/05/17 00:01																		
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL															
Gasoline Range Organics-NWTPH	ug/l		ug/l	ug/l															
	U		31.6	100															
(S) a,a,a-Trifluorotoluene(FID)	102			77.0-122															

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3208800-1	04/04/17 22:58 • (LCSD) R3208800-2	04/04/17 23:19																	
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits									
Gasoline Range Organics-NWTPH	ug/l	ug/l	ug/l	%	%	%	%	%	%	%									
	5500	6480	6340	118	115	72.0-134			2.27	20									
(S) a,a,a-Trifluorotoluene(FID)				104	104	77.0-122													

L898920-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L898920-02	04/05/17 02:53 • (MS) R3208800-4	04/05/17 01:50 • (MSD) R3208800-5	04/05/17 02:11																
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits							
Gasoline Range Organics-NWTPH	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%						
	5500	ND	2230	2360	40.6	42.9	1	23.0-159			5.59	20							
(S) a,a,a-Trifluorotoluene(FID)					104	104		77.0-122											

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Volatile Organic Compounds (GC) by Method RSK175

[L899176-01.02.04.05](#)

Method Blank (MB)

(MB) R3208061-1 04/04/17 00:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L899438-01 Original Sample (OS) • Duplicate (DUP)

(OS) L899438-01 04/04/17 03:10 • (DUP) R3208061-2 04/04/17 03:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	ND	8.93	1	3.50	J	20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L899439-01 Original Sample (OS) • Duplicate (DUP)

(OS) L899439-01 04/04/17 03:44 • (DUP) R3208061-3 04/04/17 06:47

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	ND	0.000	1	0.000		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3208061-4 04/04/17 07:04 • (LCSD) R3208061-5 04/04/17 07:20

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Methane	67.8	70.0	68.4	103	101	70.0-130			2.30	20
Ethane	129	125	123	97.0	95.0	70.0-130			2.06	20
Ethene	127	123	120	96.8	94.6	70.0-130			2.33	20

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Volatile Organic Compounds (GC) by Method RSK175

[L899176-02.04.05](#)

Method Blank (MB)

(MB) R3208397-1 04/04/17 14:50			
Analyte	MB Result	MB Qualifier	MB MDL
Methane	ug/l	ug/l	ug/l
	U	0.287	0.678

L898812-08 Original Sample (OS) • Duplicate (DUP)

(OS) L898812-08 04/04/17 15:06 • (DUP) R3208397-2 04/04/17 18:09			
Analyte	Original Result	DUP Result	Dilution
Methane	ug/l	ug/l	%
	1740	1840	1
			5.65
			20

L899982-01 Original Sample (OS) • Duplicate (DUP)

(OS) L899982-01 04/05/17 08:40 • (DUP) R3208397-5 04/05/17 11:31			
Analyte	Original Result	DUP Result	Dilution
Methane	ug/l	ug/l	%
	ND	0.000	1
			0.000
			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3208397-3 04/05/17 10:53 • (LCSD) R3208397-4 04/05/17 11:09										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Methane	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
	67.8	69.6	68.8	103	101	70.0-130			112	20

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Method Blank (MB)

(MB) R3208545-3 04/05/17 14:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	2.50
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	0.500
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	0.500
2-Chloroethyl vinyl ether	U		0.877	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	0.500
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	1.00
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	0.500
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500

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Method Blank (MB)

(MB) R3208545-3 04/05/17 14:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	2.50
n-Hexane	U		0.305	1.00
Iodomethane	U		0.377	2.50
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	2.50
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	0.500
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	1.00
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	0.500
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	2.50
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	106			76.0-123
(S) 4-Bromofluorobenzene	92.8			80.0-120

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3208545-1 04/05/17 13:41 • (LCSD) R3208545-2 04/05/17 14:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	126	124	101	99.2	10.0-160			1.53	23
Acrylonitrile	125	152	147	122	118	60.0-142			3.35	20
Benzene	25.0	25.9	25.2	104	101	69.0-123			2.70	20
Bromobenzene	25.0	21.8	21.9	87.4	87.6	79.0-120			0.240	20
Bromodichloromethane	25.0	24.8	24.7	99.2	98.7	76.0-120			0.550	20
Bromochloromethane	25.0	26.4	26.3	105	105	76.0-122			0.180	20
Bromoforn	25.0	18.8	18.7	75.1	74.6	67.0-132			0.600	20
Bromomethane	25.0	29.5	29.2	118	117	18.0-160			0.960	20
n-Butylbenzene	25.0	25.8	24.7	103	98.6	72.0-126			4.54	20
sec-Butylbenzene	25.0	22.4	22.3	89.7	89.4	74.0-121			0.310	20
tert-Butylbenzene	25.0	20.5	20.3	81.9	81.3	75.0-122			0.710	20
Carbon disulfide	25.0	28.5	27.7	114	111	55.0-127			2.72	20
Carbon tetrachloride	25.0	22.5	21.6	89.8	86.4	63.0-122			3.84	20
Chlorobenzene	25.0	23.0	23.0	92.0	92.1	79.0-121			0.0700	20
Chlorodibromomethane	25.0	23.6	23.0	94.6	92.0	75.0-125			2.69	20
Chloroethane	25.0	28.3	27.9	113	112	47.0-152			1.40	20
2-Chloroethyl vinyl ether	125	137	131	110	105	10.0-160			4.57	22
Chloroform	25.0	27.3	26.7	109	107	72.0-121			2.13	20
Chloromethane	25.0	24.6	24.3	98.3	97.0	48.0-139			1.30	20
2,2-Chlorotoluene	25.0	22.8	22.7	91.3	90.9	74.0-122			0.430	20
4-Chlorotoluene	25.0	22.4	22.6	89.6	90.3	79.0-120			0.750	20
1,2-Dibromo-3-Chloropropane	25.0	23.8	22.8	95.3	91.3	64.0-127			4.30	20
1,2-Dibromoethane	25.0	23.2	22.7	93.0	90.8	77.0-123			2.30	20
Dibromomethane	25.0	22.6	22.2	90.5	88.7	78.0-120			1.98	20
1,2-Dichlorobenzene	25.0	23.8	23.5	95.4	93.9	80.0-120			1.54	20
1,3-Dichlorobenzene	25.0	20.5	20.9	81.9	83.7	72.0-123			2.10	20
1,4-Dichlorobenzene	25.0	23.5	22.8	94.0	91.2	77.0-120			3.06	20
Dichlorodifluoromethane	25.0	24.3	22.9	97.1	91.7	49.0-155			5.71	20
1,1-Dichloroethane	25.0	28.7	28.1	115	112	70.0-126			2.02	20
1,2-Dichloroethane	25.0	25.1	25.4	101	101	67.0-126			0.910	20
1,1-Dichloroethene	25.0	28.5	27.5	114	110	64.0-129			3.71	20
cis-1,2-Dichloroethene	25.0	28.3	27.7	113	111	73.0-120			1.94	20
trans-1,2-Dichloroethene	25.0	27.9	27.2	112	109	71.0-121			2.40	20
1,2-Dichloropropane	25.0	27.4	26.8	110	107	75.0-125			2.30	20
1,1-Dichloropropene	25.0	29.3	28.1	117	113	71.0-129			4.15	20
1,3-Dichloropropene	25.0	24.8	24.6	99.2	98.5	80.0-121			0.710	20
cis-1,3-Dichloropropene	25.0	28.2	27.8	113	111	79.0-123			1.40	20
trans-1,3-Dichloropropene	25.0	25.5	25.0	102	100	74.0-127			2.01	20
trans-1,4-Dichloro-2-butene	25.0	20.9	19.9	83.6	79.5	55.0-134			5.03	20
2,2-Dichloropropane	25.0	27.6	27.1	111	108	60.0-125			2.10	20

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(LCS) R3208545-1 04/05/17 13:41 • (LCSD) R3208545-2 04/05/17 14:01

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	25.0	26.9	26.8	108	107	59.0-133			0.460	20
Ethylbenzene	25.0	21.0	20.5	84.0	82.1	77.0-120			2.33	20
Hexachloro-1,3-butadiene	25.0	23.6	22.3	94.6	89.3	64.0-131			5.68	20
2-Hexanone	125	127	124	102	98.9	58.0-147			3.01	20
n-Hexane	25.0	24.9	23.7	99.5	94.7	56.0-124			4.95	20
Iodomethane	125	128	126	103	101	57.0-140			1.49	20
Isopropylbenzene	25.0	20.4	20.2	81.4	80.8	75.0-120			0.760	20
p-Isopropyltoluene	25.0	23.3	23.0	93.0	91.9	74.0-126			1.15	20
2-Butanone (MEK)	125	149	143	120	114	37.0-158			4.70	20
Methylene Chloride	25.0	27.2	26.9	109	108	66.0-121			0.980	20
4-Methyl-2-pentanone (MIBK)	125	144	140	115	112	59.0-143			2.70	20
Methyl tert-butyl ether	25.0	28.6	28.6	114	114	64.0-123			0.0300	20
Naphthalene	25.0	21.6	21.3	86.3	85.3	62.0-128			1.22	20
n-Propylbenzene	25.0	20.6	20.4	82.5	81.5	79.0-120			1.23	20
Styrene	25.0	21.1	20.9	84.5	83.7	78.0-124			1.00	20
1,1,1,2-Tetrachloroethane	25.0	22.5	22.7	90.0	90.9	75.0-122			1.07	20
1,1,2,2-Tetrachloroethane	25.0	22.9	22.6	91.5	90.6	71.0-122			1.02	20
1,1,2-Trichlorotrifluoroethane	25.0	26.0	25.2	104	101	61.0-136			2.88	20
Tetrachloroethene	25.0	21.8	21.6	87.3	86.4	70.0-127			1.06	20
Toluene	25.0	22.5	21.6	89.9	86.3	77.0-120			4.10	20
1,2,3-Trichlorobenzene	25.0	24.7	24.6	98.8	98.2	61.0-133			0.620	20
1,2,4-Trichlorobenzene	25.0	23.8	23.3	95.2	93.1	69.0-129			2.30	20
1,1,1-Trichloroethane	25.0	27.1	26.6	108	106	68.0-122			1.70	20
1,1,2-Trichloroethane	25.0	23.5	23.3	94.0	93.0	78.0-120			1.03	20
Trichloroethene	25.0	24.8	24.3	99.3	97.2	78.0-120			2.18	20
Trichlorofluoromethane	25.0	27.6	26.8	111	107	56.0-137			2.85	20
1,2,3-Trichloropropane	25.0	23.3	23.3	93.4	93.3	72.0-124			0.0400	20
1,2,4-Trimethylbenzene	25.0	22.5	22.6	89.8	90.3	75.0-120			0.540	20
1,2,3-Trimethylbenzene	25.0	23.3	22.4	93.1	89.6	75.0-120			3.78	20
1,3,5-Trimethylbenzene	25.0	22.6	22.6	90.5	90.5	75.0-120			0.0100	20
Vinyl acetate	125	131	125	105	99.8	46.0-160			5.24	20
Vinyl chloride	25.0	27.0	26.4	108	106	64.0-133			2.01	20
Xylenes, Total	75.0	62.1	61.4	82.8	81.9	77.0-120			1.13	20
(S) Toluene-d8				103	102	80.0-120				
(S) Dibromofluoromethane				108	107	76.0-123				
(S) 4-Bromofluorobenzene				88.8	91.7	80.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc. - WA

PROJECT:

1413.001.02.002

SDG:

L89976

DATE/TIME:

04/10/17 14:44

PAGE:

33 of 36



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
JO	JO - Analyte exceeds %D or %Rec for Continuing Calibration per 8260C or 8270D method specific criteria. The identification of the analyte is acceptable; the reported value is an estimate.
V	The sample concentration is too high to evaluate accurate spike recoveries.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

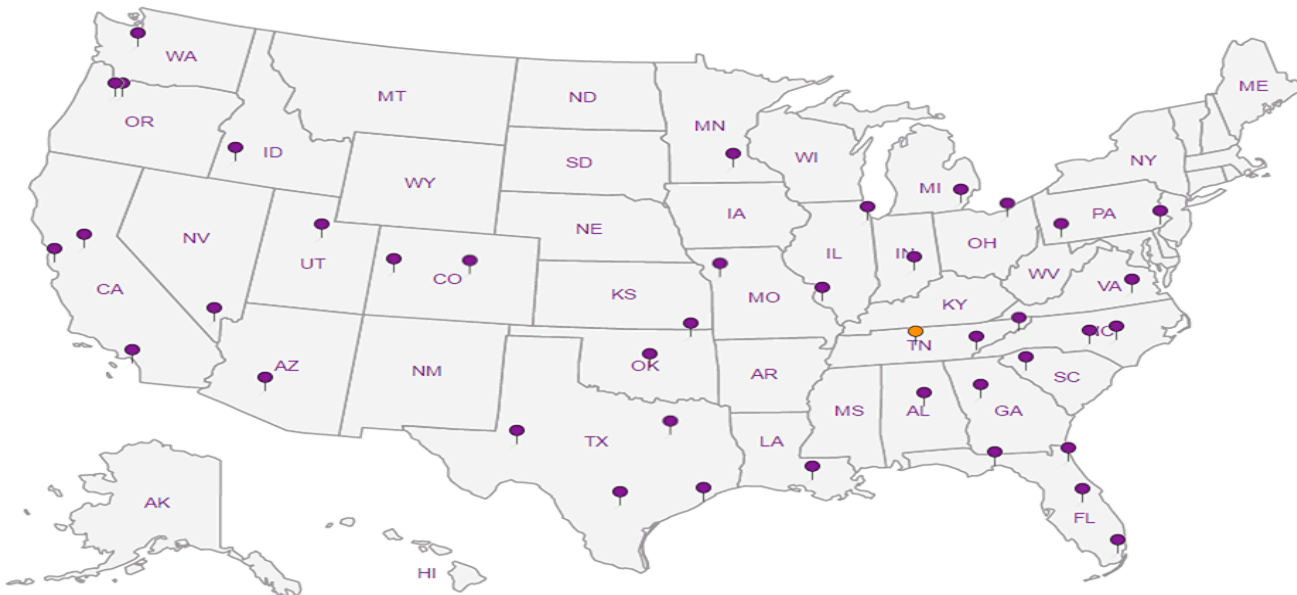
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:

Email To: bhaldeaman@pesenv.com

Bill Haldeaman

Project Description: American Linon Supply

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.02.002

Lab Project #
PESENVSWA-141300102

Collected by (print):
C. DeBor

Site/Facility ID #
700 DEXTER AVE N SEATTLE

P.O. #

Collected by (signature):
C. DeBor

Rush? (Lab MUST be Notified)

Quote #

Immediately Packed on ice N Y X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of

Contrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Pres Chk

Analysis / Container / Preservative

*NO3,Cl,SO4,Alk 250mlHDPE-NoPres
NWTPHGX 40mlAmb HCl
TOC 250mlAmb-HCl
Total Fe Mn 6020 250mlHDPE-HNO3
low level 8260C 40mlAmb-HCl
low level RSK175 40mlAmb-HCl

02
27



L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

12065 Lubaton Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-757-5859
Fax: 615-758-5859



L894976
1081

Account: PESENVSWA

Template: T121414

Prelogin: P592684

TSR: 110 - Brian Ford

PB: 313-176

Shipped Via: FedEx Ground

Remarks Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Contrs	Pres Chk	Analysis / Container / Preservative
MW120-032917	GRAB	GW	75	3/29/17	955	11	X	*NO3,Cl,SO4,Alk 250mlHDPE-NoPres
MW128-032917	GRAB	GW	65	3/29/17	1000	9	X	NWTPHGX 40mlAmb HCl
MW124-032917	GRAB	GW	130	3/29/17	1205	4	X	TOC 250mlAmb-HCl
MW109-032917	GRAB	GW	30	3/29/17	1200	9	X	Total Fe Mn 6020 250mlHDPE-HNO3
MW119-032917	GRAB	GW	40	3/29/17	1355	9	X	low level 8260C 40mlAmb-HCl
MW108-032917	GRAB	GW	120	3/29/17	1410	4	X	low level RSK175 40mlAmb-HCl
MW301-032917	GRAB	GW	130	3/29/17	1450	4	X	
TRIP BLANK		GW				1	X	

Remarks: *Nitrate has a 48 hour hold time

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS Fedex Courier

Received by: (Signature)
Date: 3/29/17
Time: 1500

Received by: (Signature)
Date: 3/30/17
Time: 895

Trip Blank Received: (Signature)
Temp: 21.2 °C
Date: 3/30/17
Time: 895

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VQA Zero HeadSpace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature)
Date: 3/29/17
Time: 1500

Relinquished by: (Signature)
Date: 3/29/17
Time: 1500

Received by: (Signature)
Date: 3/30/17
Time: 895

Received by: (Signature)
Date: 3/30/17
Time: 895

Condition: NCF / OK

PES Environmental, Inc.- WA

Sample Delivery Group: L901706
Samples Received: 04/11/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 700 DEXTER AVE N SEATTLE WA
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



¹ Cp: Cover Page	1	¹ Cp
² Tc: Table of Contents	2	² Tc
³ Ss: Sample Summary	3	³ Ss
⁴ Cn: Case Narrative	4	⁴ Cn
⁵ Sr: Sample Results	5	⁵ Sr
MW129-041017 L901706-01	5	
⁶ Qc: Quality Control Summary	7	⁶ Qc
Wet Chemistry by Method 2320 B-2011	7	
Wet Chemistry by Method 9056A	8	
Wet Chemistry by Method 9060A	11	
Metals (ICPMS) by Method 6020	12	
Volatile Organic Compounds (GC) by Method RSK175	13	⁷ Gl
Volatile Organic Compounds (GC/MS) by Method 8260C	14	⁸ Al
⁷ Gl: Glossary of Terms	18	
⁸ Al: Accreditations & Locations	19	⁹ Sc
⁹ Sc: Chain of Custody	20	



MW129-041017 L901706-01 GW

Collected by: C. DeBoer
 Collected date/time: 04/10/17 14:05
 Received date/time: 04/11/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG969253	1	04/11/17 11:36	04/11/17 11:36	AMC
Wet Chemistry by Method 9056A	WG969255	1	04/11/17 11:12	04/11/17 11:12	KCF
Wet Chemistry by Method 9056A	WG969853	5	04/13/17 11:59	04/13/17 11:59	SAM
Wet Chemistry by Method 9060A	WG969458	1	04/13/17 04:12	04/13/17 04:12	SJM
Metals (ICPMS) by Method 6020	WG969609	1	04/12/17 17:06	04/13/17 11:44	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG969641	1	04/13/17 01:04	04/13/17 01:04	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG971582	5	04/19/17 05:42	04/19/17 05:42	CAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG971582	50	04/20/17 00:36	04/20/17 00:36	JHH

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	308000		2710	20000	1	04/11/2017 11:36	WG969253

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	44200		51.9	1000	1	04/11/2017 11:12	WG969255
Nitrate	U		22.7	100	1	04/11/2017 11:12	WG969255
Sulfate	124000		387	25000	5	04/13/2017 11:59	WG969853

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2740		102	1000	1	04/13/2017 04:12	WG969458

6 Qc

7 Gl

Metals (ICPMS) by Method 6020

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	365		15.0	100	1	04/13/2017 11:44	WG969609
Manganese	402		0.250	5.00	1	04/13/2017 11:44	WG969609

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	279		0.287	0.678	1	04/13/2017 01:04	WG969641
Ethane	26.8		0.296	1.29	1	04/13/2017 01:04	WG969641
Ethene	U		0.422	1.27	1	04/13/2017 01:04	WG969641

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		5.25	125	5	04/19/2017 05:42	WG971582
Acrylonitrile	U		4.36	12.5	5	04/19/2017 05:42	WG971582
Benzene	U		0.448	2.50	5	04/19/2017 05:42	WG971582
Bromobenzene	U		0.665	2.50	5	04/19/2017 05:42	WG971582
Bromodichloromethane	U		0.400	2.50	5	04/19/2017 05:42	WG971582
Bromochloromethane	U		0.725	2.50	5	04/19/2017 05:42	WG971582
Bromoform	U		0.930	2.50	5	04/19/2017 05:42	WG971582
Bromomethane	U		0.785	2.50	5	04/19/2017 05:42	WG971582
n-Butylbenzene	U		0.715	2.50	5	04/19/2017 05:42	WG971582
sec-Butylbenzene	U		0.670	2.50	5	04/19/2017 05:42	WG971582
tert-Butylbenzene	U		0.915	2.50	5	04/19/2017 05:42	WG971582
Carbon disulfide	U		0.505	2.50	5	04/19/2017 05:42	WG971582
Carbon tetrachloride	U		0.795	2.50	5	04/19/2017 05:42	WG971582
Chlorobenzene	U		0.700	2.50	5	04/19/2017 05:42	WG971582
Chlorodibromomethane	U		0.640	2.50	5	04/19/2017 05:42	WG971582
Chloroethane	U		0.705	2.50	5	04/19/2017 05:42	WG971582
Chloroform	U		0.430	2.50	5	04/19/2017 05:42	WG971582
Chloromethane	U		0.765	2.50	5	04/19/2017 05:42	WG971582
2-Chlorotoluene	U		0.555	2.50	5	04/19/2017 05:42	WG971582
4-Chlorotoluene	U		0.486	2.50	5	04/19/2017 05:42	WG971582
1,2-Dibromo-3-Chloropropane	U		1.62	5.00	5	04/19/2017 05:42	WG971582
1,2-Dibromoethane	U		0.965	2.50	5	04/19/2017 05:42	WG971582
Dibromomethane	U		0.585	2.50	5	04/19/2017 05:42	WG971582



Collected date/time: 04/10/17 14:05

L901706

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.505	2.50	5	04/19/2017 05:42	WG971582
1,3-Dichlorobenzene	U		0.650	2.50	5	04/19/2017 05:42	WG971582
1,4-Dichlorobenzene	U		0.605	2.50	5	04/19/2017 05:42	WG971582
Dichlorodifluoromethane	U		0.635	2.50	5	04/19/2017 05:42	WG971582
1,1-Dichloroethane	U		0.570	2.50	5	04/19/2017 05:42	WG971582
1,2-Dichloroethane	U		0.540	2.50	5	04/19/2017 05:42	WG971582
1,1-Dichloroethene	4.86		0.940	2.50	5	04/19/2017 05:42	WG971582
cis-1,2-Dichloroethene	1420		4.66	25.0	50	04/20/2017 00:36	WG971582
trans-1,2-Dichloroethene	5.05		0.760	2.50	5	04/19/2017 05:42	WG971582
1,2-Dichloropropane	U		0.950	2.50	5	04/19/2017 05:42	WG971582
1,1-Dichloropropene	U		0.640	2.50	5	04/19/2017 05:42	WG971582
1,3-Dichloropropane	U		0.735	2.50	5	04/19/2017 05:42	WG971582
cis-1,3-Dichloropropene	U		0.488	2.50	5	04/19/2017 05:42	WG971582
trans-1,3-Dichloropropene	U		1.11	2.50	5	04/19/2017 05:42	WG971582
trans-1,4-Dichloro-2-butene	U		1.28	25.0	5	04/19/2017 05:42	WG971582
2,2-Dichloropropane	U		0.464	2.50	5	04/19/2017 05:42	WG971582
Di-isopropyl ether	U		0.462	2.50	5	04/19/2017 05:42	WG971582
Ethylbenzene	U		0.790	2.50	5	04/19/2017 05:42	WG971582
Hexachloro-1,3-butadiene	U		0.785	5.00	5	04/19/2017 05:42	WG971582
2-Hexanone	U		3.78	12.5	5	04/19/2017 05:42	WG971582
n-Hexane	U		1.52	5.00	5	04/19/2017 05:42	WG971582
Iodomethane	U	J4	18.8	125	50	04/20/2017 00:36	WG971582
Isopropylbenzene	U		0.630	2.50	5	04/19/2017 05:42	WG971582
p-Isopropyltoluene	U		0.690	2.50	5	04/19/2017 05:42	WG971582
2-Butanone (MEK)	U		6.40	12.5	5	04/19/2017 05:42	WG971582
Methylene Chloride	U		5.35	12.5	5	04/19/2017 05:42	WG971582
4-Methyl-2-pentanone (MIBK)	U		4.12	12.5	5	04/19/2017 05:42	WG971582
Methyl tert-butyl ether	U		0.510	2.50	5	04/19/2017 05:42	WG971582
Naphthalene	1.42	J	0.870	2.50	5	04/19/2017 05:42	WG971582
n-Propylbenzene	U		0.810	2.50	5	04/19/2017 05:42	WG971582
Styrene	U		0.585	2.50	5	04/19/2017 05:42	WG971582
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	04/19/2017 05:42	WG971582
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	04/19/2017 05:42	WG971582
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	04/19/2017 05:42	WG971582
Tetrachloroethene	194		0.995	2.50	5	04/19/2017 05:42	WG971582
Toluene	U		2.06	5.00	5	04/19/2017 05:42	WG971582
1,2,3-Trichlorobenzene	U		0.820	2.50	5	04/19/2017 05:42	WG971582
1,2,4-Trichlorobenzene	U		1.78	2.50	5	04/19/2017 05:42	WG971582
1,1,1-Trichloroethane	U		0.470	2.50	5	04/19/2017 05:42	WG971582
1,1,2-Trichloroethane	U		0.930	2.50	5	04/19/2017 05:42	WG971582
Trichloroethene	492		0.765	2.50	5	04/19/2017 05:42	WG971582
Trichlorofluoromethane	U		0.650	2.50	5	04/19/2017 05:42	WG971582
1,2,3-Trichloropropane	U		1.24	12.5	5	04/19/2017 05:42	WG971582
1,2,4-Trimethylbenzene	U		0.615	2.50	5	04/19/2017 05:42	WG971582
1,2,3-Trimethylbenzene	U		0.370	2.50	5	04/19/2017 05:42	WG971582
1,3,5-Trimethylbenzene	U		0.620	2.50	5	04/19/2017 05:42	WG971582
Vinyl acetate	U		3.22	12.5	5	04/19/2017 05:42	WG971582
Vinyl chloride	0.885	J	0.590	2.50	5	04/19/2017 05:42	WG971582
Xylenes, Total	U		1.58	7.50	5	04/19/2017 05:42	WG971582
(S) Toluene-d8	102			80.0-120		04/19/2017 05:42	WG971582
(S) Toluene-d8	103			80.0-120		04/20/2017 00:36	WG971582
(S) Dibromofluoromethane	105			76.0-123		04/19/2017 05:42	WG971582
(S) Dibromofluoromethane	110			76.0-123		04/20/2017 00:36	WG971582
(S) 4-Bromofluorobenzene	95.7			80.0-120		04/19/2017 05:42	WG971582
(S) 4-Bromofluorobenzene	102			80.0-120		04/20/2017 00:36	WG971582

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3209969-1	04/11/17 10:06	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	3220	<u>1</u>	2710	20000
Alkalinity					

L901406-01 Original Sample (OS) • Duplicate (DUP)

(OS) L901406-01	04/11/17 10:32 • (DUP) R3209969-2	04/11/17 10:38	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	46400	47600	1	3.00	%	20	
Alkalinity								

L901543-01 Original Sample (OS) • Duplicate (DUP)

(OS) L901543-01	04/11/17 12:01 • (DUP) R3209969-4	04/11/17 12:07	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	75300	74000	1	2.00	%	20	
Alkalinity								

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3209969-3	04/11/17 11:11 • (LCSD) R3209969-5	04/11/17 12:14	Spike Amount	LCS Result	LCSD Result	LCS Rec.	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	100000	101000	97300	101	%	97.0		4.00	20
Alkalinity										

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1 Cp
2 Tc
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Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100

L901638-09 Original Sample (OS) • Duplicate (DUP)

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
Chloride	16300	16500	1	1		15
Nitrate	1340	1330	1	1		15

L901709-07 Original Sample (OS) • Duplicate (DUP)

	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
Chloride	47100	47200	1	0		15
Nitrate	2210	2200	1	0		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Chloride	40000	39500	39500	99	99	80-120			0	15
Nitrate	8000	8180	8190	102	102	80-120			0	15

L901638-11 Original Sample (OS) • Matrix Spike (MS)

	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
Analyte	ug/l	ug/l	ug/l	%	%	%	%
Chloride	50000	15900	66300	101	1	80-120	
Nitrate	5000	133	5050	98	1	80-120	

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1 Cp
2 Tc
3 Ss
4 Cn
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6 Qc
7 Gl
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L901709-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	27000	76100	76400	98	99	1	80-120			0	15
Nitrate	5000	ND	4900	4830	98	97	1	80-120			1	15

L901705-01 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Nitrate	5000	ND	22700	90	5	80-120	



Method Blank (MB)

(MB) R3210785-2	04/13/17 09:34	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l
Sulfate	U	77.4	5000		

L901882-05 Original Sample (OS) • Duplicate (DUP)

(OS) L901882-05	04/13/17 13:57 • (DUP) R3210785-7	04/13/17 14:07	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%
Sulfate	ND	3640	1	23		<u>JP1</u>	15	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3210785-3	04/13/17 09:44 • (LCSD) R3210785-4	04/13/17 09:54	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Sulfate	40000	40800	40900	102	102		102	80-120	0	15		15

L901882-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L901882-01	04/13/17 13:06 • (MS) R3210785-6	04/13/17 13:16	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%
Sulfate	50000	ND	52200	102	1		80-120		

L902037-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L902037-01	04/13/17 15:49 • (MS) R3210785-8	04/13/17 15:59 • (MSD) R3210785-9	04/13/17 16:29	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
Sulfate	50000	ND	55700	55600	104	104	104		104	1	80-120			0	15

1 Cp
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Method Blank (MB)

(MB) R3210413-1	04/12/17 16:27	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	U			102	1000

L901588-01 Original Sample (OS) • Duplicate (DUP)

(OS) L901588-01	04/12/17 20:37 • (DUP) R3210413-4	04/12/17 22:06	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l			%			%
TOC (Total Organic Carbon)	5370	5180			1	4		20

L901588-13 Original Sample (OS) • Duplicate (DUP)

(OS) L901588-13	04/13/17 03:02 • (DUP) R3210413-7	04/13/17 03:21	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l			%			%
TOC (Total Organic Carbon)	4040	3960			1	2		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3210413-2	04/12/17 18:30 • (LCSD) R3210413-3	04/12/17 20:58	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l			ug/l	%	%	%			%	%
TOC (Total Organic Carbon)	75000	74700			74800	100	100	85-115			0	20

L901588-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L901588-07	04/12/17 23:44 • (MS) R3210413-5	04/13/17 00:07 • (MSD) R3210413-6	04/13/17 00:30	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l			ug/l	ug/l	%	%		%			%	%
TOC (Total Organic Carbon)	50000	3980	55700			56900		104	106	1	80-120			2	20

1 Cp
2 Tc
3 Ss
4 Cn
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6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3210537-1 04/13/17 10:55				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.349	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3210537-2 04/13/17 10:58 • (LCSD) R3210537-3 04/13/17 11:02											
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
Iron	5000	4880	4920	98	98	80-120			1	20	
Manganese	50.0	48.1	50.0	96	100	80-120			4	20	

L901739-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L901739-09 04/13/17 11:05 • (MS) R3210537-5 04/13/17 11:12 • (MSD) R3210537-6 04/13/17 11:16												
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	ND	4930	4990	99	100	1	75-125			1	20
Manganese	50.0	ND	48.2	49.3	93	96	1	75-125			2	20

1 Cp
2 Tc
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Method Blank (MB)

(MB) R3210496-1 04/12/17 23:07				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L901416-03 Original Sample (OS) • Duplicate (DUP)

(OS) L901416-03 04/12/17 23:24 • (DUP) R3210496-2 04/13/17 02:27						
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	2460	2500	10	1.67		20
Ethane	U	0.000	10	0.000		20
Ethene	U	0.000	10	0.000		20

L901992-01 Original Sample (OS) • Duplicate (DUP)

(OS) L901992-01 04/13/17 02:44 • (DUP) R3210496-3 04/13/17 05:31						
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	ND	0.000	1	0.000		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3210496-4 04/13/17 05:48 • (LCSD) R3210496-5 04/13/17 06:04										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Methane	67.8	63.5	64.0	93.6	94.5	70.0-130			0.870	20
Ethane	129	111	113	86.0	87.2	70.0-130			1.41	20
Ethene	127	109	110	86.1	86.8	70.0-130			0.840	20

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1 Cp
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6 Qc
7 Gl
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Method Blank (MB)

(MB) R3211879-3 04/19/17 03:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	2.50
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	0.500
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	0.500
2-Chlorotoluene	U		0.111	0.500
Chloroform	U		0.0860	0.500
4-Chlorotoluene	U		0.0972	0.500
Chloromethane	U		0.153	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	1.00
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	0.500
cis-1,2-Dichloroethene	0.314	J	0.0933	0.500
1,1-Dichloroethane	U		0.114	0.500
1,1-Dichloropropene	U		0.128	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
1,3-Dichloropropene	U		0.147	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00

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Method Blank (MB)

(MB) R3211879-3 04/19/17 03:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
trans-1,3-Dichloropropene	U		0.222	0.500
2-Hexanone	U		0.757	2.50
n-Hexane	U		0.305	1.00
Iodomethane	U		0.377	2.50
Ethylbenzene	U		0.158	0.500
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	2.50
Methyl tert-butyl ether	U		0.102	0.500
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Methylene Chloride	U		1.07	2.50
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
Naphthalene	U		0.174	0.500
Trichlorofluoromethane	U		0.130	0.500
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	2.50
Toluene	U		0.412	1.00
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	104			80.0-120
(S) Dibromofluoromethane	104			76.0-123
(S) 4-Bromofluorobenzene	96.9			80.0-120

1 Cp
2 Tc
3 Ss
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3211879-1 04/19/17 01:06 • (LCSD) R3211879-2 04/19/17 02:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	124	134	99.5	107	10.0-160			7.26	23
Bromobenzene	25.0	25.4	25.4	101	102	79.0-120			0.290	20
Bromochloromethane	25.0	25.6	25.8	102	103	76.0-122			0.740	20
n-Butylbenzene	25.0	23.4	23.3	93.6	93.1	72.0-126			0.550	20
sec-Butylbenzene	25.0	22.5	22.5	90.1	90.0	74.0-121			0.0300	20
tert-Butylbenzene	25.0	22.5	22.6	89.9	90.2	75.0-122			0.380	20
Carbon disulfide	25.0	22.8	22.9	91.0	91.7	55.0-127			0.690	20
2-Chlorotoluene	25.0	24.8	24.7	99.2	99.0	74.0-122			0.200	20
4-Chlorotoluene	25.0	24.6	24.5	98.2	98.0	79.0-120			0.160	20
1,2-Dibromo-3-Chloropropane	25.0	22.7	23.1	90.6	92.5	64.0-127			2.02	20
1,2-Dibromomethane	25.0	25.2	25.1	101	100	77.0-123			0.500	20
Dibromomethane	25.0	24.0	24.3	96.2	97.3	78.0-120			1.17	20
1,2-Dichlorobenzene	25.0	26.6	26.4	106	106	80.0-120			0.860	20
1,3-Dichlorobenzene	25.0	25.3	25.4	101	102	72.0-123			0.340	20
1,4-Dichlorobenzene	25.0	27.2	26.8	109	107	77.0-120			1.22	20
Dichlorodifluoromethane	25.0	25.9	25.8	104	103	49.0-155			0.390	20
dis-1,2-Dichloroethene	25.0	26.7	27.3	107	109	73.0-120			2.32	20
1,1-Dichloropropene	25.0	25.7	25.7	103	103	71.0-129			0.290	20
1,3-Dichloropropene	25.0	27.1	27.1	108	109	80.0-121			0.130	20
Acrylonitrile	125	139	140	111	112	60.0-142			0.460	20
Benzene	25.0	28.0	28.3	112	113	69.0-123			1.11	20
trans-1,4-Dichloro-2-butene	25.0	16.7	16.5	66.9	66.0	55.0-134			1.28	20
2,2-Dichloropropane	25.0	18.8	19.1	75.4	76.5	60.0-125			1.42	20
Bromodichloromethane	25.0	24.3	24.1	97.2	96.5	76.0-120			0.720	20
Di-isopropyl ether	25.0	25.9	26.2	104	105	59.0-133			1.26	20
Bromoform	25.0	24.2	24.2	96.7	96.7	67.0-132			0.0500	20
Hexachloro-1,3-butadiene	25.0	21.8	22.2	87.1	88.9	64.0-131			2.10	20
2-Hexanone	125	142	146	114	117	58.0-147			2.69	20
Bromomethane	25.0	28.7	26.9	115	107	18.0-160			6.52	20
n-Hexane	25.0	25.0	25.3	100	101	56.0-124			0.940	20
Iodomethane	125	48.8	58.6	39.1	46.9	57.0-140	J4	J4	18.1	20
Isopropylbenzene	25.0	24.1	23.9	96.5	95.6	75.0-120			0.890	20
p-Isopropyltoluene	25.0	22.6	22.5	90.3	90.1	74.0-126			0.200	20
2-Butanone (MEK)	125	143	146	114	116	37.0-158			2.12	20
Carbon tetrachloride	25.0	21.6	21.9	86.3	87.7	63.0-122			1.59	20
4-Methyl-2-pentanone (MIBK)	125	142	142	113	113	59.0-143			0.200	20
Chlorobenzene	25.0	26.0	25.7	104	103	79.0-121			1.12	20
Chlorodibromomethane	25.0	23.7	23.7	94.7	94.8	75.0-125			0.110	20
Methyl tert-butyl ether	25.0	24.8	25.0	99.4	100	64.0-123			0.610	20
Chloroethane	25.0	22.4	22.8	89.5	91.2	47.0-152			1.92	20

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1 Cp
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3211879-1 04/19/17 01:06 • (LCSD) R3211879-2 04/19/17 02:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Propylbenzene	25.0	24.9	24.9	99.7	99.7	79.0-120			0.0100	20
Chloroform	25.0	25.4	25.4	101	102	72.0-121			0.180	20
Styrene	25.0	25.5	25.3	102	101	78.0-124			0.880	20
1,1,2-Tetrachloroethane	25.0	24.0	24.3	96.1	97.3	75.0-122			1.27	20
Chloromethane	25.0	22.1	23.3	88.4	93.2	48.0-139			5.32	20
1,1,2-Trichlorotrifluoroethane	25.0	24.8	25.1	99.1	100	61.0-136			1.32	20
1,2,3-Trichlorobenzene	25.0	24.3	24.5	97.3	98.2	61.0-133			0.870	20
1,2,4-Trichlorobenzene	25.0	24.8	24.3	99.0	97.0	69.0-129			2.04	20
Trichlorofluoromethane	25.0	24.7	23.7	98.7	95.0	56.0-137			3.86	20
1,2,3-Trichloropropene	25.0	23.2	23.3	93.0	93.1	72.0-124			0.160	20
1,1-Dichloroethane	25.0	26.0	26.7	104	107	70.0-126			2.65	20
1,2,4-Trimethylbenzene	25.0	23.2	23.4	92.7	93.7	75.0-120			1.08	20
1,2,3-Trimethylbenzene	25.0	24.6	24.5	98.3	98.0	75.0-120			0.310	20
1,2-Dichloroethane	25.0	21.4	22.1	85.8	88.5	67.0-126			3.17	20
1,1-Dichloroethene	25.0	24.0	24.6	95.9	98.5	64.0-129			2.68	20
1,3,5-Trimethylbenzene	25.0	23.2	23.2	92.9	92.8	75.0-120			0.140	20
Vinyl acetate	125	106	94.1	84.6	75.3	46.0-160			11.7	20
trans-1,2-Dichloroethene	25.0	26.1	26.1	105	105	71.0-121			0.000	20
1,2-Dichloropropane	25.0	27.5	27.0	110	108	75.0-125			1.76	20
cis-1,3-Dichloropropene	25.0	24.2	23.6	96.8	94.2	79.0-123			2.70	20
trans-1,3-Dichloropropene	25.0	23.0	22.9	92.0	91.7	74.0-127			0.340	20
Ethylbenzene	25.0	25.6	25.8	102	103	77.0-120			0.790	20
Methylene Chloride	25.0	25.4	25.8	102	103	66.0-121			1.27	20
Naphthalene	25.0	24.2	24.7	96.8	98.6	62.0-128			1.84	20
1,1,2,2-Tetrachloroethane	25.0	25.3	24.3	101	97.0	71.0-122			4.16	20
Tetrachloroethene	25.0	25.3	25.0	101	100	70.0-127			1.32	20
Toluene	25.0	26.0	26.0	104	104	77.0-120			0.340	20
1,1,1-Trichloroethane	25.0	22.9	22.9	91.4	91.5	68.0-122			0.0400	20
1,1,2-Trichloroethane	25.0	26.8	26.9	107	108	78.0-120			0.600	20
Trichloroethene	25.0	26.2	26.8	105	107	78.0-120			2.26	20
Vinyl chloride	25.0	28.6	28.8	114	115	64.0-133			0.650	20
Xylenes, Total	75.0	76.4	76.7	102	102	77.0-120			0.390	20
(S) Toluene-d8				104	103	80.0-120				
(S) Dibromofluoromethane				102	104	76.0-123				
(S) 4-Bromofluorobenzene				94.8	95.8	80.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc. - WA

1413.001.02.002

L901706

04/20/17 16:23

17 of 20



Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

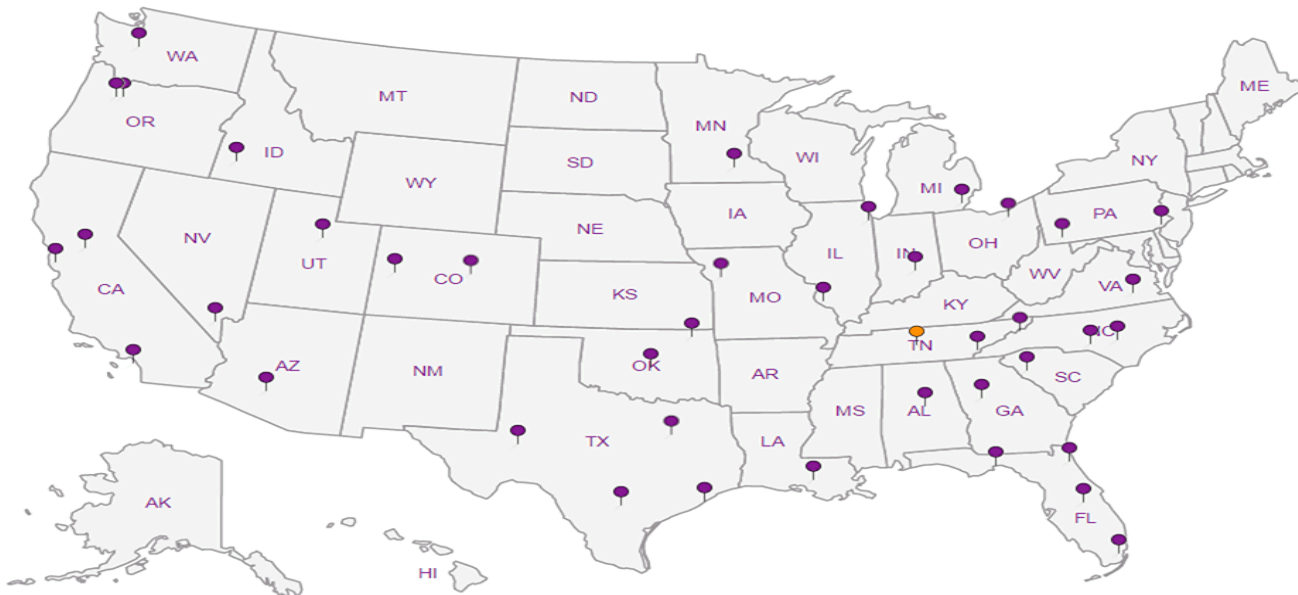
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeman

Email To: bhalde@pesenv.com

Project:
Description: **American Linen Supply**

City/State Collected: **Seattle, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.002

Lab Project #
PESENVSWA-141300102

Collected by (print):
Chris Boer

Site/Facility ID #
700 DEXTER AVE N SEATTLE

P.O. #

Collected by (signature):
Chris Boer

Rush? (Lab MUST Be Notified)

Quote #

Interim/analytical Packed on Ice: N Y

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cntrs

MW12A-011017

Grab

GW

86.5

4/10/17

1405

9

Analysis / Container / Preservative	Pres Chk
*NO3,CI,SO4,Alk 250mlHDPE-NoPres	<input checked="" type="checkbox"/>
NWTPHGX 40mlAmb HCl	<input checked="" type="checkbox"/>
TOC 250mlAmb-HCl	<input checked="" type="checkbox"/>
Total Fe Mn 6020 250mlHDPE-HNO3	<input checked="" type="checkbox"/>
low level 8260C 40mlAmb-HCl	<input checked="" type="checkbox"/>
low level RSK175 40mlAmb-HCl	<input checked="" type="checkbox"/>

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Biossary
WW - WasteWater
DW - Drinking Water
OT - Other

Remarks: *Nitrate has a 48 hour hold time

Samples returned via:
UPS FedEx Courier

Relinquished by: (Signature)
Chris Boer

Date: **4/10/17** Time: **1510**

Received by: (Signature)
[Signature]

Temp: **5.12** °C Bottles Received: **9**
Date: **4-11-17** Time: **8:45**

Sample Receipt Check: **X**
COC Seal Present/Intact: **X**
COC Signed/Accurate: **X**
Bottles arrive intact: **X**
Correct bottles used: **X**
Sufficient volume sent: **X**
If Applicable: **X**
VOA Zero Readspace: **X**
Preservation Correct/checked: **X**

Relinquished by: (Signature)

Date: Time:

Received for lab by: (Signature)
[Signature]

Date: Time:

Condition: **NCF / OK**

ESC
L.A.B. S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

12005 Lebanon Rd
Mooresville, TN 37122
Phone: 615-738-5881
Phone: 800-767-5859
Fax: 615-738-5859

L# **901706**
K019

Account: **PESENVSWA**
Template: **T121414**
Prelogin: **P592684**
TSR: **110 - Brian Ford**
PB: **3-13-176**
Shipped Via: **FedEx Ground**

Remarks: **01**

Sample Receipt Check: **X**
COC Seal Present/Intact: **X**
COC Signed/Accurate: **X**
Bottles arrive intact: **X**
Correct bottles used: **X**
Sufficient volume sent: **X**
If Applicable: **X**
VOA Zero Readspace: **X**
Preservation Correct/checked: **X**

June 22, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L916025
Samples Received: 06/15/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 700 DEXTER AVE N SEATTLE WA
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW105-061417 L916025-01 GW

Collected by Shannon McKernan
Collected date/time 06/14/17 10:30
Received date/time 06/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG989777	1	06/19/17 18:44	06/19/17 18:44	JAH

1 Cp

2 Tc

3 Ss

BB-8-061417 L916025-02 GW

Collected by Shannon McKernan
Collected date/time 06/14/17 10:50
Received date/time 06/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG990920	1	06/22/17 01:33	06/22/17 01:33	MCG
Wet Chemistry by Method 9056A	WG989400	1	06/15/17 13:52	06/15/17 13:52	DR
Wet Chemistry by Method 9060A	WG989915	1	06/16/17 19:17	06/16/17 19:17	SJM
Metals (ICPMS) by Method 6020A	WG990560	1	06/19/17 19:03	06/21/17 14:19	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG989710	1	06/16/17 10:40	06/16/17 10:40	AMC
Volatile Organic Compounds (GC/MS) by Method 8260C	WG989777	1	06/19/17 19:06	06/19/17 19:06	JAH

4 Cn

5 Sr

6 Qc

7 Gl

SCL-MW101-061417 L916025-03 GW

Collected by Shannon McKernan
Collected date/time 06/14/17 13:00
Received date/time 06/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG989777	1	06/19/17 19:29	06/19/17 19:29	JAH

8 Al

9 Sc

MW122-061417 L916025-04 GW

Collected by Shannon McKernan
Collected date/time 06/14/17 13:00
Received date/time 06/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG989777	1	06/19/17 19:52	06/19/17 19:52	JAH

MW111-061417 L916025-05 GW

Collected by Shannon McKernan
Collected date/time 06/14/17 15:00
Received date/time 06/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG990920	1	06/22/17 01:40	06/22/17 01:40	MCG
Wet Chemistry by Method 9056A	WG989400	1	06/15/17 14:22	06/15/17 14:22	DR
Wet Chemistry by Method 9060A	WG990593	1	06/19/17 11:47	06/19/17 11:47	SJM
Metals (ICPMS) by Method 6020A	WG990560	1	06/19/17 19:03	06/21/17 14:22	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG989710	1	06/16/17 10:43	06/16/17 10:43	AMC
Volatile Organic Compounds (GC/MS) by Method 8260C	WG989777	1	06/19/17 20:15	06/19/17 20:15	JAH

MW103-061417 L916025-06 GW

Collected by Shannon McKernan
Collected date/time 06/14/17 15:00
Received date/time 06/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG990920	1	06/22/17 01:47	06/22/17 01:47	MCG
Wet Chemistry by Method 9056A	WG989400	1	06/15/17 14:37	06/15/17 14:37	DR
Wet Chemistry by Method 9060A	WG990593	1	06/19/17 12:00	06/19/17 12:00	SJM
Metals (ICPMS) by Method 6020A	WG990560	1	06/19/17 19:03	06/21/17 14:26	LAT
Volatile Organic Compounds (GC) by Method RSK175	WG989710	1	06/16/17 10:45	06/16/17 10:45	AMC
Volatile Organic Compounds (GC/MS) by Method 8260C	WG989777	1	06/19/17 20:37	06/19/17 20:37	JAH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.18	J	1.05	25.0	1	06/19/2017 18:44	WG989777
Acrylonitrile	U		0.873	5.00	1	06/19/2017 18:44	WG989777
Benzene	U		0.0896	0.500	1	06/19/2017 18:44	WG989777
Bromobenzene	U		0.133	0.500	1	06/19/2017 18:44	WG989777
Bromodichloromethane	U		0.0800	0.500	1	06/19/2017 18:44	WG989777
Bromochloromethane	U		0.145	0.500	1	06/19/2017 18:44	WG989777
Bromoform	U		0.186	0.500	1	06/19/2017 18:44	WG989777
Bromomethane	U		0.157	2.50	1	06/19/2017 18:44	WG989777
n-Butylbenzene	U		0.143	0.500	1	06/19/2017 18:44	WG989777
sec-Butylbenzene	U		0.134	0.500	1	06/19/2017 18:44	WG989777
tert-Butylbenzene	U		0.183	0.500	1	06/19/2017 18:44	WG989777
Carbon disulfide	U		0.101	0.500	1	06/19/2017 18:44	WG989777
Carbon tetrachloride	U		0.159	0.500	1	06/19/2017 18:44	WG989777
Chlorobenzene	U		0.140	0.500	1	06/19/2017 18:44	WG989777
Chlorodibromomethane	U		0.128	0.500	1	06/19/2017 18:44	WG989777
Chloroethane	U		0.141	2.50	1	06/19/2017 18:44	WG989777
Chloroform	U		0.0860	0.500	1	06/19/2017 18:44	WG989777
Chloromethane	U		0.153	1.25	1	06/19/2017 18:44	WG989777
2-Chlorotoluene	U		0.111	0.500	1	06/19/2017 18:44	WG989777
4-Chlorotoluene	U		0.0972	0.500	1	06/19/2017 18:44	WG989777
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	06/19/2017 18:44	WG989777
1,2-Dibromoethane	U		0.193	0.500	1	06/19/2017 18:44	WG989777
Dibromomethane	U		0.117	0.500	1	06/19/2017 18:44	WG989777
1,2-Dichlorobenzene	U		0.101	0.500	1	06/19/2017 18:44	WG989777
1,3-Dichlorobenzene	U		0.130	0.500	1	06/19/2017 18:44	WG989777
1,4-Dichlorobenzene	U		0.121	0.500	1	06/19/2017 18:44	WG989777
Dichlorodifluoromethane	U		0.127	2.50	1	06/19/2017 18:44	WG989777
1,1-Dichloroethane	U		0.114	0.500	1	06/19/2017 18:44	WG989777
1,2-Dichloroethane	U		0.108	0.500	1	06/19/2017 18:44	WG989777
1,1-Dichloroethene	U		0.188	0.500	1	06/19/2017 18:44	WG989777
cis-1,2-Dichloroethene	0.180	J	0.0933	0.500	1	06/19/2017 18:44	WG989777
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/19/2017 18:44	WG989777
1,2-Dichloropropane	U		0.190	0.500	1	06/19/2017 18:44	WG989777
1,1-Dichloropropene	U		0.128	0.500	1	06/19/2017 18:44	WG989777
1,3-Dichloropropane	U		0.147	1.00	1	06/19/2017 18:44	WG989777
cis-1,3-Dichloropropene	U		0.0976	0.500	1	06/19/2017 18:44	WG989777
trans-1,3-Dichloropropene	U		0.222	0.500	1	06/19/2017 18:44	WG989777
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	06/19/2017 18:44	WG989777
2,2-Dichloropropane	U		0.0929	0.500	1	06/19/2017 18:44	WG989777
Di-isopropyl ether	U		0.0924	0.500	1	06/19/2017 18:44	WG989777
Ethylbenzene	U		0.158	0.500	1	06/19/2017 18:44	WG989777
Hexachloro-1,3-butadiene	U		0.157	1.00	1	06/19/2017 18:44	WG989777
2-Hexanone	U		0.757	5.00	1	06/19/2017 18:44	WG989777
n-Hexane	U		0.305	5.00	1	06/19/2017 18:44	WG989777
Iodomethane	U		0.377	10.0	1	06/19/2017 18:44	WG989777
Isopropylbenzene	U		0.126	0.500	1	06/19/2017 18:44	WG989777
p-Isopropyltoluene	U		0.138	0.500	1	06/19/2017 18:44	WG989777
2-Butanone (MEK)	U		1.28	5.00	1	06/19/2017 18:44	WG989777
Methylene Chloride	U		1.07	2.50	1	06/19/2017 18:44	WG989777
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	06/19/2017 18:44	WG989777
Methyl tert-butyl ether	U		0.102	0.500	1	06/19/2017 18:44	WG989777
Naphthalene	1.41	J	0.174	2.50	1	06/19/2017 18:44	WG989777
n-Propylbenzene	U		0.162	0.500	1	06/19/2017 18:44	WG989777
Styrene	U		0.117	0.500	1	06/19/2017 18:44	WG989777
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	06/19/2017 18:44	WG989777
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	06/19/2017 18:44	WG989777

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/14/17 10:30

L916025

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	06/19/2017 18:44	WG989777
Tetrachloroethene	U		0.199	0.500	1	06/19/2017 18:44	WG989777
Toluene	U		0.412	0.500	1	06/19/2017 18:44	WG989777
1,2,3-Trichlorobenzene	U		0.164	0.500	1	06/19/2017 18:44	WG989777
1,2,4-Trichlorobenzene	U		0.355	0.500	1	06/19/2017 18:44	WG989777
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/19/2017 18:44	WG989777
1,1,2-Trichloroethane	U		0.186	0.500	1	06/19/2017 18:44	WG989777
Trichloroethene	0.356	J	0.153	0.500	1	06/19/2017 18:44	WG989777
Trichlorofluoromethane	U		0.130	2.50	1	06/19/2017 18:44	WG989777
1,2,3-Trichloropropane	U		0.247	2.50	1	06/19/2017 18:44	WG989777
1,2,4-Trimethylbenzene	0.216	J	0.123	0.500	1	06/19/2017 18:44	WG989777
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	06/19/2017 18:44	WG989777
1,3,5-Trimethylbenzene	U		0.124	0.500	1	06/19/2017 18:44	WG989777
Vinyl acetate	U		0.645	5.00	1	06/19/2017 18:44	WG989777
Vinyl chloride	0.514		0.118	0.500	1	06/19/2017 18:44	WG989777
Xylenes, Total	U		0.316	1.50	1	06/19/2017 18:44	WG989777
(S) Toluene-d8	100			80.0-120		06/19/2017 18:44	WG989777
(S) Dibromofluoromethane	108			76.0-123		06/19/2017 18:44	WG989777
(S) 4-Bromofluorobenzene	101			80.0-120		06/19/2017 18:44	WG989777

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	290000		2710	20000	1	06/22/2017 01:33	WG990920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10200		51.9	1000	1	06/15/2017 13:52	WG989400
Nitrate	2740		22.7	100	1	06/15/2017 13:52	WG989400
Sulfate	56900		77.4	5000	1	06/15/2017 13:52	WG989400

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3340		102	1000	1	06/16/2017 19:17	WG989915

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	34.8	J	15.0	100	1	06/21/2017 14:19	WG990560
Manganese	47.5		0.250	5.00	1	06/21/2017 14:19	WG990560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	06/16/2017 10:40	WG989710
Ethane	U		0.296	1.29	1	06/16/2017 10:40	WG989710
Ethene	U		0.422	1.27	1	06/16/2017 10:40	WG989710

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.50	J	1.05	25.0	1	06/19/2017 19:06	WG989777
Acrylonitrile	U		0.873	5.00	1	06/19/2017 19:06	WG989777
Benzene	U		0.0896	0.500	1	06/19/2017 19:06	WG989777
Bromobenzene	U		0.133	0.500	1	06/19/2017 19:06	WG989777
Bromodichloromethane	U		0.0800	0.500	1	06/19/2017 19:06	WG989777
Bromochloromethane	U		0.145	0.500	1	06/19/2017 19:06	WG989777
Bromoform	U		0.186	0.500	1	06/19/2017 19:06	WG989777
Bromomethane	U		0.157	2.50	1	06/19/2017 19:06	WG989777
n-Butylbenzene	U		0.143	0.500	1	06/19/2017 19:06	WG989777
sec-Butylbenzene	U		0.134	0.500	1	06/19/2017 19:06	WG989777
tert-Butylbenzene	U		0.183	0.500	1	06/19/2017 19:06	WG989777
Carbon disulfide	U		0.101	0.500	1	06/19/2017 19:06	WG989777
Carbon tetrachloride	U		0.159	0.500	1	06/19/2017 19:06	WG989777
Chlorobenzene	U		0.140	0.500	1	06/19/2017 19:06	WG989777
Chlorodibromomethane	U		0.128	0.500	1	06/19/2017 19:06	WG989777
Chloroethane	U		0.141	2.50	1	06/19/2017 19:06	WG989777
Chloroform	U		0.0860	0.500	1	06/19/2017 19:06	WG989777
Chloromethane	U		0.153	1.25	1	06/19/2017 19:06	WG989777
2-Chlorotoluene	U		0.111	0.500	1	06/19/2017 19:06	WG989777
4-Chlorotoluene	U		0.0972	0.500	1	06/19/2017 19:06	WG989777
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	06/19/2017 19:06	WG989777
1,2-Dibromoethane	U		0.193	0.500	1	06/19/2017 19:06	WG989777
Dibromomethane	U		0.117	0.500	1	06/19/2017 19:06	WG989777

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/14/17 10:50

L916025

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.101	0.500	1	06/19/2017 19:06	WG989777
1,3-Dichlorobenzene	U		0.130	0.500	1	06/19/2017 19:06	WG989777
1,4-Dichlorobenzene	U		0.121	0.500	1	06/19/2017 19:06	WG989777
Dichlorodifluoromethane	U		0.127	2.50	1	06/19/2017 19:06	WG989777
1,1-Dichloroethane	U		0.114	0.500	1	06/19/2017 19:06	WG989777
1,2-Dichloroethane	U		0.108	0.500	1	06/19/2017 19:06	WG989777
1,1-Dichloroethene	U		0.188	0.500	1	06/19/2017 19:06	WG989777
cis-1,2-Dichloroethene	12.6		0.0933	0.500	1	06/19/2017 19:06	WG989777
trans-1,2-Dichloroethene	0.155	J	0.152	0.500	1	06/19/2017 19:06	WG989777
1,2-Dichloropropane	U		0.190	0.500	1	06/19/2017 19:06	WG989777
1,1-Dichloropropene	U		0.128	0.500	1	06/19/2017 19:06	WG989777
1,3-Dichloropropane	U		0.147	1.00	1	06/19/2017 19:06	WG989777
cis-1,3-Dichloropropene	U		0.0976	0.500	1	06/19/2017 19:06	WG989777
trans-1,3-Dichloropropene	U		0.222	0.500	1	06/19/2017 19:06	WG989777
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	06/19/2017 19:06	WG989777
2,2-Dichloropropane	U		0.0929	0.500	1	06/19/2017 19:06	WG989777
Di-isopropyl ether	U		0.0924	0.500	1	06/19/2017 19:06	WG989777
Ethylbenzene	U		0.158	0.500	1	06/19/2017 19:06	WG989777
Hexachloro-1,3-butadiene	U		0.157	1.00	1	06/19/2017 19:06	WG989777
2-Hexanone	U		0.757	5.00	1	06/19/2017 19:06	WG989777
n-Hexane	U		0.305	5.00	1	06/19/2017 19:06	WG989777
Iodomethane	U		0.377	10.0	1	06/19/2017 19:06	WG989777
Isopropylbenzene	U		0.126	0.500	1	06/19/2017 19:06	WG989777
p-Isopropyltoluene	U		0.138	0.500	1	06/19/2017 19:06	WG989777
2-Butanone (MEK)	U		1.28	5.00	1	06/19/2017 19:06	WG989777
Methylene Chloride	U		1.07	2.50	1	06/19/2017 19:06	WG989777
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	06/19/2017 19:06	WG989777
Methyl tert-butyl ether	U		0.102	0.500	1	06/19/2017 19:06	WG989777
Naphthalene	0.184	J	0.174	2.50	1	06/19/2017 19:06	WG989777
n-Propylbenzene	U		0.162	0.500	1	06/19/2017 19:06	WG989777
Styrene	U		0.117	0.500	1	06/19/2017 19:06	WG989777
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	06/19/2017 19:06	WG989777
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	06/19/2017 19:06	WG989777
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	06/19/2017 19:06	WG989777
Tetrachloroethene	26.0		0.199	0.500	1	06/19/2017 19:06	WG989777
Toluene	U		0.412	0.500	1	06/19/2017 19:06	WG989777
1,2,3-Trichlorobenzene	U		0.164	0.500	1	06/19/2017 19:06	WG989777
1,2,4-Trichlorobenzene	U		0.355	0.500	1	06/19/2017 19:06	WG989777
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/19/2017 19:06	WG989777
1,1,2-Trichloroethane	U		0.186	0.500	1	06/19/2017 19:06	WG989777
Trichloroethene	8.57		0.153	0.500	1	06/19/2017 19:06	WG989777
Trichlorofluoromethane	U		0.130	2.50	1	06/19/2017 19:06	WG989777
1,2,3-Trichloropropane	U		0.247	2.50	1	06/19/2017 19:06	WG989777
1,2,4-Trimethylbenzene	U		0.123	0.500	1	06/19/2017 19:06	WG989777
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	06/19/2017 19:06	WG989777
1,3,5-Trimethylbenzene	U		0.124	0.500	1	06/19/2017 19:06	WG989777
Vinyl acetate	U		0.645	5.00	1	06/19/2017 19:06	WG989777
Vinyl chloride	U		0.118	0.500	1	06/19/2017 19:06	WG989777
Xylenes, Total	U		0.316	1.50	1	06/19/2017 19:06	WG989777
(S) Toluene-d8	103			80.0-120		06/19/2017 19:06	WG989777
(S) Dibromofluoromethane	106			76.0-123		06/19/2017 19:06	WG989777
(S) 4-Bromofluorobenzene	101			80.0-120		06/19/2017 19:06	WG989777

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	06/19/2017 19:29	WG989777
Acrylonitrile	U		0.873	5.00	1	06/19/2017 19:29	WG989777
Benzene	18.6		0.0896	0.500	1	06/19/2017 19:29	WG989777
Bromobenzene	U		0.133	0.500	1	06/19/2017 19:29	WG989777
Bromodichloromethane	U		0.0800	0.500	1	06/19/2017 19:29	WG989777
Bromochloromethane	U		0.145	0.500	1	06/19/2017 19:29	WG989777
Bromoform	U		0.186	0.500	1	06/19/2017 19:29	WG989777
Bromomethane	U		0.157	2.50	1	06/19/2017 19:29	WG989777
n-Butylbenzene	6.97		0.143	0.500	1	06/19/2017 19:29	WG989777
sec-Butylbenzene	8.01		0.134	0.500	1	06/19/2017 19:29	WG989777
tert-Butylbenzene	0.219	J	0.183	0.500	1	06/19/2017 19:29	WG989777
Carbon disulfide	U		0.101	0.500	1	06/19/2017 19:29	WG989777
Carbon tetrachloride	U		0.159	0.500	1	06/19/2017 19:29	WG989777
Chlorobenzene	U		0.140	0.500	1	06/19/2017 19:29	WG989777
Chlorodibromomethane	U		0.128	0.500	1	06/19/2017 19:29	WG989777
Chloroethane	U		0.141	2.50	1	06/19/2017 19:29	WG989777
Chloroform	U		0.0860	0.500	1	06/19/2017 19:29	WG989777
Chloromethane	U		0.153	1.25	1	06/19/2017 19:29	WG989777
2-Chlorotoluene	U		0.111	0.500	1	06/19/2017 19:29	WG989777
4-Chlorotoluene	U		0.0972	0.500	1	06/19/2017 19:29	WG989777
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	06/19/2017 19:29	WG989777
1,2-Dibromoethane	U		0.193	0.500	1	06/19/2017 19:29	WG989777
Dibromomethane	U		0.117	0.500	1	06/19/2017 19:29	WG989777
1,2-Dichlorobenzene	U		0.101	0.500	1	06/19/2017 19:29	WG989777
1,3-Dichlorobenzene	U		0.130	0.500	1	06/19/2017 19:29	WG989777
1,4-Dichlorobenzene	U		0.121	0.500	1	06/19/2017 19:29	WG989777
Dichlorodifluoromethane	U		0.127	2.50	1	06/19/2017 19:29	WG989777
1,1-Dichloroethane	U		0.114	0.500	1	06/19/2017 19:29	WG989777
1,2-Dichloroethane	U		0.108	0.500	1	06/19/2017 19:29	WG989777
1,1-Dichloroethene	U		0.188	0.500	1	06/19/2017 19:29	WG989777
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/19/2017 19:29	WG989777
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/19/2017 19:29	WG989777
1,2-Dichloropropane	U		0.190	0.500	1	06/19/2017 19:29	WG989777
1,1-Dichloropropene	U		0.128	0.500	1	06/19/2017 19:29	WG989777
1,3-Dichloropropane	U		0.147	1.00	1	06/19/2017 19:29	WG989777
cis-1,3-Dichloropropene	U		0.0976	0.500	1	06/19/2017 19:29	WG989777
trans-1,3-Dichloropropene	U		0.222	0.500	1	06/19/2017 19:29	WG989777
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	06/19/2017 19:29	WG989777
2,2-Dichloropropane	U		0.0929	0.500	1	06/19/2017 19:29	WG989777
Di-isopropyl ether	U		0.0924	0.500	1	06/19/2017 19:29	WG989777
Ethylbenzene	17.1		0.158	0.500	1	06/19/2017 19:29	WG989777
Hexachloro-1,3-butadiene	U		0.157	1.00	1	06/19/2017 19:29	WG989777
2-Hexanone	U		0.757	5.00	1	06/19/2017 19:29	WG989777
n-Hexane	3.39	J	0.305	5.00	1	06/19/2017 19:29	WG989777
Iodomethane	U		0.377	10.0	1	06/19/2017 19:29	WG989777
Isopropylbenzene	29.9		0.126	0.500	1	06/19/2017 19:29	WG989777
p-Isopropyltoluene	U		0.138	0.500	1	06/19/2017 19:29	WG989777
2-Butanone (MEK)	U		1.28	5.00	1	06/19/2017 19:29	WG989777
Methylene Chloride	U		1.07	2.50	1	06/19/2017 19:29	WG989777
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	06/19/2017 19:29	WG989777
Methyl tert-butyl ether	U		0.102	0.500	1	06/19/2017 19:29	WG989777
Naphthalene	4.76		0.174	2.50	1	06/19/2017 19:29	WG989777
n-Propylbenzene	75.3		0.162	0.500	1	06/19/2017 19:29	WG989777
Styrene	U		0.117	0.500	1	06/19/2017 19:29	WG989777
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	06/19/2017 19:29	WG989777
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	06/19/2017 19:29	WG989777

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	06/19/2017 19:29	WG989777
Tetrachloroethene	U		0.199	0.500	1	06/19/2017 19:29	WG989777
Toluene	1.68		0.412	0.500	1	06/19/2017 19:29	WG989777
1,2,3-Trichlorobenzene	U		0.164	0.500	1	06/19/2017 19:29	WG989777
1,2,4-Trichlorobenzene	U		0.355	0.500	1	06/19/2017 19:29	WG989777
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/19/2017 19:29	WG989777
1,1,2-Trichloroethane	U		0.186	0.500	1	06/19/2017 19:29	WG989777
Trichloroethene	U		0.153	0.500	1	06/19/2017 19:29	WG989777
Trichlorofluoromethane	U		0.130	2.50	1	06/19/2017 19:29	WG989777
1,2,3-Trichloropropane	U		0.247	2.50	1	06/19/2017 19:29	WG989777
1,2,4-Trimethylbenzene	1.12		0.123	0.500	1	06/19/2017 19:29	WG989777
1,2,3-Trimethylbenzene	2.03		0.0739	0.500	1	06/19/2017 19:29	WG989777
1,3,5-Trimethylbenzene	0.185	J	0.124	0.500	1	06/19/2017 19:29	WG989777
Vinyl acetate	U		0.645	5.00	1	06/19/2017 19:29	WG989777
Vinyl chloride	U		0.118	0.500	1	06/19/2017 19:29	WG989777
Xylenes, Total	3.50		0.316	1.50	1	06/19/2017 19:29	WG989777
(S) Toluene-d8	102			80.0-120		06/19/2017 19:29	WG989777
(S) Dibromofluoromethane	105			76.0-123		06/19/2017 19:29	WG989777
(S) 4-Bromofluorobenzene	98.1			80.0-120		06/19/2017 19:29	WG989777

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	06/19/2017 19:52	WG989777
Acrylonitrile	U		0.873	5.00	1	06/19/2017 19:52	WG989777
Benzene	U		0.0896	0.500	1	06/19/2017 19:52	WG989777
Bromobenzene	U		0.133	0.500	1	06/19/2017 19:52	WG989777
Bromodichloromethane	U		0.0800	0.500	1	06/19/2017 19:52	WG989777
Bromochloromethane	U		0.145	0.500	1	06/19/2017 19:52	WG989777
Bromoform	U		0.186	0.500	1	06/19/2017 19:52	WG989777
Bromomethane	U		0.157	2.50	1	06/19/2017 19:52	WG989777
n-Butylbenzene	U		0.143	0.500	1	06/19/2017 19:52	WG989777
sec-Butylbenzene	U		0.134	0.500	1	06/19/2017 19:52	WG989777
tert-Butylbenzene	U		0.183	0.500	1	06/19/2017 19:52	WG989777
Carbon disulfide	U		0.101	0.500	1	06/19/2017 19:52	WG989777
Carbon tetrachloride	U		0.159	0.500	1	06/19/2017 19:52	WG989777
Chlorobenzene	U		0.140	0.500	1	06/19/2017 19:52	WG989777
Chlorodibromomethane	U		0.128	0.500	1	06/19/2017 19:52	WG989777
Chloroethane	U		0.141	2.50	1	06/19/2017 19:52	WG989777
Chloroform	U		0.0860	0.500	1	06/19/2017 19:52	WG989777
Chloromethane	U		0.153	1.25	1	06/19/2017 19:52	WG989777
2-Chlorotoluene	U		0.111	0.500	1	06/19/2017 19:52	WG989777
4-Chlorotoluene	U		0.0972	0.500	1	06/19/2017 19:52	WG989777
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	06/19/2017 19:52	WG989777
1,2-Dibromoethane	U		0.193	0.500	1	06/19/2017 19:52	WG989777
Dibromomethane	U		0.117	0.500	1	06/19/2017 19:52	WG989777
1,2-Dichlorobenzene	U		0.101	0.500	1	06/19/2017 19:52	WG989777
1,3-Dichlorobenzene	U		0.130	0.500	1	06/19/2017 19:52	WG989777
1,4-Dichlorobenzene	U		0.121	0.500	1	06/19/2017 19:52	WG989777
Dichlorodifluoromethane	U		0.127	2.50	1	06/19/2017 19:52	WG989777
1,1-Dichloroethane	U		0.114	0.500	1	06/19/2017 19:52	WG989777
1,2-Dichloroethane	U		0.108	0.500	1	06/19/2017 19:52	WG989777
1,1-Dichloroethene	U		0.188	0.500	1	06/19/2017 19:52	WG989777
cis-1,2-Dichloroethene	U		0.0933	0.500	1	06/19/2017 19:52	WG989777
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/19/2017 19:52	WG989777
1,2-Dichloropropane	U		0.190	0.500	1	06/19/2017 19:52	WG989777
1,1-Dichloropropene	U		0.128	0.500	1	06/19/2017 19:52	WG989777
1,3-Dichloropropane	U		0.147	1.00	1	06/19/2017 19:52	WG989777
cis-1,3-Dichloropropene	U		0.0976	0.500	1	06/19/2017 19:52	WG989777
trans-1,3-Dichloropropene	U		0.222	0.500	1	06/19/2017 19:52	WG989777
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	06/19/2017 19:52	WG989777
2,2-Dichloropropane	U		0.0929	0.500	1	06/19/2017 19:52	WG989777
Di-isopropyl ether	U		0.0924	0.500	1	06/19/2017 19:52	WG989777
Ethylbenzene	U		0.158	0.500	1	06/19/2017 19:52	WG989777
Hexachloro-1,3-butadiene	U		0.157	1.00	1	06/19/2017 19:52	WG989777
2-Hexanone	U		0.757	5.00	1	06/19/2017 19:52	WG989777
n-Hexane	U		0.305	5.00	1	06/19/2017 19:52	WG989777
Iodomethane	U		0.377	10.0	1	06/19/2017 19:52	WG989777
Isopropylbenzene	U		0.126	0.500	1	06/19/2017 19:52	WG989777
p-Isopropyltoluene	U		0.138	0.500	1	06/19/2017 19:52	WG989777
2-Butanone (MEK)	U		1.28	5.00	1	06/19/2017 19:52	WG989777
Methylene Chloride	U		1.07	2.50	1	06/19/2017 19:52	WG989777
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	06/19/2017 19:52	WG989777
Methyl tert-butyl ether	U		0.102	0.500	1	06/19/2017 19:52	WG989777
Naphthalene	U		0.174	2.50	1	06/19/2017 19:52	WG989777
n-Propylbenzene	0.382	J	0.162	0.500	1	06/19/2017 19:52	WG989777
Styrene	U		0.117	0.500	1	06/19/2017 19:52	WG989777
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	06/19/2017 19:52	WG989777
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	06/19/2017 19:52	WG989777

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 06/14/17 13:00

L916025

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	06/19/2017 19:52	WG989777
Tetrachloroethene	U		0.199	0.500	1	06/19/2017 19:52	WG989777
Toluene	U		0.412	0.500	1	06/19/2017 19:52	WG989777
1,2,3-Trichlorobenzene	U		0.164	0.500	1	06/19/2017 19:52	WG989777
1,2,4-Trichlorobenzene	U		0.355	0.500	1	06/19/2017 19:52	WG989777
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/19/2017 19:52	WG989777
1,1,2-Trichloroethane	U		0.186	0.500	1	06/19/2017 19:52	WG989777
Trichloroethene	0.162	J	0.153	0.500	1	06/19/2017 19:52	WG989777
Trichlorofluoromethane	U		0.130	2.50	1	06/19/2017 19:52	WG989777
1,2,3-Trichloropropane	U		0.247	2.50	1	06/19/2017 19:52	WG989777
1,2,4-Trimethylbenzene	U		0.123	0.500	1	06/19/2017 19:52	WG989777
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	06/19/2017 19:52	WG989777
1,3,5-Trimethylbenzene	U		0.124	0.500	1	06/19/2017 19:52	WG989777
Vinyl acetate	U		0.645	5.00	1	06/19/2017 19:52	WG989777
Vinyl chloride	U		0.118	0.500	1	06/19/2017 19:52	WG989777
Xylenes, Total	U		0.316	1.50	1	06/19/2017 19:52	WG989777
(S) Toluene-d8	99.9			80.0-120		06/19/2017 19:52	WG989777
(S) Dibromofluoromethane	106			76.0-123		06/19/2017 19:52	WG989777
(S) 4-Bromofluorobenzene	101			80.0-120		06/19/2017 19:52	WG989777

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	202000		2710	20000	1	06/22/2017 01:40	WG990920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23200		51.9	1000	1	06/15/2017 14:22	WG989400
Nitrate	U		22.7	100	1	06/15/2017 14:22	WG989400
Sulfate	8970		77.4	5000	1	06/15/2017 14:22	WG989400

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1200		102	1000	1	06/19/2017 11:47	WG990593

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	298		15.0	100	1	06/21/2017 14:22	WG990560
Manganese	142		0.250	5.00	1	06/21/2017 14:22	WG990560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	231		0.287	0.678	1	06/16/2017 10:43	WG989710
Ethane	7.73		0.296	1.29	1	06/16/2017 10:43	WG989710
Ethene	6.71		0.422	1.27	1	06/16/2017 10:43	WG989710

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	06/19/2017 20:15	WG989777
Acrylonitrile	U		0.873	5.00	1	06/19/2017 20:15	WG989777
Benzene	U		0.0896	0.500	1	06/19/2017 20:15	WG989777
Bromobenzene	U		0.133	0.500	1	06/19/2017 20:15	WG989777
Bromodichloromethane	U		0.0800	0.500	1	06/19/2017 20:15	WG989777
Bromochloromethane	U		0.145	0.500	1	06/19/2017 20:15	WG989777
Bromoform	U		0.186	0.500	1	06/19/2017 20:15	WG989777
Bromomethane	U		0.157	2.50	1	06/19/2017 20:15	WG989777
n-Butylbenzene	U		0.143	0.500	1	06/19/2017 20:15	WG989777
sec-Butylbenzene	U		0.134	0.500	1	06/19/2017 20:15	WG989777
tert-Butylbenzene	U		0.183	0.500	1	06/19/2017 20:15	WG989777
Carbon disulfide	U		0.101	0.500	1	06/19/2017 20:15	WG989777
Carbon tetrachloride	U		0.159	0.500	1	06/19/2017 20:15	WG989777
Chlorobenzene	U		0.140	0.500	1	06/19/2017 20:15	WG989777
Chlorodibromomethane	U		0.128	0.500	1	06/19/2017 20:15	WG989777
Chloroethane	U		0.141	2.50	1	06/19/2017 20:15	WG989777
Chloroform	U		0.0860	0.500	1	06/19/2017 20:15	WG989777
Chloromethane	U		0.153	1.25	1	06/19/2017 20:15	WG989777
2-Chlorotoluene	U		0.111	0.500	1	06/19/2017 20:15	WG989777
4-Chlorotoluene	U		0.0972	0.500	1	06/19/2017 20:15	WG989777
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	06/19/2017 20:15	WG989777
1,2-Dibromoethane	U		0.193	0.500	1	06/19/2017 20:15	WG989777
Dibromomethane	U		0.117	0.500	1	06/19/2017 20:15	WG989777

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/14/17 15:00

L916025

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.101	0.500	1	06/19/2017 20:15	WG989777
1,3-Dichlorobenzene	U		0.130	0.500	1	06/19/2017 20:15	WG989777
1,4-Dichlorobenzene	U		0.121	0.500	1	06/19/2017 20:15	WG989777
Dichlorodifluoromethane	U		0.127	2.50	1	06/19/2017 20:15	WG989777
1,1-Dichloroethane	U		0.114	0.500	1	06/19/2017 20:15	WG989777
1,2-Dichloroethane	U		0.108	0.500	1	06/19/2017 20:15	WG989777
1,1-Dichloroethene	U		0.188	0.500	1	06/19/2017 20:15	WG989777
cis-1,2-Dichloroethene	1.24		0.0933	0.500	1	06/19/2017 20:15	WG989777
trans-1,2-Dichloroethene	U		0.152	0.500	1	06/19/2017 20:15	WG989777
1,2-Dichloropropane	U		0.190	0.500	1	06/19/2017 20:15	WG989777
1,1-Dichloropropene	U		0.128	0.500	1	06/19/2017 20:15	WG989777
1,3-Dichloropropane	U		0.147	1.00	1	06/19/2017 20:15	WG989777
cis-1,3-Dichloropropene	U		0.0976	0.500	1	06/19/2017 20:15	WG989777
trans-1,3-Dichloropropene	U		0.222	0.500	1	06/19/2017 20:15	WG989777
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	06/19/2017 20:15	WG989777
2,2-Dichloropropane	U		0.0929	0.500	1	06/19/2017 20:15	WG989777
Di-isopropyl ether	U		0.0924	0.500	1	06/19/2017 20:15	WG989777
Ethylbenzene	U		0.158	0.500	1	06/19/2017 20:15	WG989777
Hexachloro-1,3-butadiene	U		0.157	1.00	1	06/19/2017 20:15	WG989777
2-Hexanone	U		0.757	5.00	1	06/19/2017 20:15	WG989777
n-Hexane	U		0.305	5.00	1	06/19/2017 20:15	WG989777
Iodomethane	U		0.377	10.0	1	06/19/2017 20:15	WG989777
Isopropylbenzene	U		0.126	0.500	1	06/19/2017 20:15	WG989777
p-Isopropyltoluene	U		0.138	0.500	1	06/19/2017 20:15	WG989777
2-Butanone (MEK)	U		1.28	5.00	1	06/19/2017 20:15	WG989777
Methylene Chloride	U		1.07	2.50	1	06/19/2017 20:15	WG989777
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	06/19/2017 20:15	WG989777
Methyl tert-butyl ether	U		0.102	0.500	1	06/19/2017 20:15	WG989777
Naphthalene	U		0.174	2.50	1	06/19/2017 20:15	WG989777
n-Propylbenzene	U		0.162	0.500	1	06/19/2017 20:15	WG989777
Styrene	U		0.117	0.500	1	06/19/2017 20:15	WG989777
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	06/19/2017 20:15	WG989777
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	06/19/2017 20:15	WG989777
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	06/19/2017 20:15	WG989777
Tetrachloroethene	U		0.199	0.500	1	06/19/2017 20:15	WG989777
Toluene	U		0.412	0.500	1	06/19/2017 20:15	WG989777
1,2,3-Trichlorobenzene	U		0.164	0.500	1	06/19/2017 20:15	WG989777
1,2,4-Trichlorobenzene	U		0.355	0.500	1	06/19/2017 20:15	WG989777
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/19/2017 20:15	WG989777
1,1,2-Trichloroethane	U		0.186	0.500	1	06/19/2017 20:15	WG989777
Trichloroethene	0.408	U	0.153	0.500	1	06/19/2017 20:15	WG989777
Trichlorofluoromethane	U		0.130	2.50	1	06/19/2017 20:15	WG989777
1,2,3-Trichloropropane	U		0.247	2.50	1	06/19/2017 20:15	WG989777
1,2,4-Trimethylbenzene	U		0.123	0.500	1	06/19/2017 20:15	WG989777
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	06/19/2017 20:15	WG989777
1,3,5-Trimethylbenzene	U		0.124	0.500	1	06/19/2017 20:15	WG989777
Vinyl acetate	U		0.645	5.00	1	06/19/2017 20:15	WG989777
Vinyl chloride	3.22		0.118	0.500	1	06/19/2017 20:15	WG989777
Xylenes, Total	U		0.316	1.50	1	06/19/2017 20:15	WG989777
(S) Toluene-d8	101			80.0-120		06/19/2017 20:15	WG989777
(S) Dibromofluoromethane	106			76.0-123		06/19/2017 20:15	WG989777
(S) 4-Bromofluorobenzene	101			80.0-120		06/19/2017 20:15	WG989777

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	339000		2710	20000	1	06/22/2017 01:47	WG990920

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	34700		51.9	1000	1	06/15/2017 14:37	WG989400
Nitrate	U		22.7	100	1	06/15/2017 14:37	WG989400
Sulfate	28100		77.4	5000	1	06/15/2017 14:37	WG989400

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2580		102	1000	1	06/19/2017 12:00	WG990593

Metals (ICPMS) by Method 6020A

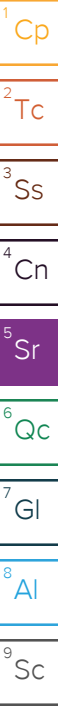
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4560		15.0	100	1	06/21/2017 14:26	WG990560
Manganese	936		0.250	5.00	1	06/21/2017 14:26	WG990560

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	863		0.287	0.678	1	06/16/2017 10:45	WG989710
Ethane	84.6		0.296	1.29	1	06/16/2017 10:45	WG989710
Ethene	43.1		0.422	1.27	1	06/16/2017 10:45	WG989710

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.76	J	1.05	25.0	1	06/19/2017 20:37	WG989777
Acrylonitrile	U		0.873	5.00	1	06/19/2017 20:37	WG989777
Benzene	U		0.0896	0.500	1	06/19/2017 20:37	WG989777
Bromobenzene	U		0.133	0.500	1	06/19/2017 20:37	WG989777
Bromodichloromethane	U		0.0800	0.500	1	06/19/2017 20:37	WG989777
Bromochloromethane	U		0.145	0.500	1	06/19/2017 20:37	WG989777
Bromoform	U		0.186	0.500	1	06/19/2017 20:37	WG989777
Bromomethane	U		0.157	2.50	1	06/19/2017 20:37	WG989777
n-Butylbenzene	U		0.143	0.500	1	06/19/2017 20:37	WG989777
sec-Butylbenzene	U		0.134	0.500	1	06/19/2017 20:37	WG989777
tert-Butylbenzene	U		0.183	0.500	1	06/19/2017 20:37	WG989777
Carbon disulfide	U		0.101	0.500	1	06/19/2017 20:37	WG989777
Carbon tetrachloride	U		0.159	0.500	1	06/19/2017 20:37	WG989777
Chlorobenzene	U		0.140	0.500	1	06/19/2017 20:37	WG989777
Chlorodibromomethane	U		0.128	0.500	1	06/19/2017 20:37	WG989777
Chloroethane	U		0.141	2.50	1	06/19/2017 20:37	WG989777
Chloroform	U		0.0860	0.500	1	06/19/2017 20:37	WG989777
Chloromethane	U		0.153	1.25	1	06/19/2017 20:37	WG989777
2-Chlorotoluene	U		0.111	0.500	1	06/19/2017 20:37	WG989777
4-Chlorotoluene	U		0.0972	0.500	1	06/19/2017 20:37	WG989777
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	06/19/2017 20:37	WG989777
1,2-Dibromoethane	U		0.193	0.500	1	06/19/2017 20:37	WG989777
Dibromomethane	U		0.117	0.500	1	06/19/2017 20:37	WG989777





Collected date/time: 06/14/17 15:00

L916025

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.101	0.500	1	06/19/2017 20:37	WG989777
1,3-Dichlorobenzene	U		0.130	0.500	1	06/19/2017 20:37	WG989777
1,4-Dichlorobenzene	U		0.121	0.500	1	06/19/2017 20:37	WG989777
Dichlorodifluoromethane	U		0.127	2.50	1	06/19/2017 20:37	WG989777
1,1-Dichloroethane	U		0.114	0.500	1	06/19/2017 20:37	WG989777
1,2-Dichloroethane	U		0.108	0.500	1	06/19/2017 20:37	WG989777
1,1-Dichloroethene	1.98		0.188	0.500	1	06/19/2017 20:37	WG989777
cis-1,2-Dichloroethene	120		0.0933	0.500	1	06/19/2017 20:37	WG989777
trans-1,2-Dichloroethene	0.369	J	0.152	0.500	1	06/19/2017 20:37	WG989777
1,2-Dichloropropane	U		0.190	0.500	1	06/19/2017 20:37	WG989777
1,1-Dichloropropene	U		0.128	0.500	1	06/19/2017 20:37	WG989777
1,3-Dichloropropane	U		0.147	1.00	1	06/19/2017 20:37	WG989777
cis-1,3-Dichloropropene	U		0.0976	0.500	1	06/19/2017 20:37	WG989777
trans-1,3-Dichloropropene	U		0.222	0.500	1	06/19/2017 20:37	WG989777
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	06/19/2017 20:37	WG989777
2,2-Dichloropropane	U		0.0929	0.500	1	06/19/2017 20:37	WG989777
Di-isopropyl ether	U		0.0924	0.500	1	06/19/2017 20:37	WG989777
Ethylbenzene	U		0.158	0.500	1	06/19/2017 20:37	WG989777
Hexachloro-1,3-butadiene	U		0.157	1.00	1	06/19/2017 20:37	WG989777
2-Hexanone	U		0.757	5.00	1	06/19/2017 20:37	WG989777
n-Hexane	U		0.305	5.00	1	06/19/2017 20:37	WG989777
Iodomethane	U		0.377	10.0	1	06/19/2017 20:37	WG989777
Isopropylbenzene	U		0.126	0.500	1	06/19/2017 20:37	WG989777
p-Isopropyltoluene	U		0.138	0.500	1	06/19/2017 20:37	WG989777
2-Butanone (MEK)	U		1.28	5.00	1	06/19/2017 20:37	WG989777
Methylene Chloride	U		1.07	2.50	1	06/19/2017 20:37	WG989777
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	06/19/2017 20:37	WG989777
Methyl tert-butyl ether	U		0.102	0.500	1	06/19/2017 20:37	WG989777
Naphthalene	U		0.174	2.50	1	06/19/2017 20:37	WG989777
n-Propylbenzene	U		0.162	0.500	1	06/19/2017 20:37	WG989777
Styrene	U		0.117	0.500	1	06/19/2017 20:37	WG989777
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	06/19/2017 20:37	WG989777
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	06/19/2017 20:37	WG989777
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	06/19/2017 20:37	WG989777
Tetrachloroethene	0.626		0.199	0.500	1	06/19/2017 20:37	WG989777
Toluene	U		0.412	0.500	1	06/19/2017 20:37	WG989777
1,2,3-Trichlorobenzene	U		0.164	0.500	1	06/19/2017 20:37	WG989777
1,2,4-Trichlorobenzene	U		0.355	0.500	1	06/19/2017 20:37	WG989777
1,1,1-Trichloroethane	U		0.0940	0.500	1	06/19/2017 20:37	WG989777
1,1,2-Trichloroethane	U		0.186	0.500	1	06/19/2017 20:37	WG989777
Trichloroethene	23.0		0.153	0.500	1	06/19/2017 20:37	WG989777
Trichlorofluoromethane	U		0.130	2.50	1	06/19/2017 20:37	WG989777
1,2,3-Trichloropropane	U		0.247	2.50	1	06/19/2017 20:37	WG989777
1,2,4-Trimethylbenzene	U		0.123	0.500	1	06/19/2017 20:37	WG989777
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	06/19/2017 20:37	WG989777
1,3,5-Trimethylbenzene	U		0.124	0.500	1	06/19/2017 20:37	WG989777
Vinyl acetate	U		0.645	5.00	1	06/19/2017 20:37	WG989777
Vinyl chloride	69.2		0.118	0.500	1	06/19/2017 20:37	WG989777
Xylenes, Total	U		0.316	1.50	1	06/19/2017 20:37	WG989777
(S) Toluene-d8	101			80.0-120		06/19/2017 20:37	WG989777
(S) Dibromofluoromethane	105			76.0-123		06/19/2017 20:37	WG989777
(S) 4-Bromofluorobenzene	100			80.0-120		06/19/2017 20:37	WG989777

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3227880-2 06/22/17 00:20			
Analyte	MB Result	MB Qualifier	MB MDL
Alkalinity	2830	1	2710
	ug/l	ug/l	ug/l
			20000

L915502-01 Original Sample (OS) • Duplicate (DUP)

(OS) L915502-01 06/22/17 00:26 • (DUP) R3227880-3 06/22/17 00:32			
Analyte	Original Result	DUP Result	Dilution
Alkalinity	ND	17500	1
	ug/l	ug/l	%
			0.000
			20

L916773-17 Original Sample (OS) • Duplicate (DUP)

(OS) L916773-17 06/22/17 06:48 • (DUP) R3227880-6 06/22/17 06:55			
Analyte	Original Result	DUP Result	Dilution
Alkalinity	101000	99200	1
	ug/l	ug/l	%
			2.00
			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3227880-4 06/22/17 01:24 • (LCSD) R3227880-5 06/22/17 02:46										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Alkalinity	100000	109000	108000	109	108	85.0-115			2.00	20
	ug/l	ug/l	ug/l	%	%	%			%	%

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
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Method Blank (MB)

(MB) R3226220-1 06/15/17 07:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	117	J	77.4	5000

L915950-01 Original Sample (OS) • Duplicate (DUP)

(OS) L915950-01 06/15/17 09:06 • (DUP) R3226220-4 06/15/17 09:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Chloride	24600	24500	1	1		15
Nitrate	1190	1180	1	1		15
Sulfate	28400	28300	1	0		15

L915998-02 Original Sample (OS) • Duplicate (DUP)

(OS) L915998-02 06/15/17 12:52 • (DUP) R3226220-6 06/15/17 13:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Chloride	13900	14300	1	2		15
Nitrate	102	102	1	0		15
Sulfate	ND	1190	1	0		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3226220-2 06/15/17 07:15 • (LCSD) R3226220-3 06/15/17 07:30

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Chloride	40000	39500	39600	99	99	80-120			0	15
Nitrate	8000	8080	8080	101	101	80-120			0	15
Sulfate	40000	39900	39900	100	100	80-120			0	15

L915950-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L915950-03 06/15/17 09:50 • (MS) R3226220-5 06/15/17 10:05

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%	%	%	%
Chloride	50000	28500	77500	98	1	80-120	
Nitrate	5000	1760	6680	98	1	80-120	

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¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

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L915950-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L915950-03 06/15/17 09:50 • (MS) R3226220-5 06/15/17 10:05

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	23100	71900	98	1	80-120	

L916078-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L916078-14 06/15/17 15:21 • (MS) R3226220-7 06/15/17 15:36 • (MSD) R3226220-8 06/15/17 15:51

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	6910	57700	57600	102	101	1	80-120			0	15
Nitrate	5000	1350	6450	6440	102	102	1	80-120			0	15
Sulfate	50000	ND	51900	51900	102	102	1	80-120			0	15

¹Cp
²Tc
³Ss
⁴Cn
⁵Sr
⁶Qc
⁷Gl
⁸Al
⁹Sc



Method Blank (MB)

(MB) R3226627-1	06/16/17 12:04	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	U			102	1000

L915586-04 Original Sample (OS) • Duplicate (DUP)

(OS) L915586-04	06/16/17 14:46 • (DUP) R3226627-3	06/16/17 15:05	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l			%	%	%	%
TOC (Total Organic Carbon)	1420	1490			1	5		20

L916081-03 Original Sample (OS) • Duplicate (DUP)

(OS) L916081-03	06/16/17 21:50 • (DUP) R3226627-7	06/16/17 22:06	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l			%	%	%	%
TOC (Total Organic Carbon)	1020	992			1	3	J	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3226627-2	06/16/17 14:12 • (LCSD) R3226627-4	06/16/17 16:21	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l			ug/l	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	75000	71200			7600	95	96	85-115			1	20

L915799-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L915799-01	06/16/17 17:27 • (MS) R3226627-5	06/16/17 17:45 • (MSD) R3226627-6	06/16/17 18:02	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l					%	%		%	%	%	%	%
TOC (Total Organic Carbon)	50000	6600	50500			49600		88	86	1	80-120			2	20

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1 Cp
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6 Qc
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Method Blank (MB)

(MB) R3226906-1 06/19/17 10:22	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	U	102	1000	

L916181-04 Original Sample (OS) • Duplicate (DUP)

(OS) L916181-04 06/19/17 12:18 • (DUP) R3226906-3 06/19/17 12:35	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	ND	637	1	0		20

L916429-03 Original Sample (OS) • Duplicate (DUP)

(OS) L916429-03 06/19/17 19:13 • (DUP) R3226906-7 06/19/17 19:28	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	2250	2200	1	2		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3226906-2 06/19/17 11:32 • (LCSD) R3226906-4 06/19/17 13:47	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	75000	71200	72200	95	96	85-115			1	20

L916184-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L916184-01 06/19/17 15:42 • (MS) R3226906-5 06/19/17 16:00 • (MSD) R3226906-6 06/19/17 16:18	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	16600	64000	64400	95	96	1	80-120			1	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3227505-1 06/21/17 13:35				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.371	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3227505-2 06/21/17 13:39 • (LCSD) R3227505-3 06/21/17 13:42										
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	4780	4760	96	95	80-120			0	20
Manganese	50.0	45.8	45.4	92	91	80-120		1	1	20

L916657-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L916657-02 06/21/17 13:46 • (MS) R3227505-5 06/21/17 13:53 • (MSD) R3227505-6 06/21/17 13:56												
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	17.9	4710	4650	94	93	1	75-125			1	20
Manganese	50.0	144	190	189	92	89	1	75-125			1	20

1 Cp
2 Tc
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Volatile Organic Compounds (GC) by Method RSK175

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Method Blank (MB)

(MB) R3226293-1 06/16/17 10:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L916025-02 Original Sample (OS) • Duplicate (DUP)

(OS) L916025-02 06/16/17 10:40 • (DUP) R3226293-2 06/16/17 11:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L916295-01 Original Sample (OS) • Duplicate (DUP)

(OS) L916295-01 06/16/17 11:44 • (DUP) R3226293-3 06/16/17 11:51

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3226293-4 06/16/17 11:58 • (LCSD) R3226293-5 06/16/17 12:07

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Methane	67.8	63.8	76.7	94.2	113	70.0-130			18.3	20
Ethane	129	121	127	94.0	98.5	70.0-130			4.88	20
Ethene	127	116	121	91.6	94.9	70.0-130			3.60	20

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2 Tc
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Method Blank (MB)

(MB) R3227153-3 06/17/17 11:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
2-Hexanone	U		0.757	5.00

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(MB) R3227153-3 06/17/17 11:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1-3-butadiene	U		0.157	1.00
n-Hexane	U		0.305	5.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
Methyl tert-butyl ether	U		0.102	0.500
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Naphthalene	U		0.174	2.50
1,1,2-Tetrachloroethane	U		0.130	0.500
n-Propylbenzene	U		0.162	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	5.00
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
Toluene	U		0.412	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
Trichloroethene	U		0.153	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
Vinyl chloride	U		0.118	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	104			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) 4-Bromofluorobenzene	99.8			80.0-120

1 Cp
2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3227153-1 06/17/17 08:45 • (LCSD) R3227153-2 06/17/17 09:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	25.0	25.8	25.9	103	104	76.0-122			0.370	20
Acetone	125	142	140	113	112	10.0-160			0.890	23
Acrylonitrile	125	121	129	97.1	103	60.0-142			5.78	20
Benzene	25.0	25.0	25.1	99.9	101	69.0-123			0.620	20
trans-1,4-Dichloro-2-butene	25.0	19.0	19.9	75.8	79.5	55.0-134			4.72	20
Bromobenzene	25.0	24.0	24.5	96.0	98.1	79.0-120			2.17	20
Bromodichloromethane	25.0	25.5	25.0	102	99.9	76.0-120			2.25	20
Bromoform	25.0	26.3	26.8	105	107	67.0-132			1.99	20
2-Hexanone	125	144	144	115	115	58.0-147			0.210	20
Bromomethane	25.0	19.2	18.0	76.8	72.0	18.0-160			6.48	20
Iodomethane	125	103	117	82.1	93.4	57.0-140			12.8	20
n-Butylbenzene	25.0	23.6	24.5	94.3	97.9	72.0-126			3.74	20
sec-Butylbenzene	25.0	23.3	24.5	93.3	98.0	74.0-121			4.92	20
tert-Butylbenzene	25.0	23.3	24.5	93.4	98.2	75.0-122			5.02	20
Carbon disulfide	25.0	29.7	30.3	119	121	55.0-127			1.94	20
Carbon tetrachloride	25.0	26.4	26.9	105	108	63.0-122			2.00	20
Chlorobenzene	25.0	25.4	26.2	102	105	79.0-121			2.85	20
Chlorodibromomethane	25.0	27.2	27.2	109	109	75.0-125			0.0900	20
Chloroethane	25.0	22.2	22.2	88.9	88.7	47.0-152			0.230	20
Chloroform	25.0	24.1	24.0	96.4	96.1	72.0-121			0.370	20
Chloromethane	25.0	21.5	22.2	85.9	88.8	48.0-139			3.41	20
2-Chlorotoluene	25.0	24.2	24.8	96.9	99.3	74.0-122			2.46	20
4-Chlorotoluene	25.0	24.6	25.5	98.6	102	79.0-120			3.57	20
1,2-Dibromo-3-Chloropropane	25.0	22.4	23.6	89.6	94.5	64.0-127			5.33	20
1,2-Dibromoethane	25.0	25.7	26.7	103	107	77.0-123			3.65	20
1,2-Dichlorobenzene	25.0	25.6	26.0	102	104	80.0-120			1.68	20
Dibromomethane	25.0	25.5	25.8	102	103	78.0-120			1.10	20
1,3-Dichlorobenzene	25.0	24.8	25.3	99.3	101	72.0-123			1.98	20
1,4-Dichlorobenzene	25.0	24.9	24.9	99.4	99.4	77.0-120			0.0300	20
Dichlorodifluoromethane	25.0	25.7	25.3	103	101	49.0-155			1.31	20
1,1-Dichloroethane	25.0	24.9	25.0	99.6	100	70.0-126			0.570	20
1,2-Dichloroethane	25.0	25.6	25.6	102	103	67.0-126			0.270	20
1,1-Dichloroethene	25.0	29.1	29.2	116	117	64.0-129			0.400	20
Vinyl acetate	125	80.5	88.2	64.4	70.6	46.0-160			9.15	20
cis-1,2-Dichloroethene	25.0	24.6	25.5	98.6	102	73.0-120			3.44	20
trans-1,2-Dichloroethene	25.0	25.1	25.6	100	103	71.0-121			2.25	20
1,2-Dichloropropane	25.0	25.0	25.3	100	101	75.0-125			1.08	20
1,1-Dichloropropene	25.0	25.7	26.1	103	104	71.0-129			1.41	20
1,3-Dichloropropane	25.0	25.6	25.9	103	103	80.0-121			0.810	20
cis-1,3-Dichloropropene	25.0	24.7	24.9	98.9	99.4	79.0-123			0.570	20

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

ACCOUNT:

PES Environmental, Inc. - WA

PROJECT:

1413.001.02.002

SDG:

L916025

DATE/TIME:

06/22/17 16:57

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3227153-1 06/17/17 08:45 • (LCSD) R3227153-2 06/17/17 09:18

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	25.0	24.7	24.9	98.9	99.8	74.0-127			0.880	20
2,2-Dichloropropane	25.0	22.3	22.6	89.0	90.2	60.0-125			1.36	20
Di-isopropyl ether	25.0	25.2	25.2	101	101	59.0-133			0.0700	20
Ethylbenzene	25.0	25.7	26.4	103	105	77.0-120			2.59	20
Hexachloro-1,3-butadiene	25.0	23.5	24.0	94.0	95.8	64.0-131			1.93	20
n-Hexane	25.0	23.5	23.4	94.1	93.7	56.0-124			0.390	20
Isopropylbenzene	25.0	24.4	25.2	97.4	101	75.0-120			3.27	20
p-Isopropyltoluene	25.0	23.6	24.6	94.6	98.4	74.0-126			3.95	20
2-Butanone (MEK)	125	122	122	97.9	97.4	37.0-158			0.480	20
Methylene Chloride	25.0	24.7	24.7	98.8	98.8	66.0-121			0.0300	20
4-Methyl-2-pentanone (MIBK)	125	127	129	102	103	59.0-143			1.85	20
Methyl tert-butyl ether	25.0	25.3	25.0	101	99.9	64.0-123			1.17	20
Naphthalene	25.0	22.4	23.5	89.6	94.0	62.0-128			4.87	20
n-Propylbenzene	25.0	24.1	24.6	96.5	98.4	79.0-120			1.93	20
Styrene	25.0	25.4	25.7	101	103	78.0-124			1.15	20
1,1,1,2-Tetrachloroethane	25.0	25.9	25.8	104	103	75.0-122			0.650	20
1,1,2,2-Tetrachloroethane	25.0	22.1	22.9	88.4	91.6	71.0-122			3.56	20
Tetrachloroethene	25.0	26.2	26.6	105	106	70.0-127			1.53	20
Toluene	25.0	25.8	25.8	103	103	77.0-120			0.0800	20
1,1,2-Trichlorotrifluoroethane	25.0	28.8	29.2	115	117	61.0-136			1.54	20
1,2,3-Trichlorobenzene	25.0	22.5	22.6	90.2	90.5	61.0-133			0.370	20
1,1,1-Trichloroethane	25.0	26.8	27.0	107	108	68.0-122			0.740	20
1,2,4-Trichlorobenzene	25.0	25.1	26.4	100	106	69.0-129			5.32	20
Trichloroethene	25.0	25.7	26.1	103	104	78.0-120			1.56	20
Trichlorofluoromethane	25.0	26.5	27.4	106	110	78.0-120			3.37	20
1,2,3-Trichloropropane	25.0	26.3	26.2	105	105	56.0-137			0.420	20
1,2,3-Trimethylbenzene	25.0	22.8	24.5	91.2	97.9	72.0-124			7.10	20
1,2,4-Trimethylbenzene	25.0	25.2	25.8	101	103	75.0-120			2.40	20
1,3,5-Trimethylbenzene	25.0	24.6	24.9	98.5	99.6	75.0-120			1.20	20
Vinyl chloride	25.0	24.1	24.4	96.6	97.5	75.0-120			0.900	20
Xylenes, Total	25.0	24.6	25.2	98.5	101	64.0-133			2.48	20
(S) Toluene-d8	75.0	75.8	75.8	101	101	77.0-120			0.000	20
(S) Dibromofluoromethane				106	106	80.0-120				
(S) 4-Bromofluorobenzene				98.8	99.2	76.0-123				
				101	103	80.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT: PES Environmental, Inc. - WA

PROJECT: 1413.001.02.002

SDG: L916025

DATE/TIME: 06/22/17 16:57

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Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
---	---

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

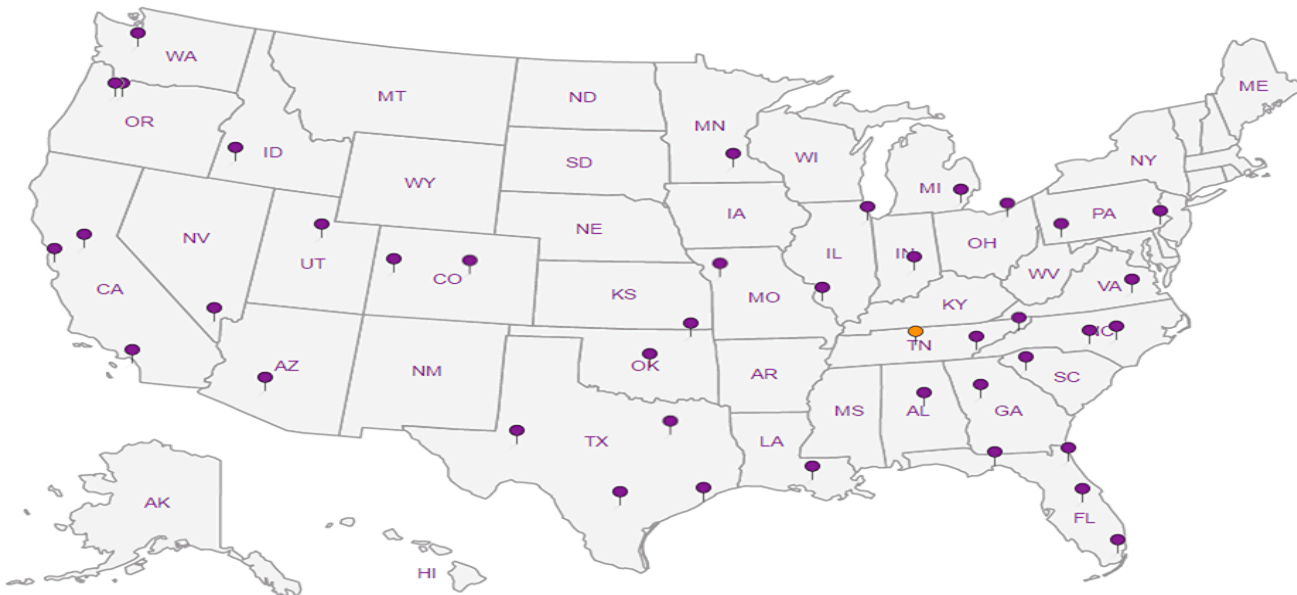
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeaman

Email To: bhaldeaman@pesenv.com

Project Description: **American Linen Supply**

City/State Collected: **SEATTLE, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.002

Lab Project #
PESENVSWA-141300102

Collected by (Print):
SHANNON MCKERRAN

Site/Facility ID #
700 DEXTER AVE N SEATTLE

P.O. #

Collected by (Signature):

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on Ice N Y X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

*Alk,Cl,NO3,SO4 250mlHDPE-NoPres

NWTPHGX 40mlAmb HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

low level 8260C 40mlAmb-HCl

low level RSK175 40mlAmb-HCl

Analysis / Container / Preservative

Pres
Chk

✓

Chain of Custody Page ___ of ___



L.A.B S.C.I.E.N.C.E.S

YOUR LAB OF CHOICE

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# **916025**

F004

Account: **PESENVSWA**

Template: **T124201**

Prelimin: **P603202**

TSR: **110 - Brian Ford**

PG: **5-31-176**

Shipped Via: **FedEx Ground**

Remarks Sample # (Lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MW105-061317061417	GRAB	GW	135	6/14/17	1030	4	*Alk,Cl,NO3,SO4 250mlHDPE-NoPres
BB-8-061417	GRAB	GW	35	↓	1050	9	NWTPHGX 40mlAmb HCl
SG1-MW100-061417	GRAB	GW					TOC 250mlAmb-HCl
SG1-MW101-061417	GRAB	GW	12	6/14/17	1300	4	Total Fe Mn 6020 250mlHDPE-HNO3
MW122-061417		GW	112	↓	1300	4	low level 8260C 40mlAmb-HCl
MW111-061417		GW	75	↓	1500	9	low level RSK175 40mlAmb-HCl
MW103-061417		GW	108.5	↑	1500	9	

Remarks: *NO3 nitrate has a 48 hour holding time

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS _____ FedEx _____ Courier _____

Tracking #

Trip Blank Received: Yes / No
HCL / MeOH

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
VOC Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature)
[Signature]

Date: **6/14/17**

Time: **1625**

Received by: (Signature)
[Signature]

Temp: **7.8°C**
Bottles Received: **39**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)
[Signature]

Date: **6-16-17**
Time: **845**

Hold: Condition: NCF / OK

July 05, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L918537
Samples Received: 06/24/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 700 DEXTER AVE N SEATTLE WA
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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FMW-131-062317 L918537-01 GW

Collected by Shannon McKernan
Collected date/time 06/23/17 08:45
Received date/time 06/24/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG994293	1	06/30/17 16:38	06/30/17 16:38	MCG
Wet Chemistry by Method 9056A	WG992587	1	06/24/17 17:43	06/24/17 17:43	DR
Wet Chemistry by Method 9060A	WG993861	1	06/29/17 20:43	06/29/17 20:43	SJM
Metals (ICPMS) by Method 6020A	WG993124	1	06/28/17 09:01	06/28/17 13:32	JPD
Volatile Organic Compounds (GC) by Method RSK175	WG992737	1	06/25/17 13:24	06/25/17 13:24	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG994563	1	07/02/17 16:38	07/02/17 16:38	JHH

1 Cp
2 Tc
3 Ss
4 Cn

GEI-2-062317 L918537-02 GW

Collected by Shannon McKernan
Collected date/time 06/23/17 10:45
Received date/time 06/24/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG994293	1	06/30/17 16:45	06/30/17 16:45	MCG
Wet Chemistry by Method 9056A	WG992587	1	06/24/17 18:27	06/24/17 18:27	DR
Wet Chemistry by Method 9060A	WG993861	1	06/29/17 21:24	06/29/17 21:24	SJM
Metals (ICPMS) by Method 6020A	WG993124	1	06/28/17 09:01	06/28/17 13:35	JPD
Volatile Organic Compounds (GC) by Method RSK175	WG992737	1	06/25/17 13:30	06/25/17 13:30	MJ
Volatile Organic Compounds (GC) by Method RSK175	WG992750	20	06/25/17 14:34	06/25/17 14:34	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG994563	1	07/02/17 16:56	07/02/17 16:56	JHH

5 Sr
6 Qc
7 Gl
8 Al
9 Sc

FMW-3D-062317 L918537-03 GW

Collected by Shannon McKernan
Collected date/time 06/23/17 12:45
Received date/time 06/24/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG994563	1	07/02/17 17:14	07/02/17 17:14	JHH

FMW-129-062317 L918537-04 GW

Collected by Shannon McKernan
Collected date/time 06/23/17 15:05
Received date/time 06/24/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG994293	1	06/30/17 16:51	06/30/17 16:51	MCG
Wet Chemistry by Method 9056A	WG992587	1	06/24/17 18:42	06/24/17 18:42	DR
Wet Chemistry by Method 9060A	WG993861	1	06/29/17 21:35	06/29/17 21:35	SJM
Metals (ICPMS) by Method 6020A	WG993124	1	06/28/17 09:01	06/28/17 13:39	JPD
Volatile Organic Compounds (GC) by Method RSK175	WG992750	1	06/25/17 14:36	06/25/17 14:36	MJ
Volatile Organic Compounds (GC/MS) by Method 8260C	WG994563	1	07/02/17 17:32	07/02/17 17:32	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG994563	10	07/04/17 11:43	07/04/17 11:43	JHH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	273000		2710	20000	1	06/30/2017 16:38	WG994293

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28100		51.9	1000	1	06/24/2017 17:43	WG992587
Nitrate	109		22.7	100	1	06/24/2017 17:43	WG992587
Sulfate	29200		77.4	5000	1	06/24/2017 17:43	WG992587

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1560		102	1000	1	06/29/2017 20:43	WG993861

6 Qc

7 Gl

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2390		15.0	100	1	06/28/2017 13:32	WG993124
Manganese	1260		0.250	5.00	1	06/28/2017 13:32	WG993124

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	87.4		0.287	0.678	1	06/25/2017 13:24	WG992737
Ethane	U		0.296	1.29	1	06/25/2017 13:24	WG992737
Ethene	U		0.422	1.27	1	06/25/2017 13:24	WG992737

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	07/02/2017 16:38	WG994563
Acrylonitrile	U		0.873	5.00	1	07/02/2017 16:38	WG994563
Benzene	U		0.0896	0.500	1	07/02/2017 16:38	WG994563
Bromobenzene	U		0.133	0.500	1	07/02/2017 16:38	WG994563
Bromodichloromethane	U		0.0800	0.500	1	07/02/2017 16:38	WG994563
Bromochloromethane	U		0.145	0.500	1	07/02/2017 16:38	WG994563
Bromoform	U		0.186	0.500	1	07/02/2017 16:38	WG994563
Bromomethane	U		0.157	2.50	1	07/02/2017 16:38	WG994563
n-Butylbenzene	U		0.143	0.500	1	07/02/2017 16:38	WG994563
sec-Butylbenzene	U		0.134	0.500	1	07/02/2017 16:38	WG994563
tert-Butylbenzene	U		0.183	0.500	1	07/02/2017 16:38	WG994563
Carbon disulfide	U	<u>JO</u>	0.101	0.500	1	07/02/2017 16:38	WG994563
Carbon tetrachloride	U		0.159	0.500	1	07/02/2017 16:38	WG994563
Chlorobenzene	U		0.140	0.500	1	07/02/2017 16:38	WG994563
Chlorodibromomethane	U		0.128	0.500	1	07/02/2017 16:38	WG994563
Chloroethane	U		0.141	2.50	1	07/02/2017 16:38	WG994563
Chloroform	U		0.0860	0.500	1	07/02/2017 16:38	WG994563
Chloromethane	U		0.153	1.25	1	07/02/2017 16:38	WG994563
2-Chlorotoluene	U		0.111	0.500	1	07/02/2017 16:38	WG994563
4-Chlorotoluene	U		0.0972	0.500	1	07/02/2017 16:38	WG994563
1,2-Dibromo-3-Chloropropane	U		1.325	2.50	1	07/02/2017 16:38	WG994563
1,2-Dibromoethane	U		0.193	0.500	1	07/02/2017 16:38	WG994563
Dibromomethane	U		0.117	0.500	1	07/02/2017 16:38	WG994563



Collected date/time: 06/23/17 08:45

L918537

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.101	0.500	1	07/02/2017 16:38	WG994563
1,3-Dichlorobenzene	U		0.130	0.500	1	07/02/2017 16:38	WG994563
1,4-Dichlorobenzene	U		0.121	0.500	1	07/02/2017 16:38	WG994563
Dichlorodifluoromethane	U		0.127	2.50	1	07/02/2017 16:38	WG994563
1,1-Dichloroethane	U		0.114	0.500	1	07/02/2017 16:38	WG994563
1,2-Dichloroethane	U		0.108	0.500	1	07/02/2017 16:38	WG994563
1,1-Dichloroethene	U		0.188	0.500	1	07/02/2017 16:38	WG994563
cis-1,2-Dichloroethene	3.61		0.0933	0.500	1	07/02/2017 16:38	WG994563
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/02/2017 16:38	WG994563
1,2-Dichloropropane	U		0.190	0.500	1	07/02/2017 16:38	WG994563
1,1-Dichloropropene	U		0.128	0.500	1	07/02/2017 16:38	WG994563
1,3-Dichloropropane	U		0.147	1.00	1	07/02/2017 16:38	WG994563
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/02/2017 16:38	WG994563
trans-1,3-Dichloropropene	U		0.222	1.00	1	07/02/2017 16:38	WG994563
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/02/2017 16:38	WG994563
2,2-Dichloropropane	U		0.0929	0.500	1	07/02/2017 16:38	WG994563
Di-isopropyl ether	U		0.0924	0.500	1	07/02/2017 16:38	WG994563
Ethylbenzene	U		0.158	0.500	1	07/02/2017 16:38	WG994563
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/02/2017 16:38	WG994563
2-Hexanone	U		0.757	5.00	1	07/02/2017 16:38	WG994563
n-Hexane	U		0.305	5.00	1	07/02/2017 16:38	WG994563
Iodomethane	U	JO J3	0.377	10.0	1	07/02/2017 16:38	WG994563
Isopropylbenzene	U		0.126	0.500	1	07/02/2017 16:38	WG994563
p-Isopropyltoluene	U		0.138	0.500	1	07/02/2017 16:38	WG994563
2-Butanone (MEK)	U		1.28	5.00	1	07/02/2017 16:38	WG994563
Methylene Chloride	U		1.07	2.50	1	07/02/2017 16:38	WG994563
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/02/2017 16:38	WG994563
Methyl tert-butyl ether	U		0.102	0.500	1	07/02/2017 16:38	WG994563
Naphthalene	U		0.174	2.50	1	07/02/2017 16:38	WG994563
n-Propylbenzene	U		0.162	0.500	1	07/02/2017 16:38	WG994563
Styrene	U		0.117	0.500	1	07/02/2017 16:38	WG994563
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/02/2017 16:38	WG994563
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/02/2017 16:38	WG994563
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/02/2017 16:38	WG994563
Tetrachloroethene	U		0.199	0.500	1	07/02/2017 16:38	WG994563
Toluene	U		0.412	0.500	1	07/02/2017 16:38	WG994563
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/02/2017 16:38	WG994563
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/02/2017 16:38	WG994563
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/02/2017 16:38	WG994563
1,1,2-Trichloroethane	U		0.186	0.500	1	07/02/2017 16:38	WG994563
Trichloroethene	U		0.153	0.500	1	07/02/2017 16:38	WG994563
Trichlorofluoromethane	U		0.130	2.50	1	07/02/2017 16:38	WG994563
1,2,3-Trichloropropane	U		0.247	2.50	1	07/02/2017 16:38	WG994563
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/02/2017 16:38	WG994563
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/02/2017 16:38	WG994563
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/02/2017 16:38	WG994563
Vinyl acetate	U		0.645	5.00	1	07/02/2017 16:38	WG994563
Vinyl chloride	0.264	J	0.118	0.500	1	07/02/2017 16:38	WG994563
Xylenes, Total	U		0.316	1.50	1	07/02/2017 16:38	WG994563
(S) Toluene-d8	108			80.0-120		07/02/2017 16:38	WG994563
(S) Dibromofluoromethane	94.0			76.0-123		07/02/2017 16:38	WG994563
(S) 4-Bromofluorobenzene	98.9			80.0-120		07/02/2017 16:38	WG994563

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	458000		2710	20000	1	06/30/2017 16:45	WG994293

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23000		51.9	1000	1	06/24/2017 18:27	WG992587
Nitrate	U		22.7	100	1	06/24/2017 18:27	WG992587
Sulfate	8900		77.4	5000	1	06/24/2017 18:27	WG992587

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6840		102	1000	1	06/29/2017 21:24	WG993861

6 Qc

7 Gl

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	14900		15.0	100	1	06/28/2017 13:35	WG993124
Manganese	483		0.250	5.00	1	06/28/2017 13:35	WG993124

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	10500		5.74	13.6	20	06/25/2017 14:34	WG992750
Ethane	23.8		0.296	1.29	1	06/25/2017 13:30	WG992737
Ethene	42.5		0.422	1.27	1	06/25/2017 13:30	WG992737

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	07/02/2017 16:56	WG994563
Acrylonitrile	U		0.873	5.00	1	07/02/2017 16:56	WG994563
Benzene	U		0.0896	0.500	1	07/02/2017 16:56	WG994563
Bromobenzene	U		0.133	0.500	1	07/02/2017 16:56	WG994563
Bromodichloromethane	U		0.0800	0.500	1	07/02/2017 16:56	WG994563
Bromochloromethane	U		0.145	0.500	1	07/02/2017 16:56	WG994563
Bromoform	U		0.186	0.500	1	07/02/2017 16:56	WG994563
Bromomethane	U		0.157	2.50	1	07/02/2017 16:56	WG994563
n-Butylbenzene	U		0.143	0.500	1	07/02/2017 16:56	WG994563
sec-Butylbenzene	U		0.134	0.500	1	07/02/2017 16:56	WG994563
tert-Butylbenzene	U		0.183	0.500	1	07/02/2017 16:56	WG994563
Carbon disulfide	U	<u>JO</u>	0.101	0.500	1	07/02/2017 16:56	WG994563
Carbon tetrachloride	U		0.159	0.500	1	07/02/2017 16:56	WG994563
Chlorobenzene	U		0.140	0.500	1	07/02/2017 16:56	WG994563
Chlorodibromomethane	U		0.128	0.500	1	07/02/2017 16:56	WG994563
Chloroethane	U		0.141	2.50	1	07/02/2017 16:56	WG994563
Chloroform	U		0.0860	0.500	1	07/02/2017 16:56	WG994563
Chloromethane	U		0.153	1.25	1	07/02/2017 16:56	WG994563
2-Chlorotoluene	U		0.111	0.500	1	07/02/2017 16:56	WG994563
4-Chlorotoluene	U		0.0972	0.500	1	07/02/2017 16:56	WG994563
1,2-Dibromo-3-Chloropropane	U		1.325	2.50	1	07/02/2017 16:56	WG994563
1,2-Dibromoethane	U		0.193	0.500	1	07/02/2017 16:56	WG994563
Dibromomethane	U		0.117	0.500	1	07/02/2017 16:56	WG994563



Collected date/time: 06/23/17 10:45

L918537

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.101	0.500	1	07/02/2017 16:56	WG994563
1,3-Dichlorobenzene	U		0.130	0.500	1	07/02/2017 16:56	WG994563
1,4-Dichlorobenzene	U		0.121	0.500	1	07/02/2017 16:56	WG994563
Dichlorodifluoromethane	U		0.127	2.50	1	07/02/2017 16:56	WG994563
1,1-Dichloroethane	U		0.114	0.500	1	07/02/2017 16:56	WG994563
1,2-Dichloroethane	U		0.108	0.500	1	07/02/2017 16:56	WG994563
1,1-Dichloroethene	U		0.188	0.500	1	07/02/2017 16:56	WG994563
cis-1,2-Dichloroethene	16.3		0.0933	0.500	1	07/02/2017 16:56	WG994563
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/02/2017 16:56	WG994563
1,2-Dichloropropane	U		0.190	0.500	1	07/02/2017 16:56	WG994563
1,1-Dichloropropene	U		0.128	0.500	1	07/02/2017 16:56	WG994563
1,3-Dichloropropane	U		0.147	1.00	1	07/02/2017 16:56	WG994563
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/02/2017 16:56	WG994563
trans-1,3-Dichloropropene	U		0.222	1.00	1	07/02/2017 16:56	WG994563
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/02/2017 16:56	WG994563
2,2-Dichloropropane	U		0.0929	0.500	1	07/02/2017 16:56	WG994563
Di-isopropyl ether	0.130	J	0.0924	0.500	1	07/02/2017 16:56	WG994563
Ethylbenzene	U		0.158	0.500	1	07/02/2017 16:56	WG994563
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/02/2017 16:56	WG994563
2-Hexanone	U		0.757	5.00	1	07/02/2017 16:56	WG994563
n-Hexane	U		0.305	5.00	1	07/02/2017 16:56	WG994563
Iodomethane	U	JO J3	0.377	10.0	1	07/02/2017 16:56	WG994563
Isopropylbenzene	U		0.126	0.500	1	07/02/2017 16:56	WG994563
p-Isopropyltoluene	U		0.138	0.500	1	07/02/2017 16:56	WG994563
2-Butanone (MEK)	U		1.28	5.00	1	07/02/2017 16:56	WG994563
Methylene Chloride	U		1.07	2.50	1	07/02/2017 16:56	WG994563
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/02/2017 16:56	WG994563
Methyl tert-butyl ether	U		0.102	0.500	1	07/02/2017 16:56	WG994563
Naphthalene	U		0.174	2.50	1	07/02/2017 16:56	WG994563
n-Propylbenzene	U		0.162	0.500	1	07/02/2017 16:56	WG994563
Styrene	U		0.117	0.500	1	07/02/2017 16:56	WG994563
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/02/2017 16:56	WG994563
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/02/2017 16:56	WG994563
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/02/2017 16:56	WG994563
Tetrachloroethene	U		0.199	0.500	1	07/02/2017 16:56	WG994563
Toluene	U		0.412	0.500	1	07/02/2017 16:56	WG994563
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/02/2017 16:56	WG994563
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/02/2017 16:56	WG994563
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/02/2017 16:56	WG994563
1,1,2-Trichloroethane	U		0.186	0.500	1	07/02/2017 16:56	WG994563
Trichloroethene	U		0.153	0.500	1	07/02/2017 16:56	WG994563
Trichlorofluoromethane	U		0.130	2.50	1	07/02/2017 16:56	WG994563
1,2,3-Trichloropropane	U		0.247	2.50	1	07/02/2017 16:56	WG994563
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/02/2017 16:56	WG994563
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/02/2017 16:56	WG994563
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/02/2017 16:56	WG994563
Vinyl acetate	U		0.645	5.00	1	07/02/2017 16:56	WG994563
Vinyl chloride	127		0.118	0.500	1	07/02/2017 16:56	WG994563
Xylenes, Total	U		0.316	1.50	1	07/02/2017 16:56	WG994563
(S) Toluene-d8	106			80.0-120		07/02/2017 16:56	WG994563
(S) Dibromofluoromethane	94.8			76.0-123		07/02/2017 16:56	WG994563
(S) 4-Bromofluorobenzene	101			80.0-120		07/02/2017 16:56	WG994563

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
	ug/l		ug/l	ug/l			
Acetone	U		1.05	25.0	1	07/02/2017 17:14	WG994563
Acrylonitrile	U		0.873	5.00	1	07/02/2017 17:14	WG994563
Benzene	U		0.0896	0.500	1	07/02/2017 17:14	WG994563
Bromobenzene	U		0.133	0.500	1	07/02/2017 17:14	WG994563
Bromodichloromethane	U		0.0800	0.500	1	07/02/2017 17:14	WG994563
Bromochloromethane	U		0.145	0.500	1	07/02/2017 17:14	WG994563
Bromoform	U		0.186	0.500	1	07/02/2017 17:14	WG994563
Bromomethane	U		0.157	2.50	1	07/02/2017 17:14	WG994563
n-Butylbenzene	U		0.143	0.500	1	07/02/2017 17:14	WG994563
sec-Butylbenzene	U		0.134	0.500	1	07/02/2017 17:14	WG994563
tert-Butylbenzene	U		0.183	0.500	1	07/02/2017 17:14	WG994563
Carbon disulfide	U	JO	0.101	0.500	1	07/02/2017 17:14	WG994563
Carbon tetrachloride	U		0.159	0.500	1	07/02/2017 17:14	WG994563
Chlorobenzene	U		0.140	0.500	1	07/02/2017 17:14	WG994563
Chlorodibromomethane	U		0.128	0.500	1	07/02/2017 17:14	WG994563
Chloroethane	U		0.141	2.50	1	07/02/2017 17:14	WG994563
Chloroform	U		0.0860	0.500	1	07/02/2017 17:14	WG994563
Chloromethane	U		0.153	1.25	1	07/02/2017 17:14	WG994563
2-Chlorotoluene	U		0.111	0.500	1	07/02/2017 17:14	WG994563
4-Chlorotoluene	U		0.0972	0.500	1	07/02/2017 17:14	WG994563
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/02/2017 17:14	WG994563
1,2-Dibromoethane	U		0.193	0.500	1	07/02/2017 17:14	WG994563
Dibromomethane	U		0.117	0.500	1	07/02/2017 17:14	WG994563
1,2-Dichlorobenzene	U		0.101	0.500	1	07/02/2017 17:14	WG994563
1,3-Dichlorobenzene	U		0.130	0.500	1	07/02/2017 17:14	WG994563
1,4-Dichlorobenzene	U		0.121	0.500	1	07/02/2017 17:14	WG994563
Dichlorodifluoromethane	U		0.127	2.50	1	07/02/2017 17:14	WG994563
1,1-Dichloroethane	U		0.114	0.500	1	07/02/2017 17:14	WG994563
1,2-Dichloroethane	U		0.108	0.500	1	07/02/2017 17:14	WG994563
1,1-Dichloroethene	U		0.188	0.500	1	07/02/2017 17:14	WG994563
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/02/2017 17:14	WG994563
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/02/2017 17:14	WG994563
1,2-Dichloropropane	U		0.190	0.500	1	07/02/2017 17:14	WG994563
1,1-Dichloropropene	U		0.128	0.500	1	07/02/2017 17:14	WG994563
1,3-Dichloropropane	U		0.147	1.00	1	07/02/2017 17:14	WG994563
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/02/2017 17:14	WG994563
trans-1,3-Dichloropropene	U		0.222	1.00	1	07/02/2017 17:14	WG994563
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/02/2017 17:14	WG994563
2,2-Dichloropropane	U		0.0929	0.500	1	07/02/2017 17:14	WG994563
Di-isopropyl ether	U		0.0924	0.500	1	07/02/2017 17:14	WG994563
Ethylbenzene	U		0.158	0.500	1	07/02/2017 17:14	WG994563
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/02/2017 17:14	WG994563
2-Hexanone	U		0.757	5.00	1	07/02/2017 17:14	WG994563
n-Hexane	U		0.305	5.00	1	07/02/2017 17:14	WG994563
Iodomethane	U	JO J3	0.377	10.0	1	07/02/2017 17:14	WG994563
Isopropylbenzene	U		0.126	0.500	1	07/02/2017 17:14	WG994563
p-Isopropyltoluene	U		0.138	0.500	1	07/02/2017 17:14	WG994563
2-Butanone (MEK)	U		1.28	5.00	1	07/02/2017 17:14	WG994563
Methylene Chloride	U		1.07	2.50	1	07/02/2017 17:14	WG994563
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/02/2017 17:14	WG994563
Methyl tert-butyl ether	U		0.102	0.500	1	07/02/2017 17:14	WG994563
Naphthalene	U		0.174	2.50	1	07/02/2017 17:14	WG994563
n-Propylbenzene	U		0.162	0.500	1	07/02/2017 17:14	WG994563
Styrene	U		0.117	0.500	1	07/02/2017 17:14	WG994563
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/02/2017 17:14	WG994563
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/02/2017 17:14	WG994563

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 06/23/17 12:45

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/02/2017 17:14	WG994563
Tetrachloroethene	U		0.199	0.500	1	07/02/2017 17:14	WG994563
Toluene	U		0.412	0.500	1	07/02/2017 17:14	WG994563
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/02/2017 17:14	WG994563
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/02/2017 17:14	WG994563
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/02/2017 17:14	WG994563
1,1,2-Trichloroethane	U		0.186	0.500	1	07/02/2017 17:14	WG994563
Trichloroethene	U		0.153	0.500	1	07/02/2017 17:14	WG994563
Trichlorofluoromethane	U		0.130	2.50	1	07/02/2017 17:14	WG994563
1,2,3-Trichloropropane	U		0.247	2.50	1	07/02/2017 17:14	WG994563
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/02/2017 17:14	WG994563
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/02/2017 17:14	WG994563
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/02/2017 17:14	WG994563
Vinyl acetate	U		0.645	5.00	1	07/02/2017 17:14	WG994563
Vinyl chloride	U		0.118	0.500	1	07/02/2017 17:14	WG994563
Xylenes, Total	U		0.316	1.50	1	07/02/2017 17:14	WG994563
(S) Toluene-d8	106			80.0-120		07/02/2017 17:14	WG994563
(S) Dibromofluoromethane	96.4			76.0-123		07/02/2017 17:14	WG994563
(S) 4-Bromofluorobenzene	101			80.0-120		07/02/2017 17:14	WG994563

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	296000		2710	20000	1	06/30/2017 16:51	WG994293

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	36100		51.9	1000	1	06/24/2017 18:42	WG992587
Nitrate	91.4	J	22.7	100	1	06/24/2017 18:42	WG992587
Sulfate	95500		77.4	5000	1	06/24/2017 18:42	WG992587

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1700		102	1000	1	06/29/2017 21:35	WG993861

6 Qc

7 Gl

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	9920		15.0	100	1	06/28/2017 13:39	WG993124
Manganese	412		0.250	5.00	1	06/28/2017 13:39	WG993124

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	276		0.287	0.678	1	06/25/2017 14:36	WG992750
Ethane	14.7		0.296	1.29	1	06/25/2017 14:36	WG992750
Ethene	U		0.422	1.27	1	06/25/2017 14:36	WG992750

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.15	J	1.05	25.0	1	07/02/2017 17:32	WG994563
Acrylonitrile	U		0.873	5.00	1	07/02/2017 17:32	WG994563
Benzene	U		0.0896	0.500	1	07/02/2017 17:32	WG994563
Bromobenzene	U		0.133	0.500	1	07/02/2017 17:32	WG994563
Bromodichloromethane	U		0.0800	0.500	1	07/02/2017 17:32	WG994563
Bromochloromethane	U		0.145	0.500	1	07/02/2017 17:32	WG994563
Bromoform	U		0.186	0.500	1	07/02/2017 17:32	WG994563
Bromomethane	U		0.157	2.50	1	07/02/2017 17:32	WG994563
n-Butylbenzene	U		0.143	0.500	1	07/02/2017 17:32	WG994563
sec-Butylbenzene	U		0.134	0.500	1	07/02/2017 17:32	WG994563
tert-Butylbenzene	U		0.183	0.500	1	07/02/2017 17:32	WG994563
Carbon disulfide	U	JO	0.101	0.500	1	07/02/2017 17:32	WG994563
Carbon tetrachloride	U		0.159	0.500	1	07/02/2017 17:32	WG994563
Chlorobenzene	U		0.140	0.500	1	07/02/2017 17:32	WG994563
Chlorodibromomethane	U		0.128	0.500	1	07/02/2017 17:32	WG994563
Chloroethane	U		0.141	2.50	1	07/02/2017 17:32	WG994563
Chloroform	U		0.0860	0.500	1	07/02/2017 17:32	WG994563
Chloromethane	U		0.153	1.25	1	07/02/2017 17:32	WG994563
2-Chlorotoluene	U		0.111	0.500	1	07/02/2017 17:32	WG994563
4-Chlorotoluene	U		0.0972	0.500	1	07/02/2017 17:32	WG994563
1,2-Dibromo-3-Chloropropane	U		1.325	2.50	1	07/02/2017 17:32	WG994563
1,2-Dibromoethane	U		0.193	0.500	1	07/02/2017 17:32	WG994563
Dibromomethane	U		0.117	0.500	1	07/02/2017 17:32	WG994563



Collected date/time: 06/23/17 15:05

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.101	0.500	1	07/02/2017 17:32	WG994563
1,3-Dichlorobenzene	U		0.130	0.500	1	07/02/2017 17:32	WG994563
1,4-Dichlorobenzene	U		0.121	0.500	1	07/02/2017 17:32	WG994563
Dichlorodifluoromethane	U		0.127	2.50	1	07/02/2017 17:32	WG994563
1,1-Dichloroethane	U		0.114	0.500	1	07/02/2017 17:32	WG994563
1,2-Dichloroethane	U		0.108	0.500	1	07/02/2017 17:32	WG994563
1,1-Dichloroethene	1.37		0.188	0.500	1	07/02/2017 17:32	WG994563
cis-1,2-Dichloroethene	474		0.933	5.00	10	07/04/2017 11:43	WG994563
trans-1,2-Dichloroethene	1.21		0.152	0.500	1	07/02/2017 17:32	WG994563
1,2-Dichloropropane	U		0.190	0.500	1	07/02/2017 17:32	WG994563
1,1-Dichloropropene	U		0.128	0.500	1	07/02/2017 17:32	WG994563
1,3-Dichloropropane	U		0.147	1.00	1	07/02/2017 17:32	WG994563
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/02/2017 17:32	WG994563
trans-1,3-Dichloropropene	U		0.222	1.00	1	07/02/2017 17:32	WG994563
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/02/2017 17:32	WG994563
2,2-Dichloropropane	U		0.0929	0.500	1	07/02/2017 17:32	WG994563
Di-isopropyl ether	U		0.0924	0.500	1	07/02/2017 17:32	WG994563
Ethylbenzene	U		0.158	0.500	1	07/02/2017 17:32	WG994563
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/02/2017 17:32	WG994563
2-Hexanone	U		0.757	5.00	1	07/02/2017 17:32	WG994563
n-Hexane	U		0.305	5.00	1	07/02/2017 17:32	WG994563
Iodomethane	U	JO J3	0.377	10.0	1	07/02/2017 17:32	WG994563
Isopropylbenzene	U		0.126	0.500	1	07/02/2017 17:32	WG994563
p-Isopropyltoluene	U		0.138	0.500	1	07/02/2017 17:32	WG994563
2-Butanone (MEK)	U		1.28	5.00	1	07/02/2017 17:32	WG994563
Methylene Chloride	U		1.07	2.50	1	07/02/2017 17:32	WG994563
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/02/2017 17:32	WG994563
Methyl tert-butyl ether	U		0.102	0.500	1	07/02/2017 17:32	WG994563
Naphthalene	U		0.174	2.50	1	07/02/2017 17:32	WG994563
n-Propylbenzene	U		0.162	0.500	1	07/02/2017 17:32	WG994563
Styrene	U		0.117	0.500	1	07/02/2017 17:32	WG994563
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/02/2017 17:32	WG994563
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/02/2017 17:32	WG994563
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/02/2017 17:32	WG994563
Tetrachloroethene	81.1		0.199	0.500	1	07/02/2017 17:32	WG994563
Toluene	U		0.412	0.500	1	07/02/2017 17:32	WG994563
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/02/2017 17:32	WG994563
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/02/2017 17:32	WG994563
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/02/2017 17:32	WG994563
1,1,2-Trichloroethane	U		0.186	0.500	1	07/02/2017 17:32	WG994563
Trichloroethene	182		0.153	0.500	1	07/02/2017 17:32	WG994563
Trichlorofluoromethane	U		0.130	2.50	1	07/02/2017 17:32	WG994563
1,2,3-Trichloropropane	U		0.247	2.50	1	07/02/2017 17:32	WG994563
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/02/2017 17:32	WG994563
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/02/2017 17:32	WG994563
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/02/2017 17:32	WG994563
Vinyl acetate	U		0.645	5.00	1	07/02/2017 17:32	WG994563
Vinyl chloride	4.13		0.118	0.500	1	07/02/2017 17:32	WG994563
Xylenes, Total	U		0.316	1.50	1	07/02/2017 17:32	WG994563
(S) Toluene-d8	99.2			80.0-120		07/04/2017 11:43	WG994563
(S) Toluene-d8	103			80.0-120		07/02/2017 17:32	WG994563
(S) Dibromofluoromethane	97.8			76.0-123		07/02/2017 17:32	WG994563
(S) Dibromofluoromethane	118			76.0-123		07/04/2017 11:43	WG994563
(S) 4-Bromofluorobenzene	107			80.0-120		07/04/2017 11:43	WG994563
(S) 4-Bromofluorobenzene	98.6			80.0-120		07/02/2017 17:32	WG994563

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3230425-1	06/30/17 15:48																		
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL															
Alkalinity	ug/l	4340	ug/l	2710	ug/l	20000													

L918392-01 Original Sample (OS) • Duplicate (DUP)

(OS) L918392-01	06/30/17 15:55 • (DUP) R3230425-2	06/30/17 16:03																	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
Alkalinity	ug/l	183000	ug/l	188000	1	2.00	%	20											

L918687-01 Original Sample (OS) • Duplicate (DUP)

(OS) L918687-01	06/30/17 20:06 • (DUP) R3230425-6	06/30/17 20:14																	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
Alkalinity	ug/l	543000	ug/l	504000	1	7.00	%	20											

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3230425-3	06/30/17 16:57 • (LCSD) R3230425-5	06/30/17 19:46																	
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits									
Alkalinity	ug/l	100000	ug/l	109000	ug/l	108000	109	%	108	%	85.0-115			1.00	%	20			

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

		MB Result		MB Qualifier		MB MDL		MB RDL	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Chloride	U	U	51.9	1000					
Nitrate	U	U	22.7	100					
Sulfate	U	U	77.4	5000					

L918361-01 Original Sample (OS) • Duplicate (DUP)

		Original Result		DUP Result		Dilution		DUP RPD		DUP Qualifier		DUP RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
Nitrate	2660	2750	2750	1	3			15					
Sulfate	85500	85500	85500	1	0			15					

L918431-01 Original Sample (OS) • Duplicate (DUP)

		Original Result		DUP Result		Dilution		DUP RPD		DUP Qualifier		DUP RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
Chloride	6720	6650	6650	1	1			15					
Nitrate	1060	1360	1360	1	25			15		J3			
Sulfate	ND	0.000	0.000	1	0			15					

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

		Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Chloride	40000	39300	39300	39400	39400	39400	39400	98	98	98	98	80-120	80-120	0	0	0	0	15	15	15	15
Nitrate	8000	8040	8040	8040	8040	8040	8040	100	100	100	101	80-120	80-120	0	0	0	0	15	15	15	15
Sulfate	40000	39400	39400	39500	39500	39500	39500	99	99	99	99	80-120	80-120	0	0	0	0	15	15	15	15

L918431-02 Original Sample (OS) • Matrix Spike (MS)

		Spike Amount		Original Result		MS Result		MS Rec.		Dilution		Rec. Limits		MS Qualifier	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
Chloride	50000	8980	8980	57800	57800	57800	57800	98	98	1	1	80-120	80-120		
Nitrate	5000	1830	1830	6800	6800	6800	6800	99	99	1	1	80-120	80-120		
Sulfate	50000	ND	ND	50500	50500	50500	50500	99	99	1	1	80-120	80-120		

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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L918537-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L918537-01 06/24/17 17:43 • (MS) R3228654-7 06/24/17 17:58 • (MSD) R3228654-8 06/24/17 18:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	28100	76000	76700	96	97	1	80-120			1	15
Nitrate	5000	109	4840	4990	95	98	1	80-120			3	15
Sulfate	50000	29200	77000	77700	96	97	1	80-120			1	15

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Method Blank (MB)

(MB) R3230074-2	06/29/17 13:27																			
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL																
	ug/l		ug/l	ug/l																
TOC (Total Organic Carbon)	U		102	1000																

L917700-05 Original Sample (OS) • Duplicate (DUP)

(OS) L917700-05	06/29/17 14:59	(DUP) R3230074-4	06/29/17 15:10																	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits														
	ug/l	ug/l	%	%	%	%														
TOC (Total Organic Carbon)	7540	7250	1	4		20														

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3230074-3	06/29/17 14:08	(LCSD) R3230074-5	06/29/17 17:02																	
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits										
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%										
TOC (Total Organic Carbon)	75000	71100	70300	95	94	85-115			1	20										

L918537-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L918537-01	06/29/17 20:43	(MS) R3230074-6	06/29/17 20:58	(MSD) R3230074-7	06/29/17 21:13															
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits										
	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%										
TOC (Total Organic Carbon)	50000	1560	48400	48500	94	94			1	80-120									0	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 6020A

[L918537-01.02.04](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3229499-1 06/28/17 11:59				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3229499-2 06/28/17 12:03 • (LCSD) R3229499-3 06/28/17 12:06										
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	5100	5150	102	103	80-120			1	20
Manganese	50.0	46.0	46.4	92	93	80-120			1	20

L917294-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L917294-12 06/28/17 12:10 • (MS) R3229499-5 06/28/17 12:17 • (MSD) R3229499-6 06/28/17 12:21												
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	576	5120	5080	101	100	1	75-125			1	20
Manganese	50.0	3010	3060	3040	118	67	1	75-125			1	20

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Method Blank (MB)

(MB) R3228532-1 06/25/17 12:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L918537-01 Original Sample (OS) • Duplicate (DUP)

(OS) L918537-01 06/25/17 13:24 • (DUP) R3228532-2 06/25/17 13:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	87.4	78.1	1	11.2		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L918570-05 Original Sample (OS) • Duplicate (DUP)

(OS) L918570-05 06/25/17 13:41 • (DUP) R3228532-3 06/25/17 13:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	935	878	1	6.29		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3228532-6 06/25/17 14:06 • (LCSD) R3228532-7 06/25/17 14:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	70.3	67.6	104	99.7	70.0-130			3.89	20
Ethane	129	120	121	92.7	93.6	70.0-130			0.980	20
Ethene	127	114	115	89.5	90.3	70.0-130			0.920	20

L918570-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L918570-05 06/25/17 13:41 • (MS) R3228532-4 06/25/17 13:59 • (MSD) R3228532-5 06/25/17 14:02

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Methane	67.8	935	932	942	0.000	11.2	1	70.0-130	V	V	1.15	20
Ethane	129	U	147	145	114	112	1	70.0-130			1.37	20

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Volatile Organic Compounds (GC) by Method RSK175

[L918537-01.02](#)

L918570-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L918570-05 06/25/17 13:41 • (MS) R3228532-4 06/25/17 13:59 • (MSD) R3228532-5 06/25/17 14:02

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethene	127	U	139	137	110	108	1	70.0-130			1.62	20

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Volatile Organic Compounds (GC) by Method RSK175

[L918537-02.04](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L918096-03 Original Sample (OS) • Duplicate (DUP)

Analyte	Original Result		DUP Result	Dilution	DUP RPD	DUP Qualifier		DUP RPD Limits
	ug/l	ug/l				%	%	
Methane	3570	3600	5	0.820	20			20
Ethane	U	0.000	5	0.000	20			20
Ethene	U	0.000	5	0.000	20			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits	LCS Qualifier		LCSD Qualifier		RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%		%	%	%			
Methane	67.8	69.0	67.3	102	99.2	70.0-130	2.54	20									
Ethane	129	121	119	94.0	92.0	70.0-130	2.13	20									
Ethene	127	115	113	90.3	89.0	70.0-130	1.50	20									

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Method Blank (MB)

(MB) R3230904-3 07/02/17 12:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	1.00
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3230904-3 07/02/17 12:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	94.3			76.0-123
(S) 4-Bromofluorobenzene	97.6			80.0-120

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3230904-1 07/02/17 11:27 • (LCSD) R3230904-2 07/02/17 11:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	107	112	85.3	89.2	10.0-160			4.52	23
Acrylonitrile	125	130	124	104	99.4	60.0-142			4.37	20
Benzene	25.0	23.2	24.2	92.8	96.7	69.0-123			4.06	20
Bromobenzene	25.0	24.0	24.9	96.0	99.6	79.0-120			3.68	20
Bromodichloromethane	25.0	22.3	23.5	89.3	94.2	76.0-120			5.27	20
Bromochloromethane	25.0	25.5	26.5	102	106	76.0-122			3.56	20
Bromoform	25.0	23.4	24.3	93.6	97.3	67.0-132			3.88	20
Bromomethane	25.0	20.6	23.9	82.5	95.7	18.0-160			14.9	20
n-Butylbenzene	25.0	22.8	23.7	91.4	94.7	72.0-126			3.54	20
sec-Butylbenzene	25.0	22.8	23.3	91.2	93.3	74.0-121			2.28	20
tert-Butylbenzene	25.0	23.3	23.9	93.2	95.5	75.0-122			2.46	20
Carbon disulfide	25.0	19.9	21.1	79.5	84.4	55.0-127			5.96	20
Carbon tetrachloride	25.0	23.1	24.2	92.5	96.6	63.0-122			4.41	20
Chlorobenzene	25.0	25.5	26.0	102	104	79.0-121			1.76	20
Chlorodibromomethane	25.0	24.1	24.7	96.3	98.9	75.0-125			2.67	20
Chloroethane	25.0	23.6	24.6	94.6	98.4	47.0-152			3.99	20
Chloroform	25.0	22.5	23.5	89.9	94.0	72.0-121			4.50	20
Chloromethane	25.0	22.2	24.3	88.7	97.0	48.0-139			8.96	20
2-Chlorotoluene	25.0	24.1	24.8	96.4	99.3	74.0-122			3.03	20
4-Chlorotoluene	25.0	24.3	24.7	97.0	99.0	79.0-120			2.00	20
1,2-Dibromo-3-Chloropropane	25.0	24.8	24.1	99.3	96.2	64.0-127			3.17	20
1,2-Dibromoethane	25.0	25.5	25.6	102	102	77.0-123			0.530	20
Dibromomethane	25.0	23.8	24.9	95.2	99.5	78.0-120			4.38	20
1,2-Dichlorobenzene	25.0	24.1	25.2	96.2	101	80.0-120			4.63	20
1,3-Dichlorobenzene	25.0	24.0	25.0	95.9	100	72.0-123			4.35	20
1,4-Dichlorobenzene	25.0	23.7	24.5	94.9	98.1	77.0-120			3.24	20
Dichlorodifluoromethane	25.0	30.8	32.1	123	128	49.0-155			4.04	20
1,1-Dichloroethane	25.0	24.0	25.4	96.0	102	70.0-126			5.71	20
1,2-Dichloroethane	25.0	23.8	24.8	95.2	99.3	67.0-126			4.16	20
1,1-Dichloroethene	25.0	24.1	25.3	96.3	101	64.0-129			4.79	20
cis-1,2-Dichloroethene	25.0	22.8	23.7	91.3	94.8	73.0-120			3.80	20
trans-1,2-Dichloroethene	25.0	22.6	23.3	90.5	93.1	71.0-121			2.82	20
1,2-Dichloropropane	25.0	24.3	25.0	97.2	100	75.0-125			2.85	20
1,1-Dichloropropene	25.0	25.0	25.9	100	104	71.0-129			3.59	20
1,3-Dichloropropene	25.0	25.4	26.1	102	105	80.0-121			2.83	20
cis-1,3-Dichloropropene	25.0	24.8	25.5	99.0	102	79.0-123			2.96	20
trans-1,3-Dichloropropene	25.0	25.7	25.6	103	102	74.0-127			0.470	20
trans-1,4-Dichloro-2-butene	25.0	20.7	21.1	82.8	84.2	55.0-134			1.68	20
2,2-Dichloropropane	25.0	23.0	24.1	91.9	96.5	60.0-125			4.82	20
Di-isopropyl ether	25.0	23.1	24.2	92.2	96.6	59.0-133			4.64	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3230904-1 07/02/17 11:27 • (LCSD) R3230904-2 07/02/17 11:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	25.0	25.4	100	102	77.0-120			145	20
Hexachloro-1,3-butadiene	25.0	21.5	21.5	86.0	85.9	64.0-131			0.120	20
2-Hexanone	125	120	118	96.4	94.7	58.0-147			1.73	20
n-Hexane	25.0	21.4	22.1	85.5	88.5	56.0-124			3.43	20
Iodomethane	125	74.7	106	59.7	84.5	57.0-140		13	34.3	20
Isopropylbenzene	25.0	23.3	24.4	93.2	97.8	75.0-120			4.83	20
p-Isopropyltoluene	25.0	23.1	23.7	92.5	94.6	74.0-126			2.25	20
2-Butanone (MEK)	125	112	113	89.3	90.4	37.0-158			1.26	20
Methylene Chloride	25.0	21.8	23.4	87.4	93.5	66.0-121			6.77	20
4-Methyl-2-pentanone (MIBK)	125	116	115	93.2	91.8	59.0-143			1.47	20
Methyl tert-butyl ether	25.0	22.9	23.8	91.4	95.3	64.0-123			4.12	20
Naphthalene	25.0	23.3	23.7	93.3	94.8	62.0-128			1.55	20
n-Propylbenzene	25.0	23.9	25.0	95.5	99.9	79.0-120			4.43	20
Styrene	25.0	24.5	26.1	97.9	104	78.0-124			6.33	20
1,1,1,2-Tetrachloroethane	25.0	24.3	24.7	97.2	98.8	75.0-122			1.62	20
1,1,2,2-Tetrachloroethane	25.0	24.9	25.2	99.7	101	71.0-122			0.930	20
1,1,2-Trichlorotrifluoroethane	25.0	25.3	26.4	101	105	61.0-136			4.06	20
Tetrachloroethene	25.0	25.4	26.3	102	105	70.0-127			3.29	20
Toluene	25.0	23.8	24.5	95.0	97.9	77.0-120			3.05	20
1,2,3-Trichlorobenzene	25.0	22.4	23.1	89.5	92.5	61.0-133			3.27	20
1,2,4-Trichlorobenzene	25.0	22.8	23.2	91.1	92.8	69.0-129			1.81	20
1,1,1-Trichloroethane	25.0	23.2	24.1	92.9	96.6	68.0-122			3.80	20
1,1,2-Trichloroethane	25.0	24.6	24.9	98.3	99.8	78.0-120			1.47	20
Trichloroethene	25.0	24.8	26.1	99.1	104	78.0-120			5.17	20
Trichlorofluoromethane	25.0	23.3	24.6	93.3	98.3	56.0-137			5.18	20
1,2,3-Trichloropropane	25.0	25.2	26.0	101	104	72.0-124			3.19	20
1,2,4-Trimethylbenzene	25.0	23.0	23.8	92.1	95.4	75.0-120			3.47	20
1,2,3-Trimethylbenzene	25.0	23.5	24.4	94.0	97.4	75.0-120			3.59	20
1,3,5-Trimethylbenzene	25.0	22.8	24.0	91.4	95.9	75.0-120			4.84	20
Vinyl acetate	125	114	115	91.5	92.3	46.0-160			0.860	20
Vinyl chloride	25.0	27.7	29.1	111	116	64.0-133			5.11	20
Xylenes, Total	75.0	73.0	75.6	97.3	101	77.0-120			3.50	20
(S) Toluene-d8				105	102	80.0-120				
(S) Dibromofluoromethane				96.6	98.2	76.0-123				
(S) 4-Bromofluorobenzene				99.0	100	80.0-120				

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Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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Cp
- ²
Tc
- ³
Ss
- ⁴
Cn
- ⁵
Sr
- ⁶
Qc
- ⁷
Gl
- ⁸
Al
- ⁹
Sc



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 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

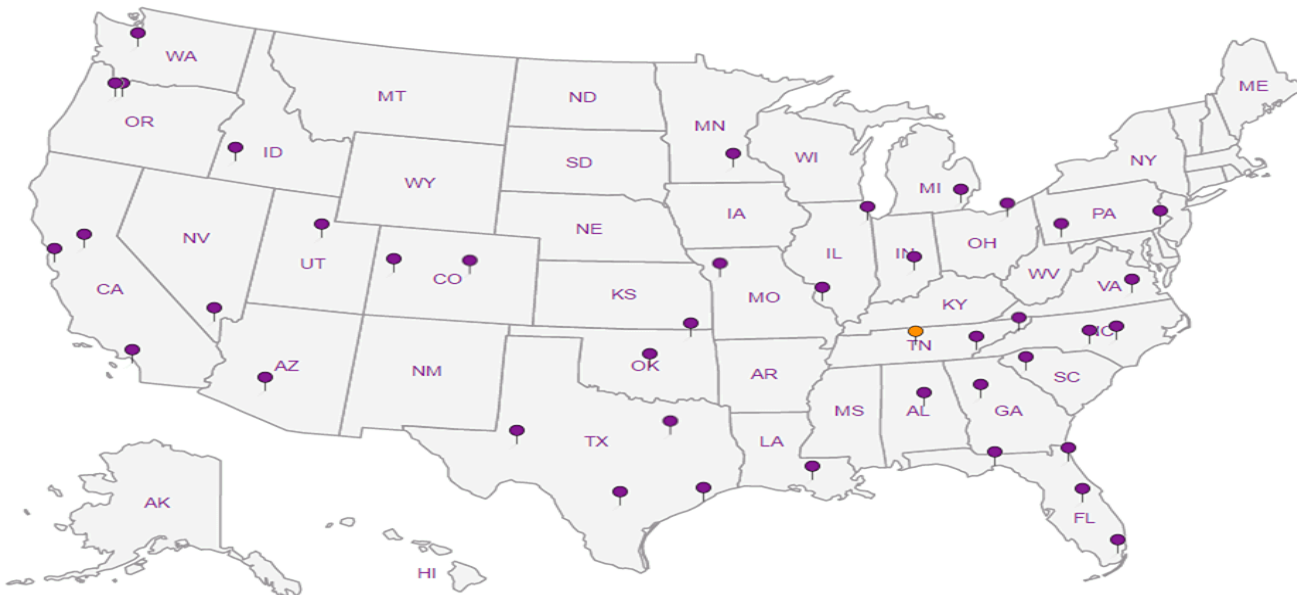
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Report to: **Bill Haldeaman**
 Email To: bhaldeaman@pesenv.com

Project: **American Linen Supply**
 City/State Collected: **SEATTLE, WA**

Phone: **206-529-3980**
 Fax: **206-529-3985**
 Client Project # **1413.001.02.002**
 Lab Project # **PESENVSWA-141300102**

Collected by (print): **SHANNON MCKERMAN**
 Site/Facility ID # **700 DEXTER AVE N SEATTLE**
 P.O. #

Collected by (signature): *[Signature]*
 Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Immediately Packed on Ice: **N** **Y**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
FMW-131-062317	GRAB	GW	08	6/23/17	0845	9	*Alk, Cl, NO3, SO4 250ml HDPE-NoPres
GEI-2-062317		GW	55.5		1045	9	NWTPHGX 40ml Amb HCl
FMW-3D-062317		GW	63.5		1245	4	TOC 250ml Amb-HCl
FMW-129-062317		GW	87		1505	9	Total Fe Mn 6020 250ml HDPE-HNO3
		GW					low level 8260C 40ml Amb-HCl
		GW					low level RSK175 40ml Amb-HCl
		GW					
		GW					
		GW					
		GW					
		GW					

Remarks: *NO3 nitrate has a 48 hour holding time

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Waste Water
 DW - Drinking Water
 OT - Other

Samples returned via:
 UPS FedEx Courier

Relinquished by: (Signature) *[Signature]* Date: **6/23/17** Time: **1645**

Tracking # **7372**
 Received by: (Signature) *[Signature]*

Temp: **16.6** °C Bottles Received: **31**
 Date: **6/24/17** Time: **0845**

Sample Receipt Checklist
 COC Seal Present/Intact: **HP** **N**
 GOC Signed/Initialed: **NY** **N**
 Bottles arrive intact: **NY** **N**
 Correct bottles used: **NY** **N**
 Sufficient volume sent: **NY** **N**
 If Applicable
 VOA zero Headpace: **Y** **N**
 Preservation Correct/Checked: **Y** **N**

Relinquished by: (Signature) _____ Date: _____ Time: _____
 Received by: (Signature) *[Signature]*
 Hold: _____ Condition: **NCE / OK**

Chain of Custody Page of
RES C.L.A.B. S.C.I.E.N.C.E.S
 YOUR LAB OF CHOICE
 12165 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-788-5858
 Phone: 800-767-5859
 Fax: 615-788-5859


Acctnum: **PESENVSWA**
 Template: **T124201**
 Prelogrn: **P603202**
 TSP: **110 - Brian Ford**
 PR: **S-31-176**
 Shipped Via: **FedEx Ground**

L# **L918537**
G180
 Remarks: _____ Sample # (lab only) _____

July 10, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L919285
Samples Received: 06/29/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 700 DEXTER AVE N SEATTLE WA
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW120-062817 L919285-01 GW

Collected by Shannon McKernan
 Collected date/time 06/28/17 10:50
 Received date/time 06/29/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG996080	1	07/06/17 11:22	07/06/17 11:22	DWR

1 Cp

2 Tc

3 Ss

MW119-062817 L919285-02 GW

Collected by Shannon McKernan
 Collected date/time 06/28/17 12:45
 Received date/time 06/29/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG996482	1	07/07/17 11:12	07/07/17 11:12	MCG
Wet Chemistry by Method 9056A	WG993864	1	07/01/17 00:05	07/01/17 00:05	SAM
Wet Chemistry by Method 9060A	WG995664	1	07/05/17 20:02	07/05/17 20:02	CSU
Metals (ICPMS) by Method 6020A	WG995343	1	07/05/17 08:50	07/05/17 21:57	LAT
Metals (ICPMS) by Method 6020A	WG995343	1	07/05/17 08:50	07/06/17 00:22	VSS
Volatile Organic Compounds (GC) by Method RSK175	WG993916	1	07/05/17 11:25	07/05/17 11:25	AMC
Volatile Organic Compounds (GC/MS) by Method 8260C	WG996080	1	07/06/17 11:37	07/06/17 11:37	DWR

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

MW125-062817 L919285-03 GW

Collected by Shannon McKernan
 Collected date/time 06/28/17 09:10
 Received date/time 06/29/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG995181	1	07/02/17 23:28	07/02/17 23:28	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG996080	1	07/06/17 11:52	07/06/17 11:52	DWR

9 Sc

R-MW3-062817 L919285-04 GW

Collected by Shannon McKernan
 Collected date/time 06/28/17 14:15
 Received date/time 06/29/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG995181	1	07/02/17 23:50	07/02/17 23:50	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG996080	1	07/06/17 12:07	07/06/17 12:07	DWR



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.40	<u>B J J0</u>	1.05	25.0	1	07/06/2017 11:22	WG996080
Acrylonitrile	U		0.873	5.00	1	07/06/2017 11:22	WG996080
Benzene	U		0.0896	0.500	1	07/06/2017 11:22	WG996080
Bromobenzene	U		0.133	0.500	1	07/06/2017 11:22	WG996080
Bromodichloromethane	U		0.0800	0.500	1	07/06/2017 11:22	WG996080
Bromochloromethane	U		0.145	0.500	1	07/06/2017 11:22	WG996080
Bromoform	U		0.186	0.500	1	07/06/2017 11:22	WG996080
Bromomethane	U		0.157	2.50	1	07/06/2017 11:22	WG996080
n-Butylbenzene	U		0.143	0.500	1	07/06/2017 11:22	WG996080
sec-Butylbenzene	U		0.134	0.500	1	07/06/2017 11:22	WG996080
tert-Butylbenzene	U		0.183	0.500	1	07/06/2017 11:22	WG996080
Carbon disulfide	U		0.101	0.500	1	07/06/2017 11:22	WG996080
Carbon tetrachloride	U		0.159	0.500	1	07/06/2017 11:22	WG996080
Chlorobenzene	U		0.140	0.500	1	07/06/2017 11:22	WG996080
Chlorodibromomethane	U		0.128	0.500	1	07/06/2017 11:22	WG996080
Chloroethane	U		0.141	2.50	1	07/06/2017 11:22	WG996080
Chloroform	U		0.0860	0.500	1	07/06/2017 11:22	WG996080
Chloromethane	U		0.153	1.25	1	07/06/2017 11:22	WG996080
2-Chlorotoluene	U		0.111	0.500	1	07/06/2017 11:22	WG996080
4-Chlorotoluene	U		0.0972	0.500	1	07/06/2017 11:22	WG996080
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/06/2017 11:22	WG996080
1,2-Dibromoethane	U		0.193	0.500	1	07/06/2017 11:22	WG996080
Dibromomethane	U		0.117	0.500	1	07/06/2017 11:22	WG996080
1,2-Dichlorobenzene	U		0.101	0.500	1	07/06/2017 11:22	WG996080
1,3-Dichlorobenzene	U		0.130	0.500	1	07/06/2017 11:22	WG996080
1,4-Dichlorobenzene	U		0.121	0.500	1	07/06/2017 11:22	WG996080
Dichlorodifluoromethane	U		0.127	2.50	1	07/06/2017 11:22	WG996080
1,1-Dichloroethane	1.57		0.114	0.500	1	07/06/2017 11:22	WG996080
1,2-Dichloroethane	0.211	<u>J</u>	0.108	0.500	1	07/06/2017 11:22	WG996080
1,1-Dichloroethene	0.251	<u>J</u>	0.188	0.500	1	07/06/2017 11:22	WG996080
cis-1,2-Dichloroethene	16.0		0.0933	0.500	1	07/06/2017 11:22	WG996080
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/06/2017 11:22	WG996080
1,2-Dichloropropane	0.762		0.190	0.500	1	07/06/2017 11:22	WG996080
1,1-Dichloropropene	U		0.128	0.500	1	07/06/2017 11:22	WG996080
1,3-Dichloropropane	U		0.147	1.00	1	07/06/2017 11:22	WG996080
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/06/2017 11:22	WG996080
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/06/2017 11:22	WG996080
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/06/2017 11:22	WG996080
2,2-Dichloropropane	U		0.0929	0.500	1	07/06/2017 11:22	WG996080
Di-isopropyl ether	U		0.0924	0.500	1	07/06/2017 11:22	WG996080
Ethylbenzene	U		0.158	0.500	1	07/06/2017 11:22	WG996080
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/06/2017 11:22	WG996080
2-Hexanone	U		0.757	5.00	1	07/06/2017 11:22	WG996080
n-Hexane	U		0.305	5.00	1	07/06/2017 11:22	WG996080
Iodomethane	U		0.377	10.0	1	07/06/2017 11:22	WG996080
Isopropylbenzene	U		0.126	0.500	1	07/06/2017 11:22	WG996080
p-Isopropyltoluene	U		0.138	0.500	1	07/06/2017 11:22	WG996080
2-Butanone (MEK)	U		1.28	5.00	1	07/06/2017 11:22	WG996080
Methylene Chloride	U		1.07	2.50	1	07/06/2017 11:22	WG996080
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/06/2017 11:22	WG996080
Methyl tert-butyl ether	U		0.102	0.500	1	07/06/2017 11:22	WG996080
Naphthalene	0.384	<u>J J0 J3</u>	0.174	2.50	1	07/06/2017 11:22	WG996080
n-Propylbenzene	U		0.162	0.500	1	07/06/2017 11:22	WG996080
Styrene	U		0.117	0.500	1	07/06/2017 11:22	WG996080
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/06/2017 11:22	WG996080
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/06/2017 11:22	WG996080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/28/17 10:50

L919285

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	0.418	J	0.164	0.500	1	07/06/2017 11:22	WG996080
Tetrachloroethene	18.0		0.199	0.500	1	07/06/2017 11:22	WG996080
Toluene	U		0.412	0.500	1	07/06/2017 11:22	WG996080
1,2,3-Trichlorobenzene	0.456	B J J0 J3	0.164	0.500	1	07/06/2017 11:22	WG996080
1,2,4-Trichlorobenzene	U	J3	0.355	0.500	1	07/06/2017 11:22	WG996080
1,1,1-Trichloroethane	0.278	J	0.0940	0.500	1	07/06/2017 11:22	WG996080
1,1,2-Trichloroethane	U		0.186	0.500	1	07/06/2017 11:22	WG996080
Trichloroethene	6.97		0.153	0.500	1	07/06/2017 11:22	WG996080
Trichlorofluoromethane	U		0.130	2.50	1	07/06/2017 11:22	WG996080
1,2,3-Trichloropropane	U		0.247	2.50	1	07/06/2017 11:22	WG996080
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/06/2017 11:22	WG996080
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/06/2017 11:22	WG996080
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/06/2017 11:22	WG996080
Vinyl acetate	U		0.645	5.00	1	07/06/2017 11:22	WG996080
Vinyl chloride	0.988		0.118	0.500	1	07/06/2017 11:22	WG996080
Xylenes, Total	U		0.316	1.50	1	07/06/2017 11:22	WG996080
(S) Toluene-d8	91.1			80.0-120		07/06/2017 11:22	WG996080
(S) Dibromofluoromethane	83.0			76.0-123		07/06/2017 11:22	WG996080
(S) 4-Bromofluorobenzene	90.6			80.0-120		07/06/2017 11:22	WG996080

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	360000		2710	20000	1	07/07/2017 11:12	WG996482

1 Cp

2 Tc

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13700		51.9	1000	1	07/01/2017 00:05	WG993864
Nitrate	U	Q	22.7	100	1	07/01/2017 00:05	WG993864
Sulfate	56100		77.4	5000	1	07/01/2017 00:05	WG993864

3 Ss

4 Cn

5 Sr

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	9090		102	1000	1	07/05/2017 20:02	WG995664

6 Qc

7 Gl

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5660		15.0	100	1	07/06/2017 00:22	WG995343
Manganese	1250		0.250	5.00	1	07/05/2017 21:57	WG995343

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	73.5		0.287	0.678	1	07/05/2017 11:25	WG993916
Ethane	U		0.296	1.29	1	07/05/2017 11:25	WG993916
Ethene	U		0.422	1.27	1	07/05/2017 11:25	WG993916

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.73	B J JO	1.05	25.0	1	07/06/2017 11:37	WG996080
Acrylonitrile	U		0.873	5.00	1	07/06/2017 11:37	WG996080
Benzene	U		0.0896	0.500	1	07/06/2017 11:37	WG996080
Bromobenzene	U		0.133	0.500	1	07/06/2017 11:37	WG996080
Bromodichloromethane	U		0.0800	0.500	1	07/06/2017 11:37	WG996080
Bromochloromethane	U		0.145	0.500	1	07/06/2017 11:37	WG996080
Bromoform	U		0.186	0.500	1	07/06/2017 11:37	WG996080
Bromomethane	U		0.157	2.50	1	07/06/2017 11:37	WG996080
n-Butylbenzene	U		0.143	0.500	1	07/06/2017 11:37	WG996080
sec-Butylbenzene	U		0.134	0.500	1	07/06/2017 11:37	WG996080
tert-Butylbenzene	U		0.183	0.500	1	07/06/2017 11:37	WG996080
Carbon disulfide	U		0.101	0.500	1	07/06/2017 11:37	WG996080
Carbon tetrachloride	U		0.159	0.500	1	07/06/2017 11:37	WG996080
Chlorobenzene	U		0.140	0.500	1	07/06/2017 11:37	WG996080
Chlorodibromomethane	U		0.128	0.500	1	07/06/2017 11:37	WG996080
Chloroethane	U		0.141	2.50	1	07/06/2017 11:37	WG996080
Chloroform	U		0.0860	0.500	1	07/06/2017 11:37	WG996080
Chloromethane	U		0.153	1.25	1	07/06/2017 11:37	WG996080
2-Chlorotoluene	U		0.111	0.500	1	07/06/2017 11:37	WG996080
4-Chlorotoluene	U		0.0972	0.500	1	07/06/2017 11:37	WG996080
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/06/2017 11:37	WG996080
1,2-Dibromoethane	U		0.193	0.500	1	07/06/2017 11:37	WG996080
Dibromomethane	U		0.117	0.500	1	07/06/2017 11:37	WG996080



Collected date/time: 06/28/17 12:45

L919285

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dichlorobenzene	U		0.101	0.500	1	07/06/2017 11:37	WG996080
1,3-Dichlorobenzene	U		0.130	0.500	1	07/06/2017 11:37	WG996080
1,4-Dichlorobenzene	U		0.121	0.500	1	07/06/2017 11:37	WG996080
Dichlorodifluoromethane	U		0.127	2.50	1	07/06/2017 11:37	WG996080
1,1-Dichloroethane	U		0.114	0.500	1	07/06/2017 11:37	WG996080
1,2-Dichloroethane	U		0.108	0.500	1	07/06/2017 11:37	WG996080
1,1-Dichloroethene	U		0.188	0.500	1	07/06/2017 11:37	WG996080
cis-1,2-Dichloroethene	5.99		0.0933	0.500	1	07/06/2017 11:37	WG996080
trans-1,2-Dichloroethene	0.167	J	0.152	0.500	1	07/06/2017 11:37	WG996080
1,2-Dichloropropane	U		0.190	0.500	1	07/06/2017 11:37	WG996080
1,1-Dichloropropene	U		0.128	0.500	1	07/06/2017 11:37	WG996080
1,3-Dichloropropane	U		0.147	1.00	1	07/06/2017 11:37	WG996080
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/06/2017 11:37	WG996080
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/06/2017 11:37	WG996080
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/06/2017 11:37	WG996080
2,2-Dichloropropane	U		0.0929	0.500	1	07/06/2017 11:37	WG996080
Di-isopropyl ether	U		0.0924	0.500	1	07/06/2017 11:37	WG996080
Ethylbenzene	U		0.158	0.500	1	07/06/2017 11:37	WG996080
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/06/2017 11:37	WG996080
2-Hexanone	U		0.757	5.00	1	07/06/2017 11:37	WG996080
n-Hexane	U		0.305	5.00	1	07/06/2017 11:37	WG996080
Iodomethane	U		0.377	10.0	1	07/06/2017 11:37	WG996080
Isopropylbenzene	U		0.126	0.500	1	07/06/2017 11:37	WG996080
p-Isopropyltoluene	U		0.138	0.500	1	07/06/2017 11:37	WG996080
2-Butanone (MEK)	U		1.28	5.00	1	07/06/2017 11:37	WG996080
Methylene Chloride	U		1.07	2.50	1	07/06/2017 11:37	WG996080
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/06/2017 11:37	WG996080
Methyl tert-butyl ether	U		0.102	0.500	1	07/06/2017 11:37	WG996080
Naphthalene	U	JO J3	0.174	2.50	1	07/06/2017 11:37	WG996080
n-Propylbenzene	U		0.162	0.500	1	07/06/2017 11:37	WG996080
Styrene	U		0.117	0.500	1	07/06/2017 11:37	WG996080
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/06/2017 11:37	WG996080
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/06/2017 11:37	WG996080
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/06/2017 11:37	WG996080
Tetrachloroethene	19.0		0.199	0.500	1	07/06/2017 11:37	WG996080
Toluene	0.726		0.412	0.500	1	07/06/2017 11:37	WG996080
1,2,3-Trichlorobenzene	0.165	B J JO J3	0.164	0.500	1	07/06/2017 11:37	WG996080
1,2,4-Trichlorobenzene	U	J3	0.355	0.500	1	07/06/2017 11:37	WG996080
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/06/2017 11:37	WG996080
1,1,2-Trichloroethane	U		0.186	0.500	1	07/06/2017 11:37	WG996080
Trichloroethene	12.4		0.153	0.500	1	07/06/2017 11:37	WG996080
Trichlorofluoromethane	U		0.130	2.50	1	07/06/2017 11:37	WG996080
1,2,3-Trichloropropane	U		0.247	2.50	1	07/06/2017 11:37	WG996080
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/06/2017 11:37	WG996080
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/06/2017 11:37	WG996080
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/06/2017 11:37	WG996080
Vinyl acetate	U		0.645	5.00	1	07/06/2017 11:37	WG996080
Vinyl chloride	U		0.118	0.500	1	07/06/2017 11:37	WG996080
Xylenes, Total	0.562	J	0.316	1.50	1	07/06/2017 11:37	WG996080
(S) Toluene-d8	92.2			80.0-120		07/06/2017 11:37	WG996080
(S) Dibromofluoromethane	83.0			76.0-123		07/06/2017 11:37	WG996080
(S) 4-Bromofluorobenzene	95.4			80.0-120		07/06/2017 11:37	WG996080

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 06/28/17 09:10

L919285

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/02/2017 23:28	WG995181
(S) a,a,a-Trifluorotoluene(FID)	92.1			77.0-122		07/02/2017 23:28	WG995181

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	07/06/2017 11:52	WG996080
Acrylonitrile	U		0.873	5.00	1	07/06/2017 11:52	WG996080
Benzene	U		0.0896	0.500	1	07/06/2017 11:52	WG996080
Bromobenzene	U		0.133	0.500	1	07/06/2017 11:52	WG996080
Bromodichloromethane	U		0.0800	0.500	1	07/06/2017 11:52	WG996080
Bromochloromethane	U		0.145	0.500	1	07/06/2017 11:52	WG996080
Bromoform	U		0.186	0.500	1	07/06/2017 11:52	WG996080
Bromomethane	U		0.157	2.50	1	07/06/2017 11:52	WG996080
n-Butylbenzene	U		0.143	0.500	1	07/06/2017 11:52	WG996080
sec-Butylbenzene	U		0.134	0.500	1	07/06/2017 11:52	WG996080
tert-Butylbenzene	U		0.183	0.500	1	07/06/2017 11:52	WG996080
Carbon disulfide	U		0.101	0.500	1	07/06/2017 11:52	WG996080
Carbon tetrachloride	U		0.159	0.500	1	07/06/2017 11:52	WG996080
Chlorobenzene	U		0.140	0.500	1	07/06/2017 11:52	WG996080
Chlorodibromomethane	U		0.128	0.500	1	07/06/2017 11:52	WG996080
Chloroethane	U		0.141	2.50	1	07/06/2017 11:52	WG996080
Chloroform	U		0.0860	0.500	1	07/06/2017 11:52	WG996080
Chloromethane	U		0.153	1.25	1	07/06/2017 11:52	WG996080
2-Chlorotoluene	U		0.111	0.500	1	07/06/2017 11:52	WG996080
4-Chlorotoluene	U		0.0972	0.500	1	07/06/2017 11:52	WG996080
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/06/2017 11:52	WG996080
1,2-Dibromoethane	U		0.193	0.500	1	07/06/2017 11:52	WG996080
Dibromomethane	U		0.117	0.500	1	07/06/2017 11:52	WG996080
1,2-Dichlorobenzene	U		0.101	0.500	1	07/06/2017 11:52	WG996080
1,3-Dichlorobenzene	U		0.130	0.500	1	07/06/2017 11:52	WG996080
1,4-Dichlorobenzene	U		0.121	0.500	1	07/06/2017 11:52	WG996080
Dichlorodifluoromethane	U		0.127	2.50	1	07/06/2017 11:52	WG996080
1,1-Dichloroethane	U		0.114	0.500	1	07/06/2017 11:52	WG996080
1,2-Dichloroethane	U		0.108	0.500	1	07/06/2017 11:52	WG996080
1,1-Dichloroethene	U		0.188	0.500	1	07/06/2017 11:52	WG996080
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/06/2017 11:52	WG996080
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/06/2017 11:52	WG996080
1,2-Dichloropropane	U		0.190	0.500	1	07/06/2017 11:52	WG996080
1,1-Dichloropropene	U		0.128	0.500	1	07/06/2017 11:52	WG996080
1,3-Dichloropropane	U		0.147	1.00	1	07/06/2017 11:52	WG996080
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/06/2017 11:52	WG996080
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/06/2017 11:52	WG996080
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/06/2017 11:52	WG996080
2,2-Dichloropropane	U		0.0929	0.500	1	07/06/2017 11:52	WG996080
Di-isopropyl ether	U		0.0924	0.500	1	07/06/2017 11:52	WG996080
Ethylbenzene	U		0.158	0.500	1	07/06/2017 11:52	WG996080
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/06/2017 11:52	WG996080
2-Hexanone	U		0.757	5.00	1	07/06/2017 11:52	WG996080
n-Hexane	U		0.305	5.00	1	07/06/2017 11:52	WG996080
Iodomethane	U		0.377	10.0	1	07/06/2017 11:52	WG996080
Isopropylbenzene	U		0.126	0.500	1	07/06/2017 11:52	WG996080
p-Isopropyltoluene	U		0.138	0.500	1	07/06/2017 11:52	WG996080
2-Butanone (MEK)	U		1.28	5.00	1	07/06/2017 11:52	WG996080
Methylene Chloride	U		1.07	2.50	1	07/06/2017 11:52	WG996080

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/28/17 09:10

L919285

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/06/2017 11:52	WG996080
Methyl tert-butyl ether	U		0.102	0.500	1	07/06/2017 11:52	WG996080
Naphthalene	U	<u>JO J3</u>	0.174	2.50	1	07/06/2017 11:52	WG996080
n-Propylbenzene	U		0.162	0.500	1	07/06/2017 11:52	WG996080
Styrene	U		0.117	0.500	1	07/06/2017 11:52	WG996080
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/06/2017 11:52	WG996080
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/06/2017 11:52	WG996080
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/06/2017 11:52	WG996080
Tetrachloroethene	U		0.199	0.500	1	07/06/2017 11:52	WG996080
Toluene	U		0.412	0.500	1	07/06/2017 11:52	WG996080
1,2,3-Trichlorobenzene	U	<u>JO J3</u>	0.164	0.500	1	07/06/2017 11:52	WG996080
1,2,4-Trichlorobenzene	U	<u>J3</u>	0.355	0.500	1	07/06/2017 11:52	WG996080
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/06/2017 11:52	WG996080
1,1,2-Trichloroethane	U		0.186	0.500	1	07/06/2017 11:52	WG996080
Trichloroethene	U		0.153	0.500	1	07/06/2017 11:52	WG996080
Trichlorofluoromethane	U		0.130	2.50	1	07/06/2017 11:52	WG996080
1,2,3-Trichloropropane	U		0.247	2.50	1	07/06/2017 11:52	WG996080
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/06/2017 11:52	WG996080
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/06/2017 11:52	WG996080
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/06/2017 11:52	WG996080
Vinyl acetate	U		0.645	5.00	1	07/06/2017 11:52	WG996080
Vinyl chloride	U		0.118	0.500	1	07/06/2017 11:52	WG996080
Xylenes, Total	U		0.316	1.50	1	07/06/2017 11:52	WG996080
(S) Toluene-d8	92.1			80.0-120		07/06/2017 11:52	WG996080
(S) Dibromofluoromethane	80.9			76.0-123		07/06/2017 11:52	WG996080
(S) 4-Bromofluorobenzene	95.1			80.0-120		07/06/2017 11:52	WG996080

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/02/2017 23:50	WG995181
(S) a,a,a-Trifluorotoluene(FID)	93.2			77.0-122		07/02/2017 23:50	WG995181

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.00	<u>B J JO</u>	1.05	25.0	1	07/06/2017 12:07	WG996080
Acrylonitrile	U		0.873	5.00	1	07/06/2017 12:07	WG996080
Benzene	U		0.0896	0.500	1	07/06/2017 12:07	WG996080
Bromobenzene	U		0.133	0.500	1	07/06/2017 12:07	WG996080
Bromodichloromethane	U		0.0800	0.500	1	07/06/2017 12:07	WG996080
Bromochloromethane	U		0.145	0.500	1	07/06/2017 12:07	WG996080
Bromoform	U		0.186	0.500	1	07/06/2017 12:07	WG996080
Bromomethane	U		0.157	2.50	1	07/06/2017 12:07	WG996080
n-Butylbenzene	U		0.143	0.500	1	07/06/2017 12:07	WG996080
sec-Butylbenzene	U		0.134	0.500	1	07/06/2017 12:07	WG996080
tert-Butylbenzene	U		0.183	0.500	1	07/06/2017 12:07	WG996080
Carbon disulfide	U		0.101	0.500	1	07/06/2017 12:07	WG996080
Carbon tetrachloride	U		0.159	0.500	1	07/06/2017 12:07	WG996080
Chlorobenzene	U		0.140	0.500	1	07/06/2017 12:07	WG996080
Chlorodibromomethane	U		0.128	0.500	1	07/06/2017 12:07	WG996080
Chloroethane	U		0.141	2.50	1	07/06/2017 12:07	WG996080
Chloroform	U		0.0860	0.500	1	07/06/2017 12:07	WG996080
Chloromethane	U		0.153	1.25	1	07/06/2017 12:07	WG996080
2-Chlorotoluene	U		0.111	0.500	1	07/06/2017 12:07	WG996080
4-Chlorotoluene	U		0.0972	0.500	1	07/06/2017 12:07	WG996080
1,2-Dibromo-3-Chloropropane	U		1.325	2.50	1	07/06/2017 12:07	WG996080
1,2-Dibromoethane	U		0.193	0.500	1	07/06/2017 12:07	WG996080
Dibromomethane	U		0.117	0.500	1	07/06/2017 12:07	WG996080
1,2-Dichlorobenzene	U		0.101	0.500	1	07/06/2017 12:07	WG996080
1,3-Dichlorobenzene	U		0.130	0.500	1	07/06/2017 12:07	WG996080
1,4-Dichlorobenzene	U		0.121	0.500	1	07/06/2017 12:07	WG996080
Dichlorodifluoromethane	U		0.127	2.50	1	07/06/2017 12:07	WG996080
1,1-Dichloroethane	U		0.114	0.500	1	07/06/2017 12:07	WG996080
1,2-Dichloroethane	U		0.108	0.500	1	07/06/2017 12:07	WG996080
1,1-Dichloroethene	U		0.188	0.500	1	07/06/2017 12:07	WG996080
cis-1,2-Dichloroethene	0.735		0.0933	0.500	1	07/06/2017 12:07	WG996080
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/06/2017 12:07	WG996080
1,2-Dichloropropane	U		0.190	0.500	1	07/06/2017 12:07	WG996080
1,1-Dichloropropene	U		0.128	0.500	1	07/06/2017 12:07	WG996080
1,3-Dichloropropane	U		0.147	1.00	1	07/06/2017 12:07	WG996080
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/06/2017 12:07	WG996080
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/06/2017 12:07	WG996080
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/06/2017 12:07	WG996080
2,2-Dichloropropane	U		0.0929	0.500	1	07/06/2017 12:07	WG996080
Di-isopropyl ether	U		0.0924	0.500	1	07/06/2017 12:07	WG996080
Ethylbenzene	U		0.158	0.500	1	07/06/2017 12:07	WG996080
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/06/2017 12:07	WG996080
2-Hexanone	U		0.757	5.00	1	07/06/2017 12:07	WG996080
n-Hexane	U		0.305	5.00	1	07/06/2017 12:07	WG996080
Iodomethane	U		0.377	10.0	1	07/06/2017 12:07	WG996080
Isopropylbenzene	U		0.126	0.500	1	07/06/2017 12:07	WG996080
p-Isopropyltoluene	U		0.138	0.500	1	07/06/2017 12:07	WG996080
2-Butanone (MEK)	U		1.28	5.00	1	07/06/2017 12:07	WG996080
Methylene Chloride	U		1.07	2.50	1	07/06/2017 12:07	WG996080

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 06/28/17 14:15

L919285

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/06/2017 12:07	WG996080
Methyl tert-butyl ether	U		0.102	0.500	1	07/06/2017 12:07	WG996080
Naphthalene	U	<u>JO J3</u>	0.174	2.50	1	07/06/2017 12:07	WG996080
n-Propylbenzene	U		0.162	0.500	1	07/06/2017 12:07	WG996080
Styrene	U		0.117	0.500	1	07/06/2017 12:07	WG996080
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/06/2017 12:07	WG996080
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/06/2017 12:07	WG996080
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/06/2017 12:07	WG996080
Tetrachloroethene	0.834		0.199	0.500	1	07/06/2017 12:07	WG996080
Toluene	U		0.412	0.500	1	07/06/2017 12:07	WG996080
1,2,3-Trichlorobenzene	U	<u>JO J3</u>	0.164	0.500	1	07/06/2017 12:07	WG996080
1,2,4-Trichlorobenzene	U	<u>J3</u>	0.355	0.500	1	07/06/2017 12:07	WG996080
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/06/2017 12:07	WG996080
1,1,2-Trichloroethane	U		0.186	0.500	1	07/06/2017 12:07	WG996080
Trichloroethene	0.582		0.153	0.500	1	07/06/2017 12:07	WG996080
Trichlorofluoromethane	U		0.130	2.50	1	07/06/2017 12:07	WG996080
1,2,3-Trichloropropane	U		0.247	2.50	1	07/06/2017 12:07	WG996080
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/06/2017 12:07	WG996080
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/06/2017 12:07	WG996080
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/06/2017 12:07	WG996080
Vinyl acetate	U		0.645	5.00	1	07/06/2017 12:07	WG996080
Vinyl chloride	0.424	<u>J</u>	0.118	0.500	1	07/06/2017 12:07	WG996080
Xylenes, Total	U		0.316	1.50	1	07/06/2017 12:07	WG996080
(S) Toluene-d8	92.8			80.0-120		07/06/2017 12:07	WG996080
(S) Dibromofluoromethane	80.7			76.0-123		07/06/2017 12:07	WG996080
(S) 4-Bromofluorobenzene	94.9			80.0-120		07/06/2017 12:07	WG996080

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Method Blank (MB)

(MB) R3231695-2 07/07/17 09:01			
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL
Alkalinity	ug/l	ug/l	ug/l
	2860	J	2710
			20000

L920001-02 Original Sample (OS) • Duplicate (DUP)

(OS) L920001-02 07/07/17 14:32 • (DUP) R3231695-6 07/07/17 14:41			
Analyte	Original Result	DUP Result	Dilution
Alkalinity	ug/l	ug/l	%
	92400	94000	1
			2.00
			DUP RPD Limits
			20

L919107-01 Original Sample (OS) • Duplicate (DUP)

(OS) L919107-01 07/07/17 09:22 • (DUP) R3231695-3 07/07/17 09:28			
Analyte	Original Result	DUP Result	Dilution
Alkalinity	ug/l	ug/l	%
	145000	143000	1
			2.00
			DUP RPD Limits
			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231695-4 07/07/17 10:44 • (LCSD) R3231695-5 07/07/17 12:10										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Alkalinity	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
	100000	107000	108000	107	108	85.0-115			1.00	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3230468-1 06/30/17 16:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L918857-01 Original Sample (OS) • Duplicate (DUP)

(OS) L918857-01 06/30/17 17:52 • (DUP) R3230468-4 06/30/17 18:07

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Chloride	3210	3230	1	1		15
Nitrate	751	747	1	1		15
Sulfate	7970	8000	1	0		15

L918863-04 Original Sample (OS) • Duplicate (DUP)

(OS) L918863-04 06/30/17 20:51 • (DUP) R3230468-6 06/30/17 21:06

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Chloride	2100	2100	1	0		15
Nitrate	163	177	1	8		15
Sulfate	6990	7030	1	1		15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3230468-2 06/30/17 16:29 • (LCSD) R3230468-3 06/30/17 16:44

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Chloride	40000	39900	40100	100	100	80-120			0	15
Nitrate	8000	8300	8320	104	104	80-120			0	15
Sulfate	40000	40600	40600	101	102	80-120			0	15

L918863-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L918863-01 06/30/17 18:52 • (MS) R3230468-5 06/30/17 19:36

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%	%	%	%
Chloride	50000	1030	51100	100	1	80-120	
Nitrate	5000	ND	4720	94	1	80-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

L918863-01 Original Sample (OS) • Matrix Spike (MS)

(OS) L918863-01 06/30/17 18:52 • (MS) R3230468-5 06/30/17 19:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Sulfate	50000	ND	50400	99	1	80-120	

L919285-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L919285-02 07/01/17 00:05 • (MS) R3230468-7 07/01/17 00:20 • (MSD) R3230468-8 07/01/17 00:35

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	13700	63100	63300	99	99	1	80-120			0	15
Nitrate	5000	U	4680	4770	94	95	1	80-120			2	15
Sulfate	50000	56100	103000	103000	95	95	1	80-120	E	E	0	15



Method Blank (MB)

(MB) R3231265-1	07/05/17 09:21																			
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL																	
Analyte	ug/l	ug/l	ug/l																	
TOC (Total Organic Carbon)	U		102																	1000

L919032-06 Original Sample (OS) • Duplicate (DUP)

(OS) L919032-06	07/05/17 11:05 • (DUP) R3231265-4	07/05/17 11:16																		
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits															
Analyte	ug/l	ug/l	%	%	%															
TOC (Total Organic Carbon)	ND	847	1	0																20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231265-5	07/05/17 12:04 • (LCSD) R3231265-6	07/05/17 15:11																		
Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits											
Analyte	ug/l	ug/l	%	%	%	%	%	%	%											
TOC (Total Organic Carbon)	75000	74700	70400	100	94	85-115		6	20											

L919032-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L919032-05	07/05/17 10:26 • (MS) R3231265-2	07/05/17 10:40 • (MSD) R3231265-3	07/05/17 10:54																	
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits									
Analyte	ug/l	ug/l	ug/l	%	%		%	%	%	%	%									
TOC (Total Organic Carbon)	50000	ND	48800	48600	98	97	1	80-120		0	20									

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R323167-7 07/05/17 20:47		MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l	U		0.250	ug/l 5.00
Manganese					

Method Blank (MB)

(MB) R323189-1 07/05/17 23:13		MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l	20.0	J	15.0	ug/l 100
Iron					

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R323167-8 07/05/17 20:50 • (LCSD) R323167-9 07/05/17 20:54		Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	50.0	54.9	54.6	110	109	80-120			1	20
Manganese											

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R323189-2 07/05/17 23:19 • (LCSD) R323189-3 07/05/17 23:24		Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	5000	5660	5690	113	114	80-120			0	20
Iron											

L919100-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L919100-01 07/05/17 20:57 • (MS) R323167-11 07/05/17 21:04 • (MSD) R323167-12 07/05/17 21:08		Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	50.0	2200	2250	2230	84	55	1	75-125			1	20
Manganese													

L919100-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L919100-01 07/05/17 23:30 • (MS) R323189-5 07/05/17 23:41 • (MSD) R323189-6 07/05/17 23:46		Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	5000	21800	25000	25800	64	79	1	75-125			3	20
Iron													

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6 Qc
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9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L919285-03.04](#)

Method Blank (MB)

(MB) R3231380-2	07/02/17 08:39																			
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL																
Gasoline Range Organics-NWTPH	U		31.6	100																
(S) a,a,a-Trifluorotoluene(FID)	92.6			77.0-122																

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231380-1	07/02/17 07:33	(LCSD) R3231380-3	07/02/17 20:33																	
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits										
Gasoline Range Organics-NWTPH	5500	5940	5790	108	105	72.0-134			2.54	20										
(S) a,a,a-Trifluorotoluene(FID)				102	106	77.0-122														

L919415-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L919415-03	07/03/17 17:31	(MS) R3231380-4	07/03/17 17:53	(MSD) R3231380-5	07/03/17 18:15															
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits								
Gasoline Range Organics-NWTPH	5500	386	1120	1010	13.3	11.3	1	23.0-159	16	16	10.6	20								
(S) a,a,a-Trifluorotoluene(FID)					93.2	87.5		77.0-122												

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1	2	3	4	5	6	7	8	9
CP	TC	SS	Cn	Sr	QC	GI	AI	Sc

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Method Blank (MB)

(MB) R3230960-1 07/05/17 10:29				
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L918982-01 Original Sample (OS) • Duplicate (DUP)

(OS) L918982-01 07/05/17 10:37 • (DUP) R3230960-2 07/05/17 11:13						
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L919503-01 Original Sample (OS) • Duplicate (DUP)

(OS) L919503-01 07/05/17 11:38 • (DUP) R3230960-3 07/05/17 12:02						
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	3250	3450	1	5.86	E	20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3230960-4 07/05/17 12:06 • (LCSD) R3230960-5 07/05/17 12:09										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	73.8	71.1	109	105	70.0-130			3.72	20
Ethane	129	140	125	109	97.2	70.0-130			11.1	20
Ethene	127	134	119	106	94.1	70.0-130			11.5	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L919285-01.02.03.04](#)

Method Blank (MB)

(MB) R3231831-3 07/06/17 10:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	2.83	J	1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Method Blank (MB)

(MB) R3231831-3 07/06/17 10:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.294		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	92.0			80.0-120
(S) Dibromofluoromethane	81.1			76.0-123
(S) 4-Bromofluorobenzene	93.7			80.0-120

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2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231831-1 07/06/17 09:14 • (LCSD) R3231831-2 07/06/17 09:29

Analyte	Spike Amount	ug/l	LCS Result	ug/l	LCSD Result	ug/l	LCS Rec.	%	LCSD Rec.	%	Rec. Limits	%	LCS Qualifier	LCSD Qualifier	RPD	%	RPD Limits	%	
Acetone	125	157	163	126	130	10.0-160	3.55	23											
Acrylonitrile	125	107	109	85.3	86.9	60.0-142	1.95	20											
Benzene	25.0	21.8	22.2	87.1	88.8	69.0-123	1.98	20											
Bromobenzene	25.0	25.9	26.6	104	106	79.0-120	2.55	20											
Bromodichloromethane	25.0	24.6	24.6	98.2	98.3	76.0-120	0.0200	20											
Bromochloromethane	25.0	22.1	22.1	88.5	88.3	76.0-122	0.190	20											
Bromoforn	25.0	25.9	26.2	103	105	67.0-132	1.32	20											
Bromomethane	25.0	24.4	22.7	97.4	90.7	18.0-160	7.13	20											
n-Butylbenzene	25.0	24.6	24.3	98.4	97.1	72.0-126	1.32	20											
sec-Butylbenzene	25.0	26.9	27.8	108	111	74.0-121	3.33	20											
tert-Butylbenzene	25.0	27.3	28.3	109	113	75.0-122	3.67	20											
Carbon disulfide	25.0	21.4	21.8	85.8	87.4	55.0-127	1.87	20											
Carbon tetrachloride	25.0	22.6	23.2	90.5	92.6	63.0-122	2.34	20											
Chlorobenzene	25.0	26.2	26.4	105	106	79.0-121	1.05	20											
Chlorodibromomethane	25.0	26.1	26.5	104	106	75.0-125	1.74	20											
Chloroethane	25.0	25.1	25.2	100	101	47.0-152	0.380	20											
Chloroform	25.0	22.2	22.6	88.7	90.3	72.0-121	1.86	20											
Chloromethane	25.0	21.6	21.5	86.5	86.1	48.0-139	0.450	20											
2-Chlorotoluene	25.0	26.1	27.0	104	108	74.0-122	3.58	20											
4-Chlorotoluene	25.0	25.9	26.6	104	107	79.0-120	2.83	20											
1,2-Dibromo-3-Chloropropane	25.0	22.2	24.3	88.8	97.4	64.0-127	9.22	20											
1,2-Dibromoethane	25.0	25.4	25.6	102	102	77.0-123	0.820	20											
Dibromomethane	25.0	23.8	24.2	95.2	97.0	78.0-120	1.85	20											
1,2-Dichlorobenzene	25.0	24.2	24.4	96.8	97.8	80.0-120	1.03	20											
1,3-Dichlorobenzene	25.0	25.9	26.6	104	106	72.0-123	2.52	20											
1,4-Dichlorobenzene	25.0	23.8	24.1	95.4	96.5	77.0-120	1.19	20											
Dichlorodifluoromethane	25.0	25.1	25.4	100	102	49.0-155	1.47	20											
1,1-Dichloroethane	25.0	21.3	22.0	85.2	88.0	70.0-126	3.24	20											
1,2-Dichloroethane	25.0	21.4	21.8	85.5	87.1	67.0-126	1.86	20											
1,1-Dichloroethene	25.0	21.8	22.2	87.1	88.7	64.0-129	1.76	20											
cis-1,2-Dichloroethene	25.0	22.0	22.4	87.8	89.5	73.0-120	1.94	20											
trans-1,2-Dichloroethene	25.0	22.4	23.0	89.8	92.0	71.0-121	2.41	20											
1,2-Dichloropropane	25.0	23.1	23.5	92.5	94.1	75.0-125	1.78	20											
1,1-Dichloropropene	25.0	22.2	23.1	88.9	92.5	71.0-129	3.99	20											
1,3-Dichloropropene	25.0	24.5	24.4	98.2	97.6	80.0-121	0.560	20											
cis-1,3-Dichloropropene	25.0	24.2	24.1	96.9	96.5	79.0-123	0.380	20											
trans-1,3-Dichloropropene	25.0	23.9	23.8	95.7	95.2	74.0-127	0.610	20											
trans-1,4-Dichloro-2-butene	25.0	24.8	25.6	99.1	103	55.0-134	3.43	20											
2,2-Dichloropropane	25.0	23.1	23.6	92.4	94.2	60.0-125	1.98	20											
Di-isopropyl ether	25.0	20.7	21.0	82.6	84.1	59.0-133	1.75	20											

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

ACCOUNT:

PES Environmental, Inc. - WA

PROJECT:

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07/10/17 16:20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3231831-1 07/06/17 09:14 • (LCSD) R3231831-2 07/06/17 09:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	25.8	26.4	103	105	77.0-120			2.06	20
Hexachloro-1,3-butadiene	25.0	21.4	25.3	85.5	101	64.0-131			16.7	20
2-Hexanone	125	138	134	110	107	58.0-147			3.17	20
n-Hexane	25.0	21.7	21.8	86.7	87.2	56.0-124			0.530	20
Iodomethane	125	115	117	92.3	93.6	57.0-140			1.43	20
Isopropylbenzene	25.0	26.9	27.8	108	111	75.0-120			3.33	20
p-Isopropyltoluene	25.0	27.0	27.8	108	111	74.0-126			3.00	20
2-Butanone (MEK)	125	106	103	84.6	82.3	37.0-158			2.75	20
Methylene Chloride	25.0	21.0	21.3	83.8	85.2	66.0-121			1.66	20
4-Methyl-2-pentanone (MIBK)	125	118	116	94.6	92.9	59.0-143			1.86	20
Methyl tert-butyl ether	25.0	21.4	21.7	85.5	86.7	64.0-123			1.39	20
Naphthalene	25.0	18.2	28.1	72.8	112	62.0-128		13	42.8	20
n-Propylbenzene	25.0	26.6	27.5	106	110	79.0-120			3.22	20
Styrene	25.0	26.1	26.6	104	107	78.0-124			1.91	20
1,1,1,2-Tetrachloroethane	25.0	26.3	26.7	105	107	75.0-122			1.51	20
1,1,2,2-Tetrachloroethane	25.0	25.7	26.3	103	105	71.0-122			2.52	20
1,1,2-Trichlorotrifluoroethane	25.0	22.7	22.7	90.8	90.7	61.0-136			0.150	20
Tetrachloroethene	25.0	26.7	26.9	107	108	70.0-127			1.04	20
Toluene	25.0	24.5	24.7	98.0	98.9	77.0-120			0.940	20
1,2,3-Trichlorobenzene	25.0	16.4	28.7	65.8	115	61.0-133		13	54.3	20
1,2,4-Trichlorobenzene	25.0	20.4	25.3	81.7	101	69.0-129		13	21.1	20
1,1,1-Trichloroethane	25.0	23.0	23.8	91.8	95.3	68.0-122			3.75	20
1,1,2-Trichloroethane	25.0	26.0	26.1	104	104	78.0-120			0.140	20
Trichloroethene	25.0	25.2	25.7	101	103	78.0-120			1.81	20
Trichlorofluoromethane	25.0	24.0	24.1	95.9	96.4	56.0-137			0.510	20
1,2,3-Trichloropropane	25.0	25.7	25.9	103	104	72.0-124			0.960	20
1,2,4-Trimethylbenzene	25.0	25.3	25.9	101	104	75.0-120			2.27	20
1,2,3-Trimethylbenzene	25.0	24.2	24.6	96.9	98.2	75.0-120			1.32	20
1,3,5-Trimethylbenzene	25.0	26.5	27.3	106	109	75.0-120			3.20	20
Vinyl acetate	125	111	111	89.2	89.1	46.0-160			0.120	20
Vinyl chloride	25.0	23.2	23.7	92.6	94.9	64.0-133			2.44	20
Xylenes, Total	75.0	76.7	78.5	102	105	77.0-120			2.32	20
(S) Toluene-d8				91.2	91.9	80.0-120				
(S) Dibromofluoromethane				80.8	82.0	76.0-123				
(S) 4-Bromofluorobenzene				92.2	94.2	80.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Abbreviations and Definitions

SDG	Sample Delivery Group.
MDL	Method Detection Limit.
RDL	Reported Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
U	Not detected at the Reporting Limit (or MDL where applicable).
RPD	Relative Percent Difference.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
Rec.	Recovery.

Qualifier Description

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
Q	Sample was prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.
V	The sample concentration is too high to evaluate accurate spike recoveries.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: bhaldeaman@pesenv.com

Report to:
Bill Haldeaman

Project Description: **American Linen Supply**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.002

City/State Collected: **SEATTLE, WA**
Lab Project #
PESENVSWA-141300102

Collected by (print):
SHANNON MCKERNAN

Site/Facility ID #
700 DEXTER AVE N SEATTLE

P.O. #

Rush? (Lab MUST be Notified)

Quote #

Immediately Packed on Ice N Y X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

*Alk,Cl,NO3,SO4 250mlHDPE-NoPres

NWTPHGX 40mlAmb HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

low level 8260C 40mlAmb-HCl

low level RSK175 40mlAmb-HCl

Analysis / Container / Preservative

Chain of Custody Page ___ of ___



YOUR LAB OF CHOICE

12065 Lebaron Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L #

1919285

A043

Account: **PESENVSWA**

Template: **T124201**

Prelogin: **P603202**

TSR: **110 - Brian Ford**

Shipped Via: **FedEx Ground**

Remarks: **Sample # (lab only)**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*Alk,Cl,NO3,SO4 250mlHDPE-NoPres	NWTPHGX 40mlAmb HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	low level 8260C 40mlAmb-HCl	low level RSK175 40mlAmb-HCl
MMW25-062817	GRAB	GW	26	6/28/17	09:10	6						
MMW20-062817	GRAB	GW	45	6/28/17	10:50	4						
MMW19-062817	↓	GW	40	↓	12:45	9						
		GW			14:15	6						
MMW25-062817	GRAB	GW	26	6/28/17	09:10	6						
R-MMW3-062817	↓	GW	15.5	↓	14:15	6						

Remarks: **NO3 nitrate has a 48 hour holding time**

- Matrix: SS - Soil AIR - Air F - Filter
- GW - Groundwater B - Bioassay
- MW - WasteWater
- DW - Drinking Water
- OT - Other

Samples returned via:
UPS FedEx Courier

Tracking #
Received by: (Signature)
Trip Blank Received: Yes No
HCL / Meoh TBR

Sample Receipt Checklist
COC Seal Present/Accurate: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature)
[Signature]

Date: **6/28/17**

Time: **1500**

Received by: (Signature)
[Signature]

Temp: **0.25** °C
Bottles Received: **25**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)
[Signature]

Date: **6-29-17** Time: **845**

Hold: Condition: NCF /

September 11, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L933267
Samples Received: 08/31/2017
Project Number: 1413.001.02.602
Description: American Linen Project
Site: 1413.001.02.602
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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B-205-40-W L933267-03	10	⁵Sr
MW-140-15 L933267-04	12	
MW-140-25 L933267-05	14	⁶Qc
MW-140-35 L933267-06	16	
B-205-65 L933267-07	18	⁷Gl
B-205-75 L933267-08	20	⁸Al
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B-205-10 L933267-01 Solid

Collected by Shannon McKernan
Collected date/time 08/30/17 09:30
Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017613	1	09/07/17 13:08	09/07/17 13:21	MLW
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016318	100	08/30/17 09:30	09/03/17 18:33	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	100	08/30/17 09:30	09/04/17 19:52	JHH

1 Cp

2 Tc

3 Ss

B-205-55 L933267-02 Solid

Collected by Shannon McKernan
Collected date/time 08/30/17 11:35
Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017613	1	09/07/17 13:08	09/07/17 13:21	MLW
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016318	1	08/30/17 11:35	09/03/17 18:57	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 11:35	09/04/17 20:13	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	25	08/30/17 11:35	09/07/17 15:14	BMB

4 Cn

5 Sr

6 Qc

7 Gl

B-205-40-W L933267-03 GW

Collected by Shannon McKernan
Collected date/time 08/30/17 10:30
Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016529	1	09/03/17 16:39	09/03/17 16:39	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016167	100	09/06/17 17:31	09/06/17 17:31	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016167	100	09/08/17 02:19	09/08/17 02:19	JHH

8 Al

9 Sc

MW-140-15 L933267-04 Solid

Collected by Shannon McKernan
Collected date/time 08/30/17 10:30
Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017613	1	09/07/17 13:08	09/07/17 13:21	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 10:30	09/04/17 20:34	JHH

MW-140-25 L933267-05 Solid

Collected by Shannon McKernan
Collected date/time 08/30/17 11:00
Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017613	1	09/07/17 13:08	09/07/17 13:21	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 11:00	09/04/17 20:54	JHH

MW-140-35 L933267-06 Solid

Collected by Shannon McKernan
Collected date/time 08/30/17 11:35
Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017613	1	09/07/17 13:08	09/07/17 13:21	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	200	08/30/17 11:35	09/07/17 15:40	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	25	08/30/17 11:35	09/04/17 21:15	JHH

B-205-65 L933267-07 Solid

Collected by Shannon McKernan
Collected date/time 08/30/17 12:20
Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017613	1	09/07/17 13:08	09/07/17 13:21	MLW
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016318	1	08/30/17 12:20	09/03/17 20:32	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 12:20	09/04/17 21:35	JHH



B-205-75 L933267-08 Solid

Collected by Shannon McKernan
 Collected date/time 08/30/17 15:00
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017613	1	09/07/17 13:08	09/07/17 13:21	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 15:00	09/04/17 21:56	JHH

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

B-904-50 L933267-09 Solid

Collected by Shannon McKernan
 Collected date/time 08/30/17 16:05
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017615	1	09/07/17 11:23	09/07/17 11:37	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 16:05	09/04/17 22:17	JHH

MW-140-45 L933267-10 Solid

Collected by Shannon McKernan
 Collected date/time 08/30/17 12:20
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017615	1	09/07/17 11:23	09/07/17 11:37	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 12:20	09/04/17 22:37	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	200	08/30/17 12:20	09/07/17 20:25	BMB

MW-140-55 L933267-11 Solid

Collected by Shannon McKernan
 Collected date/time 08/30/17 13:20
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017615	1	09/07/17 11:23	09/07/17 11:37	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 13:20	09/04/17 22:58	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	25	08/30/17 13:20	09/07/17 16:32	BMB

MW-140-65 L933267-12 Solid

Collected by Shannon McKernan
 Collected date/time 08/30/17 14:35
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017615	1	09/07/17 11:23	09/07/17 11:37	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	1	08/30/17 14:35	09/04/17 23:18	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	25.25	08/30/17 14:35	09/07/17 16:58	BMB

MW-140-75 L933267-13 Solid

Collected by Shannon McKernan
 Collected date/time 08/30/17 15:35
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017615	1	09/07/17 11:23	09/07/17 11:37	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016266	25	08/30/17 15:35	09/07/17 17:24	BMB

TRIP BLANK L933267-14 GW

Collected by Shannon McKernan
 Collected date/time 06/08/17 00:00
 Received date/time 08/31/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1015996	1	09/01/17 10:16	09/01/17 10:16	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1015996	1	09/08/17 11:14	09/08/17 11:14	JHH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	09/07/2017 13:21	WG1017613

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	274		4.09	12.1	100	09/03/2017 18:33	WG1016318
(S) a,a,a-Trifluorotoluene(FID)	96.4			77.0-120		09/03/2017 18:33	WG1016318

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		1.21	6.03	100	09/04/2017 19:52	WG1016266
Acrylonitrile	U		0.216	1.21	100	09/04/2017 19:52	WG1016266
Benzene	0.304		0.0326	0.121	100	09/04/2017 19:52	WG1016266
Bromobenzene	U		0.0343	0.121	100	09/04/2017 19:52	WG1016266
Bromodichloromethane	U	J3	0.0306	0.121	100	09/04/2017 19:52	WG1016266
Bromochloromethane	U		0.0470	0.603	100	09/04/2017 19:52	WG1016266
Bromoform	U		0.0511	0.121	100	09/04/2017 19:52	WG1016266
Bromomethane	U	J3	0.162	0.603	100	09/04/2017 19:52	WG1016266
n-Butylbenzene	0.973		0.0311	0.121	100	09/04/2017 19:52	WG1016266
sec-Butylbenzene	0.642		0.0242	0.121	100	09/04/2017 19:52	WG1016266
tert-Butylbenzene	U		0.0248	0.121	100	09/04/2017 19:52	WG1016266
Carbon disulfide	U	J6	0.0267	0.121	100	09/04/2017 19:52	WG1016266
Carbon tetrachloride	U		0.0396	0.121	100	09/04/2017 19:52	WG1016266
Chlorobenzene	U		0.0256	0.121	100	09/04/2017 19:52	WG1016266
Chlorodibromomethane	U		0.0450	0.121	100	09/04/2017 19:52	WG1016266
Chloroethane	U		0.114	0.603	100	09/04/2017 19:52	WG1016266
Chloroform	U		0.0276	0.603	100	09/04/2017 19:52	WG1016266
Chloromethane	U		0.0452	0.302	100	09/04/2017 19:52	WG1016266
2-Chlorotoluene	U		0.0363	0.121	100	09/04/2017 19:52	WG1016266
4-Chlorotoluene	U		0.0289	0.121	100	09/04/2017 19:52	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.127	0.603	100	09/04/2017 19:52	WG1016266
1,2-Dibromoethane	U		0.0414	0.121	100	09/04/2017 19:52	WG1016266
Dibromomethane	U	J3	0.0461	0.121	100	09/04/2017 19:52	WG1016266
1,2-Dichlorobenzene	U		0.0368	0.121	100	09/04/2017 19:52	WG1016266
1,3-Dichlorobenzene	U		0.0288	0.121	100	09/04/2017 19:52	WG1016266
1,4-Dichlorobenzene	U		0.0273	0.121	100	09/04/2017 19:52	WG1016266
Dichlorodifluoromethane	U		0.0860	0.603	100	09/04/2017 19:52	WG1016266
1,1-Dichloroethane	U		0.0240	0.121	100	09/04/2017 19:52	WG1016266
1,2-Dichloroethane	U	J3	0.0320	0.121	100	09/04/2017 19:52	WG1016266
1,1-Dichloroethene	U		0.0365	0.121	100	09/04/2017 19:52	WG1016266
cis-1,2-Dichloroethene	U		0.0283	0.121	100	09/04/2017 19:52	WG1016266
trans-1,2-Dichloroethene	U		0.0318	0.121	100	09/04/2017 19:52	WG1016266
1,2-Dichloropropane	U		0.0432	0.121	100	09/04/2017 19:52	WG1016266
1,1-Dichloropropene	U		0.0382	0.121	100	09/04/2017 19:52	WG1016266
1,3-Dichloropropane	U	J3	0.0250	0.121	100	09/04/2017 19:52	WG1016266
cis-1,3-Dichloropropene	U	J3	0.0316	0.121	100	09/04/2017 19:52	WG1016266
trans-1,3-Dichloropropene	U		0.0322	0.121	100	09/04/2017 19:52	WG1016266
trans-1,4-Dichloro-2-butene	U		0.0938	0.302	100	09/04/2017 19:52	WG1016266
2,2-Dichloropropane	U		0.0336	0.121	100	09/04/2017 19:52	WG1016266
Di-isopropyl ether	U		0.0299	0.121	100	09/04/2017 19:52	WG1016266
Ethylbenzene	4.74		0.0358	0.121	100	09/04/2017 19:52	WG1016266
Hexachloro-1,3-butadiene	U		0.0412	0.121	100	09/04/2017 19:52	WG1016266
2-Hexanone	U	J3	0.165	1.21	100	09/04/2017 19:52	WG1016266
n-Hexane	U	J6	0.0350	1.21	100	09/04/2017 19:52	WG1016266

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 09:30

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.305	1.21	100	09/04/2017 19:52	WG1016266
Isopropylbenzene	0.851		0.0293	0.121	100	09/04/2017 19:52	WG1016266
p-Isopropyltoluene	0.255		0.0246	0.121	100	09/04/2017 19:52	WG1016266
2-Butanone (MEK)	U		0.564	1.21	100	09/04/2017 19:52	WG1016266
Methylene Chloride	U		0.121	0.603	100	09/04/2017 19:52	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.227	1.21	100	09/04/2017 19:52	WG1016266
Methyl tert-butyl ether	U		0.0256	0.121	100	09/04/2017 19:52	WG1016266
Naphthalene	5.21		0.121	0.603	100	09/04/2017 19:52	WG1016266
n-Propylbenzene	2.84		0.0248	0.121	100	09/04/2017 19:52	WG1016266
Styrene	U	J3	0.0282	0.121	100	09/04/2017 19:52	WG1016266
1,1,1,2-Tetrachloroethane	U		0.0318	0.121	100	09/04/2017 19:52	WG1016266
1,1,2,2-Tetrachloroethane	U		0.0440	0.121	100	09/04/2017 19:52	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.0440	0.121	100	09/04/2017 19:52	WG1016266
Tetrachloroethene	U		0.0333	0.121	100	09/04/2017 19:52	WG1016266
Toluene	0.372	J	0.0523	0.603	100	09/04/2017 19:52	WG1016266
1,2,3-Trichlorobenzene	U		0.0369	0.121	100	09/04/2017 19:52	WG1016266
1,2,4-Trichlorobenzene	U		0.0468	0.121	100	09/04/2017 19:52	WG1016266
1,1,1-Trichloroethane	U		0.0345	0.121	100	09/04/2017 19:52	WG1016266
1,1,2-Trichloroethane	U		0.0334	0.121	100	09/04/2017 19:52	WG1016266
Trichloroethene	U		0.0336	0.121	100	09/04/2017 19:52	WG1016266
Trichlorofluoromethane	U		0.0461	0.603	100	09/04/2017 19:52	WG1016266
1,2,3-Trichloropropane	U		0.0894	0.302	100	09/04/2017 19:52	WG1016266
1,2,4-Trimethylbenzene	17.0	V	0.0254	0.121	100	09/04/2017 19:52	WG1016266
1,2,3-Trimethylbenzene	5.03		0.0346	0.121	100	09/04/2017 19:52	WG1016266
1,3,5-Trimethylbenzene	3.37		0.0321	0.121	100	09/04/2017 19:52	WG1016266
Vinyl acetate	U		0.288	1.21	100	09/04/2017 19:52	WG1016266
Vinyl chloride	U		0.0351	0.121	100	09/04/2017 19:52	WG1016266
Xylenes, Total	6.02		0.0842	0.362	100	09/04/2017 19:52	WG1016266
(S) Toluene-d8	106			80.0-120		09/04/2017 19:52	WG1016266
(S) Dibromofluoromethane	88.5			74.0-131		09/04/2017 19:52	WG1016266
(S) 4-Bromofluorobenzene	90.7			64.0-132		09/04/2017 19:52	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 11:35

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.6		1	09/07/2017 13:21	WG1017613

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0396	0.117	1	09/03/2017 18:57	WG1016318
(S) a,a,a-Trifluorotoluene(FID)	94.3			77.0-120		09/03/2017 18:57	WG1016318

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0117	0.0584	1	09/04/2017 20:13	WG1016266
Acrylonitrile	U		0.00209	0.0117	1	09/04/2017 20:13	WG1016266
Benzene	U		0.000315	0.00117	1	09/04/2017 20:13	WG1016266
Bromobenzene	U		0.000332	0.00117	1	09/04/2017 20:13	WG1016266
Bromodichloromethane	U		0.000297	0.00117	1	09/04/2017 20:13	WG1016266
Bromochloromethane	U		0.000456	0.00584	1	09/04/2017 20:13	WG1016266
Bromoform	U		0.000495	0.00117	1	09/04/2017 20:13	WG1016266
Bromomethane	U		0.00157	0.00584	1	09/04/2017 20:13	WG1016266
n-Butylbenzene	U		0.000301	0.00117	1	09/04/2017 20:13	WG1016266
sec-Butylbenzene	U		0.000235	0.00117	1	09/04/2017 20:13	WG1016266
tert-Butylbenzene	U		0.000241	0.00117	1	09/04/2017 20:13	WG1016266
Carbon disulfide	0.00157		0.000258	0.00117	1	09/04/2017 20:13	WG1016266
Carbon tetrachloride	U		0.000383	0.00117	1	09/04/2017 20:13	WG1016266
Chlorobenzene	U		0.000248	0.00117	1	09/04/2017 20:13	WG1016266
Chlorodibromomethane	U		0.000436	0.00117	1	09/04/2017 20:13	WG1016266
Chloroethane	U		0.00111	0.00584	1	09/04/2017 20:13	WG1016266
Chloroform	U		0.000268	0.00584	1	09/04/2017 20:13	WG1016266
Chloromethane	U		0.000438	0.00292	1	09/04/2017 20:13	WG1016266
2-Chlorotoluene	U		0.000352	0.00117	1	09/04/2017 20:13	WG1016266
4-Chlorotoluene	U		0.000280	0.00117	1	09/04/2017 20:13	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00123	0.00584	1	09/04/2017 20:13	WG1016266
1,2-Dibromoethane	U		0.000401	0.00117	1	09/04/2017 20:13	WG1016266
Dibromomethane	U		0.000446	0.00117	1	09/04/2017 20:13	WG1016266
1,2-Dichlorobenzene	U		0.000356	0.00117	1	09/04/2017 20:13	WG1016266
1,3-Dichlorobenzene	U		0.000279	0.00117	1	09/04/2017 20:13	WG1016266
1,4-Dichlorobenzene	U		0.000264	0.00117	1	09/04/2017 20:13	WG1016266
Dichlorodifluoromethane	U		0.000833	0.00584	1	09/04/2017 20:13	WG1016266
1,1-Dichloroethane	U		0.000232	0.00117	1	09/04/2017 20:13	WG1016266
1,2-Dichloroethane	U		0.000310	0.00117	1	09/04/2017 20:13	WG1016266
1,1-Dichloroethene	U		0.000354	0.00117	1	09/04/2017 20:13	WG1016266
cis-1,2-Dichloroethene	0.0155		0.000275	0.00117	1	09/04/2017 20:13	WG1016266
trans-1,2-Dichloroethene	U		0.000308	0.00117	1	09/04/2017 20:13	WG1016266
1,2-Dichloropropane	U		0.000418	0.00117	1	09/04/2017 20:13	WG1016266
1,1-Dichloropropene	U		0.000370	0.00117	1	09/04/2017 20:13	WG1016266
1,3-Dichloropropane	U		0.000242	0.00117	1	09/04/2017 20:13	WG1016266
cis-1,3-Dichloropropene	U		0.000306	0.00117	1	09/04/2017 20:13	WG1016266
trans-1,3-Dichloropropene	U		0.000312	0.00117	1	09/04/2017 20:13	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000909	0.00292	1	09/04/2017 20:13	WG1016266
2,2-Dichloropropane	U		0.000326	0.00117	1	09/04/2017 20:13	WG1016266
Di-isopropyl ether	U		0.000290	0.00117	1	09/04/2017 20:13	WG1016266
Ethylbenzene	U		0.000347	0.00117	1	09/04/2017 20:13	WG1016266
Hexachloro-1,3-butadiene	U		0.000400	0.00117	1	09/04/2017 20:13	WG1016266
2-Hexanone	U		0.00160	0.0117	1	09/04/2017 20:13	WG1016266
n-Hexane	0.00466	J	0.000339	0.0117	1	09/04/2017 20:13	WG1016266

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 11:35

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00296	0.0117	1	09/04/2017 20:13	WG1016266
Isopropylbenzene	U		0.000284	0.00117	1	09/04/2017 20:13	WG1016266
p-Isopropyltoluene	U		0.000238	0.00117	1	09/04/2017 20:13	WG1016266
2-Butanone (MEK)	U		0.00547	0.0117	1	09/04/2017 20:13	WG1016266
Methylene Chloride	U		0.00117	0.00584	1	09/04/2017 20:13	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00220	0.0117	1	09/04/2017 20:13	WG1016266
Methyl tert-butyl ether	U		0.000248	0.00117	1	09/04/2017 20:13	WG1016266
Naphthalene	U		0.00117	0.00584	1	09/04/2017 20:13	WG1016266
n-Propylbenzene	U		0.000241	0.00117	1	09/04/2017 20:13	WG1016266
Styrene	U		0.000273	0.00117	1	09/04/2017 20:13	WG1016266
1,1,1,2-Tetrachloroethane	U		0.000308	0.00117	1	09/04/2017 20:13	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000426	0.00117	1	09/04/2017 20:13	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000426	0.00117	1	09/04/2017 20:13	WG1016266
Tetrachloroethene	0.0625		0.000322	0.00117	1	09/04/2017 20:13	WG1016266
Toluene	U		0.000507	0.00584	1	09/04/2017 20:13	WG1016266
1,2,3-Trichlorobenzene	U		0.000358	0.00117	1	09/04/2017 20:13	WG1016266
1,2,4-Trichlorobenzene	U		0.000453	0.00117	1	09/04/2017 20:13	WG1016266
1,1,1-Trichloroethane	U		0.000334	0.00117	1	09/04/2017 20:13	WG1016266
1,1,2-Trichloroethane	U		0.000324	0.00117	1	09/04/2017 20:13	WG1016266
Trichloroethene	0.00923		0.000326	0.00117	1	09/04/2017 20:13	WG1016266
Trichlorofluoromethane	U		0.000446	0.00584	1	09/04/2017 20:13	WG1016266
1,2,3-Trichloropropane	U		0.000866	0.00292	1	09/04/2017 20:13	WG1016266
1,2,4-Trimethylbenzene	U		0.00617	0.0292	25	09/07/2017 15:14	WG1016266
1,2,3-Trimethylbenzene	U		0.000335	0.00117	1	09/04/2017 20:13	WG1016266
1,3,5-Trimethylbenzene	U		0.000311	0.00117	1	09/04/2017 20:13	WG1016266
Vinyl acetate	U		0.00279	0.0117	1	09/04/2017 20:13	WG1016266
Vinyl chloride	0.00562		0.000340	0.00117	1	09/04/2017 20:13	WG1016266
Xylenes, Total	U		0.000815	0.00350	1	09/04/2017 20:13	WG1016266
(S) Toluene-d8	91.1			80.0-120		09/07/2017 15:14	WG1016266
(S) Toluene-d8	102			80.0-120		09/04/2017 20:13	WG1016266
(S) Dibromofluoromethane	92.1			74.0-131		09/04/2017 20:13	WG1016266
(S) Dibromofluoromethane	101			74.0-131		09/07/2017 15:14	WG1016266
(S) 4-Bromofluorobenzene	87.5			64.0-132		09/04/2017 20:13	WG1016266
(S) 4-Bromofluorobenzene	99.8			64.0-132		09/07/2017 15:14	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L933267-02 WG1016266: No low level sodium bisulfite vials remaining for analysis.



Collected date/time: 08/30/17 10:30

L933267

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	6550		31.6	100	1	09/03/2017 16:39	WG1016529
(S) a,a,a-Trifluorotoluene(FID)	99.1			77.0-122		09/03/2017 16:39	WG1016529

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		105	2500	100	09/06/2017 17:31	WG1016167
Acrylonitrile	U		87.3	500	100	09/06/2017 17:31	WG1016167
Benzene	U		8.96	50.0	100	09/06/2017 17:31	WG1016167
Bromobenzene	U		13.3	50.0	100	09/06/2017 17:31	WG1016167
Bromodichloromethane	U		8.00	50.0	100	09/06/2017 17:31	WG1016167
Bromochloromethane	U		14.5	50.0	100	09/06/2017 17:31	WG1016167
Bromoform	U		18.6	50.0	100	09/06/2017 17:31	WG1016167
Bromomethane	U		15.7	250	100	09/08/2017 02:19	WG1016167
n-Butylbenzene	U		14.3	50.0	100	09/06/2017 17:31	WG1016167
sec-Butylbenzene	U		13.4	50.0	100	09/06/2017 17:31	WG1016167
tert-Butylbenzene	U		18.3	50.0	100	09/06/2017 17:31	WG1016167
Carbon disulfide	U		10.1	50.0	100	09/06/2017 17:31	WG1016167
Carbon tetrachloride	U		15.9	50.0	100	09/06/2017 17:31	WG1016167
Chlorobenzene	U		14.0	50.0	100	09/06/2017 17:31	WG1016167
Chlorodibromomethane	U		12.8	50.0	100	09/06/2017 17:31	WG1016167
Chloroethane	U		14.1	250	100	09/06/2017 17:31	WG1016167
Chloroform	U		8.60	50.0	100	09/06/2017 17:31	WG1016167
Chloromethane	U		15.3	125	100	09/06/2017 17:31	WG1016167
2-Chlorotoluene	U		11.1	50.0	100	09/06/2017 17:31	WG1016167
4-Chlorotoluene	U		9.72	50.0	100	09/06/2017 17:31	WG1016167
1,2-Dibromo-3-Chloropropane	U		32.5	250	100	09/06/2017 17:31	WG1016167
1,2-Dibromoethane	U		19.3	50.0	100	09/06/2017 17:31	WG1016167
Dibromomethane	U		11.7	50.0	100	09/06/2017 17:31	WG1016167
1,2-Dichlorobenzene	U		10.1	50.0	100	09/06/2017 17:31	WG1016167
1,3-Dichlorobenzene	U		13.0	50.0	100	09/06/2017 17:31	WG1016167
1,4-Dichlorobenzene	U		12.1	50.0	100	09/06/2017 17:31	WG1016167
Dichlorodifluoromethane	U		12.7	250	100	09/06/2017 17:31	WG1016167
1,1-Dichloroethane	U		11.4	50.0	100	09/06/2017 17:31	WG1016167
1,2-Dichloroethane	U		10.8	50.0	100	09/06/2017 17:31	WG1016167
1,1-Dichloroethene	U		18.8	50.0	100	09/06/2017 17:31	WG1016167
cis-1,2-Dichloroethene	5670		9.33	50.0	100	09/06/2017 17:31	WG1016167
trans-1,2-Dichloroethene	30.1	J	15.2	50.0	100	09/06/2017 17:31	WG1016167
1,2-Dichloropropane	U		19.0	50.0	100	09/06/2017 17:31	WG1016167
1,1-Dichloropropene	U		12.8	50.0	100	09/06/2017 17:31	WG1016167
1,3-Dichloropropane	U		14.7	100	100	09/06/2017 17:31	WG1016167
cis-1,3-Dichloropropene	U		9.76	50.0	100	09/06/2017 17:31	WG1016167
trans-1,3-Dichloropropene	U		22.2	50.0	100	09/06/2017 17:31	WG1016167
trans-1,4-Dichloro-2-butene	U		25.7	500	100	09/06/2017 17:31	WG1016167
2,2-Dichloropropane	U		9.29	50.0	100	09/06/2017 17:31	WG1016167
Di-isopropyl ether	U		9.24	50.0	100	09/06/2017 17:31	WG1016167
Ethylbenzene	U		15.8	50.0	100	09/06/2017 17:31	WG1016167
Hexachloro-1,3-butadiene	U		15.7	100	100	09/06/2017 17:31	WG1016167
2-Hexanone	U		75.7	500	100	09/06/2017 17:31	WG1016167
n-Hexane	U		30.5	500	100	09/06/2017 17:31	WG1016167
Iodomethane	U		37.7	1000	100	09/06/2017 17:31	WG1016167
Isopropylbenzene	U		12.6	50.0	100	09/06/2017 17:31	WG1016167
p-Isopropyltoluene	U		13.8	50.0	100	09/06/2017 17:31	WG1016167
2-Butanone (MEK)	U		128	500	100	09/06/2017 17:31	WG1016167



Collected date/time: 08/30/17 10:30

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		107	250	100	09/06/2017 17:31	WG1016167
4-Methyl-2-pentanone (MIBK)	U		82.3	500	100	09/06/2017 17:31	WG1016167
Methyl tert-butyl ether	U		10.2	50.0	100	09/06/2017 17:31	WG1016167
Naphthalene	U		17.4	250	100	09/06/2017 17:31	WG1016167
n-Propylbenzene	U		16.2	50.0	100	09/06/2017 17:31	WG1016167
Styrene	U		11.7	50.0	100	09/06/2017 17:31	WG1016167
1,1,1,2-Tetrachloroethane	U		12.0	50.0	100	09/06/2017 17:31	WG1016167
1,1,2,2-Tetrachloroethane	U		13.0	50.0	100	09/06/2017 17:31	WG1016167
1,1,2-Trichlorotrifluoroethane	U		16.4	50.0	100	09/06/2017 17:31	WG1016167
Tetrachloroethene	10300		19.9	50.0	100	09/06/2017 17:31	WG1016167
Toluene	55.6		41.2	50.0	100	09/06/2017 17:31	WG1016167
1,2,3-Trichlorobenzene	U		16.4	50.0	100	09/06/2017 17:31	WG1016167
1,2,4-Trichlorobenzene	U		35.5	50.0	100	09/06/2017 17:31	WG1016167
1,1,1-Trichloroethane	U		9.40	50.0	100	09/06/2017 17:31	WG1016167
1,1,2-Trichloroethane	U		18.6	50.0	100	09/06/2017 17:31	WG1016167
Trichloroethene	1130		15.3	50.0	100	09/06/2017 17:31	WG1016167
Trichlorofluoromethane	U		13.0	250	100	09/06/2017 17:31	WG1016167
1,2,3-Trichloropropane	U		24.7	250	100	09/06/2017 17:31	WG1016167
1,2,4-Trimethylbenzene	U		12.3	50.0	100	09/06/2017 17:31	WG1016167
1,2,3-Trimethylbenzene	U		7.39	50.0	100	09/06/2017 17:31	WG1016167
1,3,5-Trimethylbenzene	U		12.4	50.0	100	09/06/2017 17:31	WG1016167
Vinyl acetate	U		64.5	500	100	09/06/2017 17:31	WG1016167
Vinyl chloride	1010		11.8	50.0	100	09/06/2017 17:31	WG1016167
Xylenes, Total	U		31.6	150	100	09/06/2017 17:31	WG1016167
(S) Toluene-d8	105			80.0-120		09/06/2017 17:31	WG1016167
(S) Toluene-d8	102			80.0-120		09/08/2017 02:19	WG1016167
(S) Dibromofluoromethane	106			76.0-123		09/08/2017 02:19	WG1016167
(S) Dibromofluoromethane	112			76.0-123		09/06/2017 17:31	WG1016167
(S) 4-Bromofluorobenzene	105			80.0-120		09/08/2017 02:19	WG1016167
(S) 4-Bromofluorobenzene	113			80.0-120		09/06/2017 17:31	WG1016167

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.7		1	09/07/2017 13:21	WG1017613

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0114	0.0570	1	09/04/2017 20:34	WG1016266
Acrylonitrile	U		0.00204	0.0114	1	09/04/2017 20:34	WG1016266
Benzene	U		0.000308	0.00114	1	09/04/2017 20:34	WG1016266
Bromobenzene	U		0.000324	0.00114	1	09/04/2017 20:34	WG1016266
Bromodichloromethane	U		0.000290	0.00114	1	09/04/2017 20:34	WG1016266
Bromochloromethane	U		0.000445	0.00570	1	09/04/2017 20:34	WG1016266
Bromoform	U		0.000484	0.00114	1	09/04/2017 20:34	WG1016266
Bromomethane	U		0.00153	0.00570	1	09/04/2017 20:34	WG1016266
n-Butylbenzene	U		0.000294	0.00114	1	09/04/2017 20:34	WG1016266
sec-Butylbenzene	U		0.000229	0.00114	1	09/04/2017 20:34	WG1016266
tert-Butylbenzene	U		0.000235	0.00114	1	09/04/2017 20:34	WG1016266
Carbon disulfide	U		0.000252	0.00114	1	09/04/2017 20:34	WG1016266
Carbon tetrachloride	U		0.000374	0.00114	1	09/04/2017 20:34	WG1016266
Chlorobenzene	U		0.000242	0.00114	1	09/04/2017 20:34	WG1016266
Chlorodibromomethane	U		0.000425	0.00114	1	09/04/2017 20:34	WG1016266
Chloroethane	U		0.00108	0.00570	1	09/04/2017 20:34	WG1016266
Chloroform	U		0.000261	0.00570	1	09/04/2017 20:34	WG1016266
Chloromethane	U		0.000428	0.00285	1	09/04/2017 20:34	WG1016266
2-Chlorotoluene	U		0.000343	0.00114	1	09/04/2017 20:34	WG1016266
4-Chlorotoluene	U		0.000274	0.00114	1	09/04/2017 20:34	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00570	1	09/04/2017 20:34	WG1016266
1,2-Dibromoethane	U		0.000391	0.00114	1	09/04/2017 20:34	WG1016266
Dibromomethane	U		0.000436	0.00114	1	09/04/2017 20:34	WG1016266
1,2-Dichlorobenzene	U		0.000348	0.00114	1	09/04/2017 20:34	WG1016266
1,3-Dichlorobenzene	U		0.000273	0.00114	1	09/04/2017 20:34	WG1016266
1,4-Dichlorobenzene	U		0.000258	0.00114	1	09/04/2017 20:34	WG1016266
Dichlorodifluoromethane	U		0.000813	0.00570	1	09/04/2017 20:34	WG1016266
1,1-Dichloroethane	U		0.000227	0.00114	1	09/04/2017 20:34	WG1016266
1,2-Dichloroethane	U		0.000302	0.00114	1	09/04/2017 20:34	WG1016266
1,1-Dichloroethene	U		0.000346	0.00114	1	09/04/2017 20:34	WG1016266
cis-1,2-Dichloroethene	U		0.000268	0.00114	1	09/04/2017 20:34	WG1016266
trans-1,2-Dichloroethene	U		0.000301	0.00114	1	09/04/2017 20:34	WG1016266
1,2-Dichloropropane	U		0.000408	0.00114	1	09/04/2017 20:34	WG1016266
1,1-Dichloropropene	U		0.000361	0.00114	1	09/04/2017 20:34	WG1016266
1,3-Dichloropropane	U		0.000236	0.00114	1	09/04/2017 20:34	WG1016266
cis-1,3-Dichloropropene	U		0.000299	0.00114	1	09/04/2017 20:34	WG1016266
trans-1,3-Dichloropropene	U		0.000304	0.00114	1	09/04/2017 20:34	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000887	0.00285	1	09/04/2017 20:34	WG1016266
2,2-Dichloropropane	U		0.000318	0.00114	1	09/04/2017 20:34	WG1016266
Di-isopropyl ether	U		0.000283	0.00114	1	09/04/2017 20:34	WG1016266
Ethylbenzene	U		0.000339	0.00114	1	09/04/2017 20:34	WG1016266
Hexachloro-1,3-butadiene	U		0.000390	0.00114	1	09/04/2017 20:34	WG1016266
2-Hexanone	U		0.00156	0.0114	1	09/04/2017 20:34	WG1016266
n-Hexane	U		0.000331	0.0114	1	09/04/2017 20:34	WG1016266
Iodomethane	U		0.00289	0.0114	1	09/04/2017 20:34	WG1016266
Isopropylbenzene	U		0.000277	0.00114	1	09/04/2017 20:34	WG1016266
p-Isopropyltoluene	U		0.000233	0.00114	1	09/04/2017 20:34	WG1016266
2-Butanone (MEK)	U		0.00534	0.0114	1	09/04/2017 20:34	WG1016266
Methylene Chloride	U		0.00114	0.00570	1	09/04/2017 20:34	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	09/04/2017 20:34	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 10:30

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000242	0.00114	1	09/04/2017 20:34	WG1016266
Naphthalene	U		0.00114	0.00570	1	09/04/2017 20:34	WG1016266
n-Propylbenzene	U		0.000235	0.00114	1	09/04/2017 20:34	WG1016266
Styrene	U		0.000267	0.00114	1	09/04/2017 20:34	WG1016266
1,1,1,2-Tetrachloroethane	U		0.000301	0.00114	1	09/04/2017 20:34	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000416	0.00114	1	09/04/2017 20:34	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000416	0.00114	1	09/04/2017 20:34	WG1016266
Tetrachloroethene	U		0.000315	0.00114	1	09/04/2017 20:34	WG1016266
Toluene	U		0.000495	0.00570	1	09/04/2017 20:34	WG1016266
1,2,3-Trichlorobenzene	U		0.000349	0.00114	1	09/04/2017 20:34	WG1016266
1,2,4-Trichlorobenzene	U		0.000442	0.00114	1	09/04/2017 20:34	WG1016266
1,1,1-Trichloroethane	U		0.000326	0.00114	1	09/04/2017 20:34	WG1016266
1,1,2-Trichloroethane	U		0.000316	0.00114	1	09/04/2017 20:34	WG1016266
Trichloroethene	U		0.000318	0.00114	1	09/04/2017 20:34	WG1016266
Trichlorofluoromethane	U		0.000436	0.00570	1	09/04/2017 20:34	WG1016266
1,2,3-Trichloropropane	U		0.000845	0.00285	1	09/04/2017 20:34	WG1016266
1,2,4-Trimethylbenzene	U		0.000241	0.00114	1	09/04/2017 20:34	WG1016266
1,2,3-Trimethylbenzene	U		0.000327	0.00114	1	09/04/2017 20:34	WG1016266
1,3,5-Trimethylbenzene	U		0.000303	0.00114	1	09/04/2017 20:34	WG1016266
Vinyl acetate	U		0.00273	0.0114	1	09/04/2017 20:34	WG1016266
Vinyl chloride	U		0.000332	0.00114	1	09/04/2017 20:34	WG1016266
Xylenes, Total	U		0.000796	0.00342	1	09/04/2017 20:34	WG1016266
(S) Toluene-d8	101			80.0-120		09/04/2017 20:34	WG1016266
(S) Dibromofluoromethane	95.1			74.0-131		09/04/2017 20:34	WG1016266
(S) 4-Bromofluorobenzene	82.9			64.0-132		09/04/2017 20:34	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	09/07/2017 13:21	WG1017613

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0108	0.0542	1	09/04/2017 20:54	WG1016266
Acrylonitrile	U		0.00194	0.0108	1	09/04/2017 20:54	WG1016266
Benzene	U		0.000293	0.00108	1	09/04/2017 20:54	WG1016266
Bromobenzene	U		0.000308	0.00108	1	09/04/2017 20:54	WG1016266
Bromodichloromethane	U		0.000275	0.00108	1	09/04/2017 20:54	WG1016266
Bromochloromethane	U		0.000423	0.00542	1	09/04/2017 20:54	WG1016266
Bromoform	U		0.000460	0.00108	1	09/04/2017 20:54	WG1016266
Bromomethane	U		0.00145	0.00542	1	09/04/2017 20:54	WG1016266
n-Butylbenzene	U		0.000280	0.00108	1	09/04/2017 20:54	WG1016266
sec-Butylbenzene	U		0.000218	0.00108	1	09/04/2017 20:54	WG1016266
tert-Butylbenzene	U		0.000223	0.00108	1	09/04/2017 20:54	WG1016266
Carbon disulfide	0.000278	J	0.000240	0.00108	1	09/04/2017 20:54	WG1016266
Carbon tetrachloride	U		0.000356	0.00108	1	09/04/2017 20:54	WG1016266
Chlorobenzene	U		0.000230	0.00108	1	09/04/2017 20:54	WG1016266
Chlorodibromomethane	U		0.000405	0.00108	1	09/04/2017 20:54	WG1016266
Chloroethane	U		0.00103	0.00542	1	09/04/2017 20:54	WG1016266
Chloroform	U		0.000248	0.00542	1	09/04/2017 20:54	WG1016266
Chloromethane	U		0.000407	0.00271	1	09/04/2017 20:54	WG1016266
2-Chlorotoluene	U		0.000326	0.00108	1	09/04/2017 20:54	WG1016266
4-Chlorotoluene	U		0.000260	0.00108	1	09/04/2017 20:54	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00542	1	09/04/2017 20:54	WG1016266
1,2-Dibromoethane	U		0.000372	0.00108	1	09/04/2017 20:54	WG1016266
Dibromomethane	U		0.000414	0.00108	1	09/04/2017 20:54	WG1016266
1,2-Dichlorobenzene	U		0.000331	0.00108	1	09/04/2017 20:54	WG1016266
1,3-Dichlorobenzene	U		0.000259	0.00108	1	09/04/2017 20:54	WG1016266
1,4-Dichlorobenzene	U		0.000245	0.00108	1	09/04/2017 20:54	WG1016266
Dichlorodifluoromethane	U		0.000773	0.00542	1	09/04/2017 20:54	WG1016266
1,1-Dichloroethane	U		0.000216	0.00108	1	09/04/2017 20:54	WG1016266
1,2-Dichloroethane	U		0.000287	0.00108	1	09/04/2017 20:54	WG1016266
1,1-Dichloroethene	U		0.000329	0.00108	1	09/04/2017 20:54	WG1016266
cis-1,2-Dichloroethene	0.00199		0.000255	0.00108	1	09/04/2017 20:54	WG1016266
trans-1,2-Dichloroethene	U		0.000286	0.00108	1	09/04/2017 20:54	WG1016266
1,2-Dichloropropane	U		0.000388	0.00108	1	09/04/2017 20:54	WG1016266
1,1-Dichloropropene	U		0.000344	0.00108	1	09/04/2017 20:54	WG1016266
1,3-Dichloropropane	U		0.000224	0.00108	1	09/04/2017 20:54	WG1016266
cis-1,3-Dichloropropene	U		0.000284	0.00108	1	09/04/2017 20:54	WG1016266
trans-1,3-Dichloropropene	U		0.000290	0.00108	1	09/04/2017 20:54	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000844	0.00271	1	09/04/2017 20:54	WG1016266
2,2-Dichloropropane	U		0.000303	0.00108	1	09/04/2017 20:54	WG1016266
Di-isopropyl ether	U		0.000269	0.00108	1	09/04/2017 20:54	WG1016266
Ethylbenzene	U		0.000322	0.00108	1	09/04/2017 20:54	WG1016266
Hexachloro-1,3-butadiene	U		0.000371	0.00108	1	09/04/2017 20:54	WG1016266
2-Hexanone	U		0.00149	0.0108	1	09/04/2017 20:54	WG1016266
n-Hexane	0.000406	J	0.000314	0.0108	1	09/04/2017 20:54	WG1016266
Iodomethane	U		0.00274	0.0108	1	09/04/2017 20:54	WG1016266
Isopropylbenzene	U		0.000264	0.00108	1	09/04/2017 20:54	WG1016266
p-Isopropyltoluene	U		0.000221	0.00108	1	09/04/2017 20:54	WG1016266
2-Butanone (MEK)	U		0.00508	0.0108	1	09/04/2017 20:54	WG1016266
Methylene Chloride	U		0.00108	0.00542	1	09/04/2017 20:54	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0108	1	09/04/2017 20:54	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 11:00

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00108	1	09/04/2017 20:54	WG1016266
Naphthalene	U		0.00108	0.00542	1	09/04/2017 20:54	WG1016266
n-Propylbenzene	U		0.000223	0.00108	1	09/04/2017 20:54	WG1016266
Styrene	U		0.000254	0.00108	1	09/04/2017 20:54	WG1016266
1,1,1,2-Tetrachloroethane	U		0.000286	0.00108	1	09/04/2017 20:54	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000396	0.00108	1	09/04/2017 20:54	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00108	1	09/04/2017 20:54	WG1016266
Tetrachloroethene	0.147		0.000299	0.00108	1	09/04/2017 20:54	WG1016266
Toluene	U		0.000471	0.00542	1	09/04/2017 20:54	WG1016266
1,2,3-Trichlorobenzene	U		0.000332	0.00108	1	09/04/2017 20:54	WG1016266
1,2,4-Trichlorobenzene	U		0.000421	0.00108	1	09/04/2017 20:54	WG1016266
1,1,1-Trichloroethane	U		0.000310	0.00108	1	09/04/2017 20:54	WG1016266
1,1,2-Trichloroethane	U		0.000300	0.00108	1	09/04/2017 20:54	WG1016266
Trichloroethene	0.0107		0.000303	0.00108	1	09/04/2017 20:54	WG1016266
Trichlorofluoromethane	U		0.000414	0.00542	1	09/04/2017 20:54	WG1016266
1,2,3-Trichloropropane	U		0.000804	0.00271	1	09/04/2017 20:54	WG1016266
1,2,4-Trimethylbenzene	U		0.000229	0.00108	1	09/04/2017 20:54	WG1016266
1,2,3-Trimethylbenzene	U		0.000311	0.00108	1	09/04/2017 20:54	WG1016266
1,3,5-Trimethylbenzene	U		0.000288	0.00108	1	09/04/2017 20:54	WG1016266
Vinyl acetate	U		0.00259	0.0108	1	09/04/2017 20:54	WG1016266
Vinyl chloride	U		0.000316	0.00108	1	09/04/2017 20:54	WG1016266
Xylenes, Total	U		0.000757	0.00325	1	09/04/2017 20:54	WG1016266
(S) Toluene-d8	101			80.0-120		09/04/2017 20:54	WG1016266
(S) Dibromofluoromethane	91.8			74.0-131		09/04/2017 20:54	WG1016266
(S) 4-Bromofluorobenzene	88.1			64.0-132		09/04/2017 20:54	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.8		1	09/07/2017 13:21	WG1017613

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.291	1.46	25	09/04/2017 21:15	WG1016266
Acrylonitrile	U		0.0522	0.291	25	09/04/2017 21:15	WG1016266
Benzene	U		0.00786	0.0291	25	09/04/2017 21:15	WG1016266
Bromobenzene	U		0.00827	0.0291	25	09/04/2017 21:15	WG1016266
Bromodichloromethane	U		0.00740	0.0291	25	09/04/2017 21:15	WG1016266
Bromochloromethane	U		0.0114	0.146	25	09/04/2017 21:15	WG1016266
Bromoform	U		0.0124	0.0291	25	09/04/2017 21:15	WG1016266
Bromomethane	U		0.0390	0.146	25	09/04/2017 21:15	WG1016266
n-Butylbenzene	U		0.00752	0.0291	25	09/04/2017 21:15	WG1016266
sec-Butylbenzene	U		0.00585	0.0291	25	09/04/2017 21:15	WG1016266
tert-Butylbenzene	U		0.00600	0.0291	25	09/04/2017 21:15	WG1016266
Carbon disulfide	U		0.00643	0.0291	25	09/04/2017 21:15	WG1016266
Carbon tetrachloride	U		0.00955	0.0291	25	09/04/2017 21:15	WG1016266
Chlorobenzene	U		0.00618	0.0291	25	09/04/2017 21:15	WG1016266
Chlorodibromomethane	U		0.0109	0.0291	25	09/04/2017 21:15	WG1016266
Chloroethane	U		0.0275	0.146	25	09/04/2017 21:15	WG1016266
Chloroform	U		0.00666	0.146	25	09/04/2017 21:15	WG1016266
Chloromethane	U		0.0109	0.0728	25	09/04/2017 21:15	WG1016266
2-Chlorotoluene	U		0.00876	0.0291	25	09/04/2017 21:15	WG1016266
4-Chlorotoluene	U		0.00699	0.0291	25	09/04/2017 21:15	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.0305	0.146	25	09/04/2017 21:15	WG1016266
1,2-Dibromoethane	U		0.0100	0.0291	25	09/04/2017 21:15	WG1016266
Dibromomethane	U		0.0111	0.0291	25	09/04/2017 21:15	WG1016266
1,2-Dichlorobenzene	U		0.00888	0.0291	25	09/04/2017 21:15	WG1016266
1,3-Dichlorobenzene	U		0.00697	0.0291	25	09/04/2017 21:15	WG1016266
1,4-Dichlorobenzene	U		0.00658	0.0291	25	09/04/2017 21:15	WG1016266
Dichlorodifluoromethane	U		0.0207	0.146	25	09/04/2017 21:15	WG1016266
1,1-Dichloroethane	U		0.00580	0.0291	25	09/04/2017 21:15	WG1016266
1,2-Dichloroethane	U		0.00771	0.0291	25	09/04/2017 21:15	WG1016266
1,1-Dichloroethene	U		0.00883	0.0291	25	09/04/2017 21:15	WG1016266
cis-1,2-Dichloroethene	0.387		0.00685	0.0291	25	09/04/2017 21:15	WG1016266
trans-1,2-Dichloroethene	U		0.00769	0.0291	25	09/04/2017 21:15	WG1016266
1,2-Dichloropropane	U		0.0104	0.0291	25	09/04/2017 21:15	WG1016266
1,1-Dichloropropene	U		0.00923	0.0291	25	09/04/2017 21:15	WG1016266
1,3-Dichloropropane	U		0.00604	0.0291	25	09/04/2017 21:15	WG1016266
cis-1,3-Dichloropropene	U		0.00763	0.0291	25	09/04/2017 21:15	WG1016266
trans-1,3-Dichloropropene	U		0.00778	0.0291	25	09/04/2017 21:15	WG1016266
trans-1,4-Dichloro-2-butene	U		0.0226	0.0728	25	09/04/2017 21:15	WG1016266
2,2-Dichloropropane	U		0.00813	0.0291	25	09/04/2017 21:15	WG1016266
Di-isopropyl ether	U		0.00722	0.0291	25	09/04/2017 21:15	WG1016266
Ethylbenzene	U		0.00865	0.0291	25	09/04/2017 21:15	WG1016266
Hexachloro-1,3-butadiene	U		0.00996	0.0291	25	09/04/2017 21:15	WG1016266
2-Hexanone	U		0.0398	0.291	25	09/04/2017 21:15	WG1016266
n-Hexane	U		0.00845	0.291	25	09/04/2017 21:15	WG1016266
Iodomethane	U		0.0736	0.291	25	09/04/2017 21:15	WG1016266
Isopropylbenzene	U		0.00708	0.0291	25	09/04/2017 21:15	WG1016266
p-Isopropyltoluene	U		0.00594	0.0291	25	09/04/2017 21:15	WG1016266
2-Butanone (MEK)	U		0.136	0.291	25	09/04/2017 21:15	WG1016266
Methylene Chloride	U		0.0291	0.146	25	09/04/2017 21:15	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.0548	0.291	25	09/04/2017 21:15	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 11:35

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00618	0.0291	25	09/04/2017 21:15	WG1016266
Naphthalene	U		0.0291	0.146	25	09/04/2017 21:15	WG1016266
n-Propylbenzene	U		0.00600	0.0291	25	09/04/2017 21:15	WG1016266
Styrene	U		0.00682	0.0291	25	09/04/2017 21:15	WG1016266
1,1,1-Tetrachloroethane	U		0.00769	0.0291	25	09/04/2017 21:15	WG1016266
1,1,2,2-Tetrachloroethane	U		0.0106	0.0291	25	09/04/2017 21:15	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.0106	0.0291	25	09/04/2017 21:15	WG1016266
Tetrachloroethene	15.1		0.0643	0.233	200	09/07/2017 15:40	WG1016266
Toluene	U		0.0126	0.146	25	09/04/2017 21:15	WG1016266
1,2,3-Trichlorobenzene	U		0.00891	0.0291	25	09/04/2017 21:15	WG1016266
1,2,4-Trichlorobenzene	U		0.0113	0.0291	25	09/04/2017 21:15	WG1016266
1,1,1-Trichloroethane	U		0.00833	0.0291	25	09/04/2017 21:15	WG1016266
1,1,2-Trichloroethane	U		0.00806	0.0291	25	09/04/2017 21:15	WG1016266
Trichloroethene	0.629		0.00813	0.0291	25	09/04/2017 21:15	WG1016266
Trichlorofluoromethane	U		0.0111	0.146	25	09/04/2017 21:15	WG1016266
1,2,3-Trichloropropane	U		0.0216	0.0728	25	09/04/2017 21:15	WG1016266
1,2,4-Trimethylbenzene	U		0.00615	0.0291	25	09/04/2017 21:15	WG1016266
1,2,3-Trimethylbenzene	U		0.00837	0.0291	25	09/04/2017 21:15	WG1016266
1,3,5-Trimethylbenzene	U		0.00775	0.0291	25	09/04/2017 21:15	WG1016266
Vinyl acetate	U		0.0697	0.291	25	09/04/2017 21:15	WG1016266
Vinyl chloride	0.0107	J	0.00848	0.0291	25	09/04/2017 21:15	WG1016266
Xylenes, Total	U		0.0203	0.0874	25	09/04/2017 21:15	WG1016266
(S) Toluene-d8	105			80.0-120		09/04/2017 21:15	WG1016266
(S) Toluene-d8	102			80.0-120		09/07/2017 15:40	WG1016266
(S) Dibromofluoromethane	105			74.0-131		09/07/2017 15:40	WG1016266
(S) Dibromofluoromethane	86.9			74.0-131		09/04/2017 21:15	WG1016266
(S) 4-Bromofluorobenzene	99.8			64.0-132		09/07/2017 15:40	WG1016266
(S) 4-Bromofluorobenzene	86.6			64.0-132		09/04/2017 21:15	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 12:20

L933267

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.4		1	09/07/2017 13:21	WG1017613

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0359	0.106	1	09/03/2017 20:32	WG1016318
(S) a,a,a-Trifluorotoluene(FID)	94.2			77.0-120		09/03/2017 20:32	WG1016318

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0106	0.0529	1	09/04/2017 21:35	WG1016266
Acrylonitrile	U		0.00190	0.0106	1	09/04/2017 21:35	WG1016266
Benzene	U		0.000286	0.00106	1	09/04/2017 21:35	WG1016266
Bromobenzene	U		0.000301	0.00106	1	09/04/2017 21:35	WG1016266
Bromodichloromethane	U		0.000269	0.00106	1	09/04/2017 21:35	WG1016266
Bromochloromethane	U		0.000413	0.00529	1	09/04/2017 21:35	WG1016266
Bromoform	U		0.000449	0.00106	1	09/04/2017 21:35	WG1016266
Bromomethane	U		0.00142	0.00529	1	09/04/2017 21:35	WG1016266
n-Butylbenzene	U		0.000273	0.00106	1	09/04/2017 21:35	WG1016266
sec-Butylbenzene	U		0.000213	0.00106	1	09/04/2017 21:35	WG1016266
tert-Butylbenzene	U		0.000218	0.00106	1	09/04/2017 21:35	WG1016266
Carbon disulfide	0.00148		0.000234	0.00106	1	09/04/2017 21:35	WG1016266
Carbon tetrachloride	U		0.000347	0.00106	1	09/04/2017 21:35	WG1016266
Chlorobenzene	U		0.000224	0.00106	1	09/04/2017 21:35	WG1016266
Chlorodibromomethane	U		0.000395	0.00106	1	09/04/2017 21:35	WG1016266
Chloroethane	U		0.00100	0.00529	1	09/04/2017 21:35	WG1016266
Chloroform	U		0.000242	0.00529	1	09/04/2017 21:35	WG1016266
Chloromethane	U		0.000397	0.00265	1	09/04/2017 21:35	WG1016266
2-Chlorotoluene	U		0.000319	0.00106	1	09/04/2017 21:35	WG1016266
4-Chlorotoluene	U		0.000254	0.00106	1	09/04/2017 21:35	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00111	0.00529	1	09/04/2017 21:35	WG1016266
1,2-Dibromoethane	U		0.000363	0.00106	1	09/04/2017 21:35	WG1016266
Dibromomethane	U		0.000405	0.00106	1	09/04/2017 21:35	WG1016266
1,2-Dichlorobenzene	U		0.000323	0.00106	1	09/04/2017 21:35	WG1016266
1,3-Dichlorobenzene	U		0.000253	0.00106	1	09/04/2017 21:35	WG1016266
1,4-Dichlorobenzene	U		0.000239	0.00106	1	09/04/2017 21:35	WG1016266
Dichlorodifluoromethane	U		0.000755	0.00529	1	09/04/2017 21:35	WG1016266
1,1-Dichloroethane	U		0.000211	0.00106	1	09/04/2017 21:35	WG1016266
1,2-Dichloroethane	U		0.000281	0.00106	1	09/04/2017 21:35	WG1016266
1,1-Dichloroethene	U		0.000321	0.00106	1	09/04/2017 21:35	WG1016266
cis-1,2-Dichloroethene	0.00390		0.000249	0.00106	1	09/04/2017 21:35	WG1016266
trans-1,2-Dichloroethene	U		0.000280	0.00106	1	09/04/2017 21:35	WG1016266
1,2-Dichloropropane	U		0.000379	0.00106	1	09/04/2017 21:35	WG1016266
1,1-Dichloropropene	U		0.000336	0.00106	1	09/04/2017 21:35	WG1016266
1,3-Dichloropropane	U		0.000219	0.00106	1	09/04/2017 21:35	WG1016266
cis-1,3-Dichloropropene	U		0.000277	0.00106	1	09/04/2017 21:35	WG1016266
trans-1,3-Dichloropropene	U		0.000283	0.00106	1	09/04/2017 21:35	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000824	0.00265	1	09/04/2017 21:35	WG1016266
2,2-Dichloropropane	U		0.000295	0.00106	1	09/04/2017 21:35	WG1016266
Di-isopropyl ether	U		0.000263	0.00106	1	09/04/2017 21:35	WG1016266
Ethylbenzene	U		0.000314	0.00106	1	09/04/2017 21:35	WG1016266
Hexachloro-1,3-butadiene	U		0.000362	0.00106	1	09/04/2017 21:35	WG1016266
2-Hexanone	U		0.00145	0.0106	1	09/04/2017 21:35	WG1016266
n-Hexane	0.00583	J	0.000307	0.0106	1	09/04/2017 21:35	WG1016266

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 12:20

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00268	0.0106	1	09/04/2017 21:35	WG1016266
Isopropylbenzene	U		0.000257	0.00106	1	09/04/2017 21:35	WG1016266
p-Isopropyltoluene	U		0.000216	0.00106	1	09/04/2017 21:35	WG1016266
2-Butanone (MEK)	U		0.00496	0.0106	1	09/04/2017 21:35	WG1016266
Methylene Chloride	U		0.00106	0.00529	1	09/04/2017 21:35	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0106	1	09/04/2017 21:35	WG1016266
Methyl tert-butyl ether	U		0.000224	0.00106	1	09/04/2017 21:35	WG1016266
Naphthalene	U		0.00106	0.00529	1	09/04/2017 21:35	WG1016266
n-Propylbenzene	U		0.000218	0.00106	1	09/04/2017 21:35	WG1016266
Styrene	U		0.000248	0.00106	1	09/04/2017 21:35	WG1016266
1,1,1,2-Tetrachloroethane	U		0.000280	0.00106	1	09/04/2017 21:35	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000387	0.00106	1	09/04/2017 21:35	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000387	0.00106	1	09/04/2017 21:35	WG1016266
Tetrachloroethene	0.0296		0.000292	0.00106	1	09/04/2017 21:35	WG1016266
Toluene	U		0.000460	0.00529	1	09/04/2017 21:35	WG1016266
1,2,3-Trichlorobenzene	U		0.000324	0.00106	1	09/04/2017 21:35	WG1016266
1,2,4-Trichlorobenzene	U		0.000411	0.00106	1	09/04/2017 21:35	WG1016266
1,1,1-Trichloroethane	U		0.000303	0.00106	1	09/04/2017 21:35	WG1016266
1,1,2-Trichloroethane	U		0.000293	0.00106	1	09/04/2017 21:35	WG1016266
Trichloroethene	0.00582		0.000295	0.00106	1	09/04/2017 21:35	WG1016266
Trichlorofluoromethane	U		0.000405	0.00529	1	09/04/2017 21:35	WG1016266
1,2,3-Trichloropropane	U		0.000785	0.00265	1	09/04/2017 21:35	WG1016266
1,2,4-Trimethylbenzene	U		0.000223	0.00106	1	09/04/2017 21:35	WG1016266
1,2,3-Trimethylbenzene	U		0.000304	0.00106	1	09/04/2017 21:35	WG1016266
1,3,5-Trimethylbenzene	U		0.000282	0.00106	1	09/04/2017 21:35	WG1016266
Vinyl acetate	U		0.00253	0.0106	1	09/04/2017 21:35	WG1016266
Vinyl chloride	0.000378	J	0.000308	0.00106	1	09/04/2017 21:35	WG1016266
Xylenes, Total	U		0.000739	0.00318	1	09/04/2017 21:35	WG1016266
(S) Toluene-d8	104			80.0-120		09/04/2017 21:35	WG1016266
(S) Dibromofluoromethane	92.3			74.0-131		09/04/2017 21:35	WG1016266
(S) 4-Bromofluorobenzene	87.1			64.0-132		09/04/2017 21:35	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 15:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	09/07/2017 13:21	WG1017613

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0107	0.0535	1	09/04/2017 21:56	WG1016266
Acrylonitrile	U		0.00192	0.0107	1	09/04/2017 21:56	WG1016266
Benzene	U		0.000289	0.00107	1	09/04/2017 21:56	WG1016266
Bromobenzene	U		0.000304	0.00107	1	09/04/2017 21:56	WG1016266
Bromodichloromethane	U		0.000272	0.00107	1	09/04/2017 21:56	WG1016266
Bromochloromethane	U		0.000418	0.00535	1	09/04/2017 21:56	WG1016266
Bromoform	U		0.000454	0.00107	1	09/04/2017 21:56	WG1016266
Bromomethane	U		0.00144	0.00535	1	09/04/2017 21:56	WG1016266
n-Butylbenzene	U		0.000276	0.00107	1	09/04/2017 21:56	WG1016266
sec-Butylbenzene	U		0.000215	0.00107	1	09/04/2017 21:56	WG1016266
tert-Butylbenzene	U		0.000221	0.00107	1	09/04/2017 21:56	WG1016266
Carbon disulfide	0.00121		0.000237	0.00107	1	09/04/2017 21:56	WG1016266
Carbon tetrachloride	U		0.000351	0.00107	1	09/04/2017 21:56	WG1016266
Chlorobenzene	U		0.000227	0.00107	1	09/04/2017 21:56	WG1016266
Chlorodibromomethane	U		0.000399	0.00107	1	09/04/2017 21:56	WG1016266
Chloroethane	U		0.00101	0.00535	1	09/04/2017 21:56	WG1016266
Chloroform	U		0.000245	0.00535	1	09/04/2017 21:56	WG1016266
Chloromethane	U		0.000402	0.00268	1	09/04/2017 21:56	WG1016266
2-Chlorotoluene	U		0.000322	0.00107	1	09/04/2017 21:56	WG1016266
4-Chlorotoluene	U		0.000257	0.00107	1	09/04/2017 21:56	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00535	1	09/04/2017 21:56	WG1016266
1,2-Dibromoethane	U		0.000367	0.00107	1	09/04/2017 21:56	WG1016266
Dibromomethane	U		0.000409	0.00107	1	09/04/2017 21:56	WG1016266
1,2-Dichlorobenzene	U		0.000327	0.00107	1	09/04/2017 21:56	WG1016266
1,3-Dichlorobenzene	U		0.000256	0.00107	1	09/04/2017 21:56	WG1016266
1,4-Dichlorobenzene	U		0.000242	0.00107	1	09/04/2017 21:56	WG1016266
Dichlorodifluoromethane	U		0.000764	0.00535	1	09/04/2017 21:56	WG1016266
1,1-Dichloroethane	U		0.000213	0.00107	1	09/04/2017 21:56	WG1016266
1,2-Dichloroethane	U		0.000284	0.00107	1	09/04/2017 21:56	WG1016266
1,1-Dichloroethene	U		0.000324	0.00107	1	09/04/2017 21:56	WG1016266
cis-1,2-Dichloroethene	0.000585	J	0.000252	0.00107	1	09/04/2017 21:56	WG1016266
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	09/04/2017 21:56	WG1016266
1,2-Dichloropropane	U		0.000383	0.00107	1	09/04/2017 21:56	WG1016266
1,1-Dichloropropene	U		0.000339	0.00107	1	09/04/2017 21:56	WG1016266
1,3-Dichloropropane	U		0.000222	0.00107	1	09/04/2017 21:56	WG1016266
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	09/04/2017 21:56	WG1016266
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	09/04/2017 21:56	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000833	0.00268	1	09/04/2017 21:56	WG1016266
2,2-Dichloropropane	U		0.000299	0.00107	1	09/04/2017 21:56	WG1016266
Di-isopropyl ether	U		0.000266	0.00107	1	09/04/2017 21:56	WG1016266
Ethylbenzene	U		0.000318	0.00107	1	09/04/2017 21:56	WG1016266
Hexachloro-1,3-butadiene	U		0.000366	0.00107	1	09/04/2017 21:56	WG1016266
2-Hexanone	U		0.00147	0.0107	1	09/04/2017 21:56	WG1016266
n-Hexane	0.00452	J	0.000311	0.0107	1	09/04/2017 21:56	WG1016266
Iodomethane	U		0.00271	0.0107	1	09/04/2017 21:56	WG1016266
Isopropylbenzene	U		0.000260	0.00107	1	09/04/2017 21:56	WG1016266
p-Isopropyltoluene	U		0.000218	0.00107	1	09/04/2017 21:56	WG1016266
2-Butanone (MEK)	U		0.00501	0.0107	1	09/04/2017 21:56	WG1016266
Methylene Chloride	U		0.00107	0.00535	1	09/04/2017 21:56	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	09/04/2017 21:56	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 15:00

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/04/2017 21:56	WG1016266
Naphthalene	U		0.00107	0.00535	1	09/04/2017 21:56	WG1016266
n-Propylbenzene	U		0.000221	0.00107	1	09/04/2017 21:56	WG1016266
Styrene	U		0.000251	0.00107	1	09/04/2017 21:56	WG1016266
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	09/04/2017 21:56	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	09/04/2017 21:56	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	09/04/2017 21:56	WG1016266
Tetrachloroethene	0.00308		0.000296	0.00107	1	09/04/2017 21:56	WG1016266
Toluene	U		0.000465	0.00535	1	09/04/2017 21:56	WG1016266
1,2,3-Trichlorobenzene	U		0.000328	0.00107	1	09/04/2017 21:56	WG1016266
1,2,4-Trichlorobenzene	U		0.000416	0.00107	1	09/04/2017 21:56	WG1016266
1,1,1-Trichloroethane	U		0.000306	0.00107	1	09/04/2017 21:56	WG1016266
1,1,2-Trichloroethane	U		0.000297	0.00107	1	09/04/2017 21:56	WG1016266
Trichloroethene	0.000399	J	0.000299	0.00107	1	09/04/2017 21:56	WG1016266
Trichlorofluoromethane	U		0.000409	0.00535	1	09/04/2017 21:56	WG1016266
1,2,3-Trichloropropane	U		0.000794	0.00268	1	09/04/2017 21:56	WG1016266
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	09/04/2017 21:56	WG1016266
1,2,3-Trimethylbenzene	U		0.000307	0.00107	1	09/04/2017 21:56	WG1016266
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	09/04/2017 21:56	WG1016266
Vinyl acetate	U		0.00256	0.0107	1	09/04/2017 21:56	WG1016266
Vinyl chloride	U		0.000312	0.00107	1	09/04/2017 21:56	WG1016266
Xylenes, Total	U		0.000748	0.00321	1	09/04/2017 21:56	WG1016266
(S) Toluene-d8	102			80.0-120		09/04/2017 21:56	WG1016266
(S) Dibromofluoromethane	93.2			74.0-131		09/04/2017 21:56	WG1016266
(S) 4-Bromofluorobenzene	87.6			64.0-132		09/04/2017 21:56	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	09/07/2017 11:37	WG1017615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0107	0.0536	1	09/04/2017 22:17	WG1016266
Acrylonitrile	U		0.00192	0.0107	1	09/04/2017 22:17	WG1016266
Benzene	U		0.000290	0.00107	1	09/04/2017 22:17	WG1016266
Bromobenzene	U		0.000305	0.00107	1	09/04/2017 22:17	WG1016266
Bromodichloromethane	U		0.000272	0.00107	1	09/04/2017 22:17	WG1016266
Bromochloromethane	U		0.000418	0.00536	1	09/04/2017 22:17	WG1016266
Bromoform	U		0.000455	0.00107	1	09/04/2017 22:17	WG1016266
Bromomethane	U		0.00144	0.00536	1	09/04/2017 22:17	WG1016266
n-Butylbenzene	U		0.000277	0.00107	1	09/04/2017 22:17	WG1016266
sec-Butylbenzene	U		0.000216	0.00107	1	09/04/2017 22:17	WG1016266
tert-Butylbenzene	U		0.000221	0.00107	1	09/04/2017 22:17	WG1016266
Carbon disulfide	0.000877	J	0.000237	0.00107	1	09/04/2017 22:17	WG1016266
Carbon tetrachloride	U		0.000352	0.00107	1	09/04/2017 22:17	WG1016266
Chlorobenzene	U		0.000227	0.00107	1	09/04/2017 22:17	WG1016266
Chlorodibromomethane	U		0.000400	0.00107	1	09/04/2017 22:17	WG1016266
Chloroethane	U		0.00101	0.00536	1	09/04/2017 22:17	WG1016266
Chloroform	U		0.000246	0.00536	1	09/04/2017 22:17	WG1016266
Chloromethane	U		0.000402	0.00268	1	09/04/2017 22:17	WG1016266
2-Chlorotoluene	U		0.000323	0.00107	1	09/04/2017 22:17	WG1016266
4-Chlorotoluene	U		0.000257	0.00107	1	09/04/2017 22:17	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00536	1	09/04/2017 22:17	WG1016266
1,2-Dibromoethane	U		0.000368	0.00107	1	09/04/2017 22:17	WG1016266
Dibromomethane	U		0.000410	0.00107	1	09/04/2017 22:17	WG1016266
1,2-Dichlorobenzene	U		0.000327	0.00107	1	09/04/2017 22:17	WG1016266
1,3-Dichlorobenzene	U		0.000256	0.00107	1	09/04/2017 22:17	WG1016266
1,4-Dichlorobenzene	U		0.000242	0.00107	1	09/04/2017 22:17	WG1016266
Dichlorodifluoromethane	U		0.000765	0.00536	1	09/04/2017 22:17	WG1016266
1,1-Dichloroethane	U		0.000213	0.00107	1	09/04/2017 22:17	WG1016266
1,2-Dichloroethane	U		0.000284	0.00107	1	09/04/2017 22:17	WG1016266
1,1-Dichloroethene	U		0.000325	0.00107	1	09/04/2017 22:17	WG1016266
cis-1,2-Dichloroethene	0.00170		0.000252	0.00107	1	09/04/2017 22:17	WG1016266
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	09/04/2017 22:17	WG1016266
1,2-Dichloropropane	U		0.000384	0.00107	1	09/04/2017 22:17	WG1016266
1,1-Dichloropropene	U		0.000340	0.00107	1	09/04/2017 22:17	WG1016266
1,3-Dichloropropane	U		0.000222	0.00107	1	09/04/2017 22:17	WG1016266
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	09/04/2017 22:17	WG1016266
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	09/04/2017 22:17	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000835	0.00268	1	09/04/2017 22:17	WG1016266
2,2-Dichloropropane	U		0.000299	0.00107	1	09/04/2017 22:17	WG1016266
Di-isopropyl ether	U		0.000266	0.00107	1	09/04/2017 22:17	WG1016266
Ethylbenzene	U		0.000319	0.00107	1	09/04/2017 22:17	WG1016266
Hexachloro-1,3-butadiene	U		0.000367	0.00107	1	09/04/2017 22:17	WG1016266
2-Hexanone	U		0.00147	0.0107	1	09/04/2017 22:17	WG1016266
n-Hexane	0.00551	J	0.000311	0.0107	1	09/04/2017 22:17	WG1016266
Iodomethane	U		0.00271	0.0107	1	09/04/2017 22:17	WG1016266
Isopropylbenzene	U		0.000261	0.00107	1	09/04/2017 22:17	WG1016266
p-Isopropyltoluene	U		0.000219	0.00107	1	09/04/2017 22:17	WG1016266
2-Butanone (MEK)	U		0.00502	0.0107	1	09/04/2017 22:17	WG1016266
Methylene Chloride	U		0.00107	0.00536	1	09/04/2017 22:17	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0107	1	09/04/2017 22:17	WG1016266

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 16:05

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/04/2017 22:17	WG1016266
Naphthalene	U		0.00107	0.00536	1	09/04/2017 22:17	WG1016266
n-Propylbenzene	U		0.000221	0.00107	1	09/04/2017 22:17	WG1016266
Styrene	U		0.000251	0.00107	1	09/04/2017 22:17	WG1016266
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	09/04/2017 22:17	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000392	0.00107	1	09/04/2017 22:17	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00107	1	09/04/2017 22:17	WG1016266
Tetrachloroethene	0.00954		0.000296	0.00107	1	09/04/2017 22:17	WG1016266
Toluene	U		0.000466	0.00536	1	09/04/2017 22:17	WG1016266
1,2,3-Trichlorobenzene	U		0.000328	0.00107	1	09/04/2017 22:17	WG1016266
1,2,4-Trichlorobenzene	U		0.000416	0.00107	1	09/04/2017 22:17	WG1016266
1,1,1-Trichloroethane	U		0.000307	0.00107	1	09/04/2017 22:17	WG1016266
1,1,2-Trichloroethane	U		0.000297	0.00107	1	09/04/2017 22:17	WG1016266
Trichloroethene	0.00234		0.000299	0.00107	1	09/04/2017 22:17	WG1016266
Trichlorofluoromethane	U		0.000410	0.00536	1	09/04/2017 22:17	WG1016266
1,2,3-Trichloropropane	U		0.000795	0.00268	1	09/04/2017 22:17	WG1016266
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	09/04/2017 22:17	WG1016266
1,2,3-Trimethylbenzene	U		0.000308	0.00107	1	09/04/2017 22:17	WG1016266
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	09/04/2017 22:17	WG1016266
Vinyl acetate	U		0.00256	0.0107	1	09/04/2017 22:17	WG1016266
Vinyl chloride	U		0.000312	0.00107	1	09/04/2017 22:17	WG1016266
Xylenes, Total	U		0.000749	0.00322	1	09/04/2017 22:17	WG1016266
(S) Toluene-d8	104			80.0-120		09/04/2017 22:17	WG1016266
(S) Dibromofluoromethane	91.9			74.0-131		09/04/2017 22:17	WG1016266
(S) 4-Bromofluorobenzene	86.8			64.0-132		09/04/2017 22:17	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.7		1	09/07/2017 11:37	WG1017615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0107	0.0534	1	09/04/2017 22:37	WG1016266
Acrylonitrile	U		0.00191	0.0107	1	09/04/2017 22:37	WG1016266
Benzene	U		0.000288	0.00107	1	09/04/2017 22:37	WG1016266
Bromobenzene	U		0.000303	0.00107	1	09/04/2017 22:37	WG1016266
Bromodichloromethane	U		0.000271	0.00107	1	09/04/2017 22:37	WG1016266
Bromochloromethane	U		0.000416	0.00534	1	09/04/2017 22:37	WG1016266
Bromoform	U		0.000452	0.00107	1	09/04/2017 22:37	WG1016266
Bromomethane	U		0.00143	0.00534	1	09/04/2017 22:37	WG1016266
n-Butylbenzene	U		0.000275	0.00107	1	09/04/2017 22:37	WG1016266
sec-Butylbenzene	U		0.000215	0.00107	1	09/04/2017 22:37	WG1016266
tert-Butylbenzene	U		0.000220	0.00107	1	09/04/2017 22:37	WG1016266
Carbon disulfide	0.000774	J	0.000236	0.00107	1	09/04/2017 22:37	WG1016266
Carbon tetrachloride	U		0.000350	0.00107	1	09/04/2017 22:37	WG1016266
Chlorobenzene	U		0.000226	0.00107	1	09/04/2017 22:37	WG1016266
Chlorodibromomethane	U		0.000398	0.00107	1	09/04/2017 22:37	WG1016266
Chloroethane	U		0.00101	0.00534	1	09/04/2017 22:37	WG1016266
Chloroform	U		0.000244	0.00534	1	09/04/2017 22:37	WG1016266
Chloromethane	U		0.000400	0.00267	1	09/04/2017 22:37	WG1016266
2-Chlorotoluene	U		0.000321	0.00107	1	09/04/2017 22:37	WG1016266
4-Chlorotoluene	U		0.000256	0.00107	1	09/04/2017 22:37	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00534	1	09/04/2017 22:37	WG1016266
1,2-Dibromoethane	U		0.000366	0.00107	1	09/04/2017 22:37	WG1016266
Dibromomethane	U		0.000408	0.00107	1	09/04/2017 22:37	WG1016266
1,2-Dichlorobenzene	U		0.000325	0.00107	1	09/04/2017 22:37	WG1016266
1,3-Dichlorobenzene	U		0.000255	0.00107	1	09/04/2017 22:37	WG1016266
1,4-Dichlorobenzene	U		0.000241	0.00107	1	09/04/2017 22:37	WG1016266
Dichlorodifluoromethane	U		0.000761	0.00534	1	09/04/2017 22:37	WG1016266
1,1-Dichloroethane	U		0.000212	0.00107	1	09/04/2017 22:37	WG1016266
1,2-Dichloroethane	U		0.000283	0.00107	1	09/04/2017 22:37	WG1016266
1,1-Dichloroethene	0.000324	J	0.000323	0.00107	1	09/04/2017 22:37	WG1016266
cis-1,2-Dichloroethene	0.0431		0.000251	0.00107	1	09/04/2017 22:37	WG1016266
trans-1,2-Dichloroethene	U		0.000282	0.00107	1	09/04/2017 22:37	WG1016266
1,2-Dichloropropane	U		0.000382	0.00107	1	09/04/2017 22:37	WG1016266
1,1-Dichloropropene	U		0.000338	0.00107	1	09/04/2017 22:37	WG1016266
1,3-Dichloropropane	U		0.000221	0.00107	1	09/04/2017 22:37	WG1016266
cis-1,3-Dichloropropene	U		0.000280	0.00107	1	09/04/2017 22:37	WG1016266
trans-1,3-Dichloropropene	U		0.000285	0.00107	1	09/04/2017 22:37	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000830	0.00267	1	09/04/2017 22:37	WG1016266
2,2-Dichloropropane	U		0.000298	0.00107	1	09/04/2017 22:37	WG1016266
Di-isopropyl ether	U		0.000265	0.00107	1	09/04/2017 22:37	WG1016266
Ethylbenzene	U		0.000317	0.00107	1	09/04/2017 22:37	WG1016266
Hexachloro-1,3-butadiene	U		0.000365	0.00107	1	09/04/2017 22:37	WG1016266
2-Hexanone	U		0.00146	0.0107	1	09/04/2017 22:37	WG1016266
n-Hexane	0.00107	J	0.000309	0.0107	1	09/04/2017 22:37	WG1016266
Iodomethane	U		0.00270	0.0107	1	09/04/2017 22:37	WG1016266
Isopropylbenzene	U		0.000259	0.00107	1	09/04/2017 22:37	WG1016266
p-Isopropyltoluene	U		0.000218	0.00107	1	09/04/2017 22:37	WG1016266
2-Butanone (MEK)	U		0.00499	0.0107	1	09/04/2017 22:37	WG1016266
Methylene Chloride	U		0.00107	0.00534	1	09/04/2017 22:37	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	09/04/2017 22:37	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 12:20

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000226	0.00107	1	09/04/2017 22:37	WG1016266
Naphthalene	U		0.00107	0.00534	1	09/04/2017 22:37	WG1016266
n-Propylbenzene	U		0.000220	0.00107	1	09/04/2017 22:37	WG1016266
Styrene	U		0.000250	0.00107	1	09/04/2017 22:37	WG1016266
1,1,1-Tetrachloroethane	U		0.000282	0.00107	1	09/04/2017 22:37	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000390	0.00107	1	09/04/2017 22:37	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000390	0.00107	1	09/04/2017 22:37	WG1016266
Tetrachloroethene	4.27		0.0589	0.213	200	09/07/2017 20:25	WG1016266
Toluene	U		0.000463	0.00534	1	09/04/2017 22:37	WG1016266
1,2,3-Trichlorobenzene	U		0.000327	0.00107	1	09/04/2017 22:37	WG1016266
1,2,4-Trichlorobenzene	U		0.000414	0.00107	1	09/04/2017 22:37	WG1016266
1,1,1-Trichloroethane	U		0.000305	0.00107	1	09/04/2017 22:37	WG1016266
1,1,2-Trichloroethane	U		0.000296	0.00107	1	09/04/2017 22:37	WG1016266
Trichloroethene	0.0793		0.000298	0.00107	1	09/04/2017 22:37	WG1016266
Trichlorofluoromethane	U		0.000408	0.00534	1	09/04/2017 22:37	WG1016266
1,2,3-Trichloropropane	U		0.000791	0.00267	1	09/04/2017 22:37	WG1016266
1,2,4-Trimethylbenzene	U		0.000225	0.00107	1	09/04/2017 22:37	WG1016266
1,2,3-Trimethylbenzene	U		0.000306	0.00107	1	09/04/2017 22:37	WG1016266
1,3,5-Trimethylbenzene	U		0.000284	0.00107	1	09/04/2017 22:37	WG1016266
Vinyl acetate	U		0.00255	0.0107	1	09/04/2017 22:37	WG1016266
Vinyl chloride	0.00160		0.000311	0.00107	1	09/04/2017 22:37	WG1016266
Xylenes, Total	U		0.000745	0.00320	1	09/04/2017 22:37	WG1016266
(S) Toluene-d8	104			80.0-120		09/07/2017 20:25	WG1016266
(S) Toluene-d8	98.4			80.0-120		09/04/2017 22:37	WG1016266
(S) Dibromofluoromethane	103			74.0-131		09/07/2017 20:25	WG1016266
(S) Dibromofluoromethane	92.3			74.0-131		09/04/2017 22:37	WG1016266
(S) 4-Bromofluorobenzene	103			64.0-132		09/07/2017 20:25	WG1016266
(S) 4-Bromofluorobenzene	86.8			64.0-132		09/04/2017 22:37	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.1		1	09/07/2017 11:37	WG1017615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0110	0.0549	1	09/04/2017 22:58	WG1016266
Acrylonitrile	U		0.00196	0.0110	1	09/04/2017 22:58	WG1016266
Benzene	0.000379	J	0.000296	0.00110	1	09/04/2017 22:58	WG1016266
Bromobenzene	U		0.000312	0.00110	1	09/04/2017 22:58	WG1016266
Bromodichloromethane	U		0.000279	0.00110	1	09/04/2017 22:58	WG1016266
Bromochloromethane	U		0.000428	0.00549	1	09/04/2017 22:58	WG1016266
Bromoform	U		0.000465	0.00110	1	09/04/2017 22:58	WG1016266
Bromomethane	U		0.00147	0.00549	1	09/04/2017 22:58	WG1016266
n-Butylbenzene	U		0.000283	0.00110	1	09/04/2017 22:58	WG1016266
sec-Butylbenzene	U		0.000221	0.00110	1	09/04/2017 22:58	WG1016266
tert-Butylbenzene	U		0.000226	0.00110	1	09/04/2017 22:58	WG1016266
Carbon disulfide	0.00196		0.000243	0.00110	1	09/04/2017 22:58	WG1016266
Carbon tetrachloride	U		0.000360	0.00110	1	09/04/2017 22:58	WG1016266
Chlorobenzene	U		0.000233	0.00110	1	09/04/2017 22:58	WG1016266
Chlorodibromomethane	U		0.000409	0.00110	1	09/04/2017 22:58	WG1016266
Chloroethane	U		0.00104	0.00549	1	09/04/2017 22:58	WG1016266
Chloroform	U		0.000251	0.00549	1	09/04/2017 22:58	WG1016266
Chloromethane	U		0.000412	0.00274	1	09/04/2017 22:58	WG1016266
2-Chlorotoluene	U		0.000330	0.00110	1	09/04/2017 22:58	WG1016266
4-Chlorotoluene	U		0.000263	0.00110	1	09/04/2017 22:58	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00549	1	09/04/2017 22:58	WG1016266
1,2-Dibromoethane	U		0.000376	0.00110	1	09/04/2017 22:58	WG1016266
Dibromomethane	U		0.000419	0.00110	1	09/04/2017 22:58	WG1016266
1,2-Dichlorobenzene	U		0.000335	0.00110	1	09/04/2017 22:58	WG1016266
1,3-Dichlorobenzene	U		0.000262	0.00110	1	09/04/2017 22:58	WG1016266
1,4-Dichlorobenzene	U		0.000248	0.00110	1	09/04/2017 22:58	WG1016266
Dichlorodifluoromethane	U		0.000782	0.00549	1	09/04/2017 22:58	WG1016266
1,1-Dichloroethane	U		0.000218	0.00110	1	09/04/2017 22:58	WG1016266
1,2-Dichloroethane	U		0.000291	0.00110	1	09/04/2017 22:58	WG1016266
1,1-Dichloroethene	0.000499	J	0.000333	0.00110	1	09/04/2017 22:58	WG1016266
cis-1,2-Dichloroethene	0.130		0.000258	0.00110	1	09/04/2017 22:58	WG1016266
trans-1,2-Dichloroethene	0.000500	J	0.000290	0.00110	1	09/04/2017 22:58	WG1016266
1,2-Dichloropropane	U		0.000393	0.00110	1	09/04/2017 22:58	WG1016266
1,1-Dichloropropene	U		0.000348	0.00110	1	09/04/2017 22:58	WG1016266
1,3-Dichloropropane	U		0.000227	0.00110	1	09/04/2017 22:58	WG1016266
cis-1,3-Dichloropropene	U		0.000288	0.00110	1	09/04/2017 22:58	WG1016266
trans-1,3-Dichloropropene	U		0.000293	0.00110	1	09/04/2017 22:58	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000854	0.00274	1	09/04/2017 22:58	WG1016266
2,2-Dichloropropane	U		0.000306	0.00110	1	09/04/2017 22:58	WG1016266
Di-isopropyl ether	U		0.000272	0.00110	1	09/04/2017 22:58	WG1016266
Ethylbenzene	U		0.000326	0.00110	1	09/04/2017 22:58	WG1016266
Hexachloro-1,3-butadiene	U		0.000375	0.00110	1	09/04/2017 22:58	WG1016266
2-Hexanone	U		0.00150	0.0110	1	09/04/2017 22:58	WG1016266
n-Hexane	0.0134		0.000318	0.0110	1	09/04/2017 22:58	WG1016266
Iodomethane	U		0.00278	0.0110	1	09/04/2017 22:58	WG1016266
Isopropylbenzene	U		0.000267	0.00110	1	09/04/2017 22:58	WG1016266
p-Isopropyltoluene	U		0.000224	0.00110	1	09/04/2017 22:58	WG1016266
2-Butanone (MEK)	U		0.00514	0.0110	1	09/04/2017 22:58	WG1016266
Methylene Chloride	U		0.00110	0.00549	1	09/04/2017 22:58	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00206	0.0110	1	09/04/2017 22:58	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 13:20

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	09/04/2017 22:58	WG1016266
Naphthalene	U		0.00110	0.00549	1	09/04/2017 22:58	WG1016266
n-Propylbenzene	U		0.000226	0.00110	1	09/04/2017 22:58	WG1016266
Styrene	U		0.000257	0.00110	1	09/04/2017 22:58	WG1016266
1,1,1-Tetrachloroethane	U		0.000290	0.00110	1	09/04/2017 22:58	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000401	0.00110	1	09/04/2017 22:58	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000401	0.00110	1	09/04/2017 22:58	WG1016266
Tetrachloroethene	1.56		0.00757	0.0274	25	09/07/2017 16:32	WG1016266
Toluene	0.000498	J	0.000476	0.00549	1	09/04/2017 22:58	WG1016266
1,2,3-Trichlorobenzene	U		0.000336	0.00110	1	09/04/2017 22:58	WG1016266
1,2,4-Trichlorobenzene	U		0.000426	0.00110	1	09/04/2017 22:58	WG1016266
1,1,1-Trichloroethane	U		0.000314	0.00110	1	09/04/2017 22:58	WG1016266
1,1,2-Trichloroethane	U		0.000304	0.00110	1	09/04/2017 22:58	WG1016266
Trichloroethene	0.0496		0.000306	0.00110	1	09/04/2017 22:58	WG1016266
Trichlorofluoromethane	U		0.000419	0.00549	1	09/04/2017 22:58	WG1016266
1,2,3-Trichloropropane	U		0.000813	0.00274	1	09/04/2017 22:58	WG1016266
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	09/04/2017 22:58	WG1016266
1,2,3-Trimethylbenzene	U		0.000315	0.00110	1	09/04/2017 22:58	WG1016266
1,3,5-Trimethylbenzene	U		0.000292	0.00110	1	09/04/2017 22:58	WG1016266
Vinyl acetate	U		0.00262	0.0110	1	09/04/2017 22:58	WG1016266
Vinyl chloride	0.0990		0.000319	0.00110	1	09/04/2017 22:58	WG1016266
Xylenes, Total	U		0.000766	0.00329	1	09/04/2017 22:58	WG1016266
(S) Toluene-d8	98.7			80.0-120		09/04/2017 22:58	WG1016266
(S) Toluene-d8	103			80.0-120		09/07/2017 16:32	WG1016266
(S) Dibromofluoromethane	102			74.0-131		09/07/2017 16:32	WG1016266
(S) Dibromofluoromethane	92.7			74.0-131		09/04/2017 22:58	WG1016266
(S) 4-Bromofluorobenzene	87.3			64.0-132		09/04/2017 22:58	WG1016266
(S) 4-Bromofluorobenzene	101			64.0-132		09/07/2017 16:32	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	09/07/2017 11:37	WG1017615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0107	0.0535	1	09/04/2017 23:18	WG1016266
Acrylonitrile	U		0.00192	0.0107	1	09/04/2017 23:18	WG1016266
Benzene	U		0.000289	0.00107	1	09/04/2017 23:18	WG1016266
Bromobenzene	U		0.000304	0.00107	1	09/04/2017 23:18	WG1016266
Bromodichloromethane	U		0.000272	0.00107	1	09/04/2017 23:18	WG1016266
Bromochloromethane	U		0.000418	0.00535	1	09/04/2017 23:18	WG1016266
Bromoform	U		0.000454	0.00107	1	09/04/2017 23:18	WG1016266
Bromomethane	U		0.00143	0.00535	1	09/04/2017 23:18	WG1016266
n-Butylbenzene	U		0.000276	0.00107	1	09/04/2017 23:18	WG1016266
sec-Butylbenzene	U		0.000215	0.00107	1	09/04/2017 23:18	WG1016266
tert-Butylbenzene	U		0.000221	0.00107	1	09/04/2017 23:18	WG1016266
Carbon disulfide	0.00384		0.000237	0.00107	1	09/04/2017 23:18	WG1016266
Carbon tetrachloride	U		0.000351	0.00107	1	09/04/2017 23:18	WG1016266
Chlorobenzene	U		0.000227	0.00107	1	09/04/2017 23:18	WG1016266
Chlorodibromomethane	U		0.000399	0.00107	1	09/04/2017 23:18	WG1016266
Chloroethane	U		0.00101	0.00535	1	09/04/2017 23:18	WG1016266
Chloroform	U		0.000245	0.00535	1	09/04/2017 23:18	WG1016266
Chloromethane	U		0.000402	0.00268	1	09/04/2017 23:18	WG1016266
2-Chlorotoluene	U		0.000322	0.00107	1	09/04/2017 23:18	WG1016266
4-Chlorotoluene	U		0.000257	0.00107	1	09/04/2017 23:18	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00535	1	09/04/2017 23:18	WG1016266
1,2-Dibromoethane	U		0.000367	0.00107	1	09/04/2017 23:18	WG1016266
Dibromomethane	U		0.000409	0.00107	1	09/04/2017 23:18	WG1016266
1,2-Dichlorobenzene	U		0.000327	0.00107	1	09/04/2017 23:18	WG1016266
1,3-Dichlorobenzene	U		0.000256	0.00107	1	09/04/2017 23:18	WG1016266
1,4-Dichlorobenzene	U		0.000242	0.00107	1	09/04/2017 23:18	WG1016266
Dichlorodifluoromethane	U		0.000763	0.00535	1	09/04/2017 23:18	WG1016266
1,1-Dichloroethane	U		0.000213	0.00107	1	09/04/2017 23:18	WG1016266
1,2-Dichloroethane	U		0.000284	0.00107	1	09/04/2017 23:18	WG1016266
1,1-Dichloroethene	U		0.000324	0.00107	1	09/04/2017 23:18	WG1016266
cis-1,2-Dichloroethene	U		0.000252	0.00107	1	09/04/2017 23:18	WG1016266
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	09/04/2017 23:18	WG1016266
1,2-Dichloropropane	U		0.000383	0.00107	1	09/04/2017 23:18	WG1016266
1,1-Dichloropropene	U		0.000339	0.00107	1	09/04/2017 23:18	WG1016266
1,3-Dichloropropane	U		0.000222	0.00107	1	09/04/2017 23:18	WG1016266
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	09/04/2017 23:18	WG1016266
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	09/04/2017 23:18	WG1016266
trans-1,4-Dichloro-2-butene	U		0.000833	0.00268	1	09/04/2017 23:18	WG1016266
2,2-Dichloropropane	U		0.000299	0.00107	1	09/04/2017 23:18	WG1016266
Di-isopropyl ether	U		0.000266	0.00107	1	09/04/2017 23:18	WG1016266
Ethylbenzene	U		0.000318	0.00107	1	09/04/2017 23:18	WG1016266
Hexachloro-1,3-butadiene	U		0.000366	0.00107	1	09/04/2017 23:18	WG1016266
2-Hexanone	U		0.00147	0.0107	1	09/04/2017 23:18	WG1016266
n-Hexane	0.00870	J	0.000311	0.0107	1	09/04/2017 23:18	WG1016266
Iodomethane	U		0.00271	0.0107	1	09/04/2017 23:18	WG1016266
Isopropylbenzene	U		0.000260	0.00107	1	09/04/2017 23:18	WG1016266
p-Isopropyltoluene	U		0.000218	0.00107	1	09/04/2017 23:18	WG1016266
2-Butanone (MEK)	U		0.00501	0.0107	1	09/04/2017 23:18	WG1016266
Methylene Chloride	U		0.00107	0.00535	1	09/04/2017 23:18	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	09/04/2017 23:18	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 14:35

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/04/2017 23:18	WG1016266
Naphthalene	U		0.00107	0.00535	1	09/04/2017 23:18	WG1016266
n-Propylbenzene	U		0.000221	0.00107	1	09/04/2017 23:18	WG1016266
Styrene	U		0.000251	0.00107	1	09/04/2017 23:18	WG1016266
1,1,1-Tetrachloroethane	U		0.000283	0.00107	1	09/04/2017 23:18	WG1016266
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	09/04/2017 23:18	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	09/04/2017 23:18	WG1016266
Tetrachloroethene	U		0.00746	0.0270	25.25	09/07/2017 16:58	WG1016266
Toluene	U		0.000465	0.00535	1	09/04/2017 23:18	WG1016266
1,2,3-Trichlorobenzene	U		0.000328	0.00107	1	09/04/2017 23:18	WG1016266
1,2,4-Trichlorobenzene	U		0.000415	0.00107	1	09/04/2017 23:18	WG1016266
1,1,1-Trichloroethane	U		0.000306	0.00107	1	09/04/2017 23:18	WG1016266
1,1,2-Trichloroethane	U		0.000297	0.00107	1	09/04/2017 23:18	WG1016266
Trichloroethene	U		0.000299	0.00107	1	09/04/2017 23:18	WG1016266
Trichlorofluoromethane	U		0.000409	0.00535	1	09/04/2017 23:18	WG1016266
1,2,3-Trichloropropane	U		0.000793	0.00268	1	09/04/2017 23:18	WG1016266
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	09/04/2017 23:18	WG1016266
1,2,3-Trimethylbenzene	U		0.000307	0.00107	1	09/04/2017 23:18	WG1016266
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	09/04/2017 23:18	WG1016266
Vinyl acetate	U		0.00256	0.0107	1	09/04/2017 23:18	WG1016266
Vinyl chloride	U		0.000312	0.00107	1	09/04/2017 23:18	WG1016266
Xylenes, Total	U		0.000747	0.00321	1	09/04/2017 23:18	WG1016266
(S) Toluene-d8	101			80.0-120		09/04/2017 23:18	WG1016266
(S) Toluene-d8	97.8			80.0-120		09/07/2017 16:58	WG1016266
(S) Dibromofluoromethane	102			74.0-131		09/07/2017 16:58	WG1016266
(S) Dibromofluoromethane	95.0			74.0-131		09/04/2017 23:18	WG1016266
(S) 4-Bromofluorobenzene	89.0			64.0-132		09/04/2017 23:18	WG1016266
(S) 4-Bromofluorobenzene	101			64.0-132		09/07/2017 16:58	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.7		1	09/07/2017 11:37	WG1017615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.270	1.35	25	09/07/2017 17:24	WG1016266
Acrylonitrile	U		0.0483	0.270	25	09/07/2017 17:24	WG1016266
Benzene	U		0.00728	0.0270	25	09/07/2017 17:24	WG1016266
Bromobenzene	U		0.00766	0.0270	25	09/07/2017 17:24	WG1016266
Bromodichloromethane	U		0.00685	0.0270	25	09/07/2017 17:24	WG1016266
Bromochloromethane	U		0.0105	0.135	25	09/07/2017 17:24	WG1016266
Bromoform	U		0.0114	0.0270	25	09/07/2017 17:24	WG1016266
Bromomethane	U		0.0361	0.135	25	09/07/2017 17:24	WG1016266
n-Butylbenzene	U		0.00696	0.0270	25	09/07/2017 17:24	WG1016266
sec-Butylbenzene	U		0.00541	0.0270	25	09/07/2017 17:24	WG1016266
tert-Butylbenzene	U		0.00555	0.0270	25	09/07/2017 17:24	WG1016266
Carbon disulfide	U		0.00595	0.0270	25	09/07/2017 17:24	WG1016266
Carbon tetrachloride	U		0.00884	0.0270	25	09/07/2017 17:24	WG1016266
Chlorobenzene	U		0.00572	0.0270	25	09/07/2017 17:24	WG1016266
Chlorodibromomethane	U		0.0101	0.0270	25	09/07/2017 17:24	WG1016266
Chloroethane	U		0.0255	0.135	25	09/07/2017 17:24	WG1016266
Chloroform	U		0.00617	0.135	25	09/07/2017 17:24	WG1016266
Chloromethane	U		0.0101	0.0674	25	09/07/2017 17:24	WG1016266
2-Chlorotoluene	U		0.00811	0.0270	25	09/07/2017 17:24	WG1016266
4-Chlorotoluene	U		0.00647	0.0270	25	09/07/2017 17:24	WG1016266
1,2-Dibromo-3-Chloropropane	U		0.0283	0.135	25	09/07/2017 17:24	WG1016266
1,2-Dibromoethane	U		0.00925	0.0270	25	09/07/2017 17:24	WG1016266
Dibromomethane	U		0.0103	0.0270	25	09/07/2017 17:24	WG1016266
1,2-Dichlorobenzene	U		0.00822	0.0270	25	09/07/2017 17:24	WG1016266
1,3-Dichlorobenzene	U		0.00645	0.0270	25	09/07/2017 17:24	WG1016266
1,4-Dichlorobenzene	U		0.00609	0.0270	25	09/07/2017 17:24	WG1016266
Dichlorodifluoromethane	U		0.0192	0.135	25	09/07/2017 17:24	WG1016266
1,1-Dichloroethane	U		0.00537	0.0270	25	09/07/2017 17:24	WG1016266
1,2-Dichloroethane	U		0.00714	0.0270	25	09/07/2017 17:24	WG1016266
1,1-Dichloroethene	U		0.00817	0.0270	25	09/07/2017 17:24	WG1016266
cis-1,2-Dichloroethene	U		0.00634	0.0270	25	09/07/2017 17:24	WG1016266
trans-1,2-Dichloroethene	U		0.00712	0.0270	25	09/07/2017 17:24	WG1016266
1,2-Dichloropropane	U		0.00965	0.0270	25	09/07/2017 17:24	WG1016266
1,1-Dichloropropene	U		0.00854	0.0270	25	09/07/2017 17:24	WG1016266
1,3-Dichloropropane	U		0.00559	0.0270	25	09/07/2017 17:24	WG1016266
cis-1,3-Dichloropropene	U		0.00706	0.0270	25	09/07/2017 17:24	WG1016266
trans-1,3-Dichloropropene	U		0.00720	0.0270	25	09/07/2017 17:24	WG1016266
trans-1,4-Dichloro-2-butene	U		0.0209	0.0674	25	09/07/2017 17:24	WG1016266
2,2-Dichloropropane	U		0.00753	0.0270	25	09/07/2017 17:24	WG1016266
Di-isopropyl ether	U		0.00669	0.0270	25	09/07/2017 17:24	WG1016266
Ethylbenzene	U		0.00800	0.0270	25	09/07/2017 17:24	WG1016266
Hexachloro-1,3-butadiene	U		0.00922	0.0270	25	09/07/2017 17:24	WG1016266
2-Hexanone	U		0.0369	0.270	25	09/07/2017 17:24	WG1016266
n-Hexane	U		0.00782	0.270	25	09/07/2017 17:24	WG1016266
Iodomethane	U		0.0682	0.270	25	09/07/2017 17:24	WG1016266
Isopropylbenzene	U		0.00656	0.0270	25	09/07/2017 17:24	WG1016266
p-Isopropyltoluene	U		0.00550	0.0270	25	09/07/2017 17:24	WG1016266
2-Butanone (MEK)	U		0.126	0.270	25	09/07/2017 17:24	WG1016266
Methylene Chloride	U		0.0270	0.135	25	09/07/2017 17:24	WG1016266
4-Methyl-2-pentanone (MIBK)	U		0.0507	0.270	25	09/07/2017 17:24	WG1016266

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/30/17 15:35

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	0.00683	J	0.00572	0.0270	25	09/07/2017 17:24	WG1016266
Naphthalene	U		0.0270	0.135	25	09/07/2017 17:24	WG1016266
n-Propylbenzene	U		0.00555	0.0270	25	09/07/2017 17:24	WG1016266
Styrene	U		0.00631	0.0270	25	09/07/2017 17:24	WG1016266
1,1,1,2-Tetrachloroethane	U		0.00712	0.0270	25	09/07/2017 17:24	WG1016266
1,1,2,2-Tetrachloroethane	U		0.00984	0.0270	25	09/07/2017 17:24	WG1016266
1,1,2-Trichlorotrifluoroethane	U		0.00984	0.0270	25	09/07/2017 17:24	WG1016266
Tetrachloroethene	U		0.00744	0.0270	25	09/07/2017 17:24	WG1016266
Toluene	U		0.0116	0.135	25	09/07/2017 17:24	WG1016266
1,2,3-Trichlorobenzene	U		0.00825	0.0270	25	09/07/2017 17:24	WG1016266
1,2,4-Trichlorobenzene	U		0.0105	0.0270	25	09/07/2017 17:24	WG1016266
1,1,1-Trichloroethane	U		0.00771	0.0270	25	09/07/2017 17:24	WG1016266
1,1,2-Trichloroethane	U		0.00746	0.0270	25	09/07/2017 17:24	WG1016266
Trichloroethene	U		0.00753	0.0270	25	09/07/2017 17:24	WG1016266
Trichlorofluoromethane	U		0.0103	0.135	25	09/07/2017 17:24	WG1016266
1,2,3-Trichloropropane	U		0.0200	0.0674	25	09/07/2017 17:24	WG1016266
1,2,4-Trimethylbenzene	U		0.00569	0.0270	25	09/07/2017 17:24	WG1016266
1,2,3-Trimethylbenzene	U		0.00774	0.0270	25	09/07/2017 17:24	WG1016266
1,3,5-Trimethylbenzene	U		0.00717	0.0270	25	09/07/2017 17:24	WG1016266
Vinyl acetate	U		0.0645	0.270	25	09/07/2017 17:24	WG1016266
Vinyl chloride	U		0.00785	0.0270	25	09/07/2017 17:24	WG1016266
Xylenes, Total	U		0.0188	0.0809	25	09/07/2017 17:24	WG1016266
(S) Toluene-d8	86.9			80.0-120		09/07/2017 17:24	WG1016266
(S) Dibromofluoromethane	100			74.0-131		09/07/2017 17:24	WG1016266
(S) 4-Bromofluorobenzene	104			64.0-132		09/07/2017 17:24	WG1016266

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L933267-13 WG1016266: No low level sodium bisulfite vials remaining for analysis.



Collected date/time: 06/08/17 00:00

L933267

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.42	J	1.05	25.0	1	09/08/2017 11:14	WG1015996
Acrylonitrile	U		0.873	5.00	1	09/01/2017 10:16	WG1015996
Benzene	U		0.0896	0.500	1	09/01/2017 10:16	WG1015996
Bromobenzene	U		0.133	0.500	1	09/01/2017 10:16	WG1015996
Bromodichloromethane	U		0.0800	0.500	1	09/01/2017 10:16	WG1015996
Bromochloromethane	U		0.145	0.500	1	09/01/2017 10:16	WG1015996
Bromoform	U		0.186	0.500	1	09/01/2017 10:16	WG1015996
Bromomethane	U	J3	0.157	2.50	1	09/08/2017 11:14	WG1015996
n-Butylbenzene	U		0.143	0.500	1	09/01/2017 10:16	WG1015996
sec-Butylbenzene	U		0.134	0.500	1	09/01/2017 10:16	WG1015996
tert-Butylbenzene	U		0.183	0.500	1	09/01/2017 10:16	WG1015996
Carbon disulfide	U		0.101	0.500	1	09/01/2017 10:16	WG1015996
Carbon tetrachloride	U		0.159	0.500	1	09/01/2017 10:16	WG1015996
Chlorobenzene	U		0.140	0.500	1	09/01/2017 10:16	WG1015996
Chlorodibromomethane	U		0.128	0.500	1	09/01/2017 10:16	WG1015996
Chloroethane	U		0.141	2.50	1	09/01/2017 10:16	WG1015996
Chloroform	U		0.0860	0.500	1	09/01/2017 10:16	WG1015996
Chloromethane	U		0.153	1.25	1	09/01/2017 10:16	WG1015996
2-Chlorotoluene	U		0.111	0.500	1	09/01/2017 10:16	WG1015996
4-Chlorotoluene	U		0.0972	0.500	1	09/01/2017 10:16	WG1015996
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/01/2017 10:16	WG1015996
1,2-Dibromoethane	U		0.193	0.500	1	09/01/2017 10:16	WG1015996
Dibromomethane	U		0.117	0.500	1	09/01/2017 10:16	WG1015996
1,2-Dichlorobenzene	U		0.101	0.500	1	09/01/2017 10:16	WG1015996
1,3-Dichlorobenzene	U		0.130	0.500	1	09/01/2017 10:16	WG1015996
1,4-Dichlorobenzene	U		0.121	0.500	1	09/01/2017 10:16	WG1015996
Dichlorodifluoromethane	U		0.127	2.50	1	09/01/2017 10:16	WG1015996
1,1-Dichloroethane	U		0.114	0.500	1	09/01/2017 10:16	WG1015996
1,2-Dichloroethane	U		0.108	0.500	1	09/01/2017 10:16	WG1015996
1,1-Dichloroethene	U		0.188	0.500	1	09/01/2017 10:16	WG1015996
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/01/2017 10:16	WG1015996
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/01/2017 10:16	WG1015996
1,2-Dichloropropane	U		0.190	0.500	1	09/01/2017 10:16	WG1015996
1,1-Dichloropropene	U		0.128	0.500	1	09/01/2017 10:16	WG1015996
1,3-Dichloropropane	U		0.147	1.00	1	09/01/2017 10:16	WG1015996
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/01/2017 10:16	WG1015996
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/08/2017 11:14	WG1015996
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/01/2017 10:16	WG1015996
2,2-Dichloropropane	U		0.0929	0.500	1	09/01/2017 10:16	WG1015996
Di-isopropyl ether	U		0.0924	0.500	1	09/01/2017 10:16	WG1015996
Ethylbenzene	U		0.158	0.500	1	09/01/2017 10:16	WG1015996
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/01/2017 10:16	WG1015996
2-Hexanone	U		0.757	5.00	1	09/08/2017 11:14	WG1015996
n-Hexane	U		0.305	5.00	1	09/01/2017 10:16	WG1015996
Iodomethane	U	J3	0.377	10.0	1	09/08/2017 11:14	WG1015996
Isopropylbenzene	U		0.126	0.500	1	09/01/2017 10:16	WG1015996
p-Isopropyltoluene	U		0.138	0.500	1	09/01/2017 10:16	WG1015996
2-Butanone (MEK)	U		1.28	5.00	1	09/08/2017 11:14	WG1015996
Methylene Chloride	U		1.07	2.50	1	09/01/2017 10:16	WG1015996
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/01/2017 10:16	WG1015996
Methyl tert-butyl ether	U		0.102	0.500	1	09/08/2017 11:14	WG1015996
Naphthalene	U		0.174	2.50	1	09/01/2017 10:16	WG1015996
n-Propylbenzene	U		0.162	0.500	1	09/01/2017 10:16	WG1015996
Styrene	U		0.117	0.500	1	09/08/2017 11:14	WG1015996
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/01/2017 10:16	WG1015996
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/01/2017 10:16	WG1015996

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 06/08/17 00:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/01/2017 10:16	WG1015996
Tetrachloroethene	U		0.199	0.500	1	09/01/2017 10:16	WG1015996
Toluene	U		0.412	0.500	1	09/01/2017 10:16	WG1015996
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/01/2017 10:16	WG1015996
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/01/2017 10:16	WG1015996
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/01/2017 10:16	WG1015996
1,1,2-Trichloroethane	U		0.186	0.500	1	09/01/2017 10:16	WG1015996
Trichloroethene	U		0.153	0.500	1	09/01/2017 10:16	WG1015996
Trichlorofluoromethane	U		0.130	2.50	1	09/01/2017 10:16	WG1015996
1,2,3-Trichloropropane	U		0.247	2.50	1	09/01/2017 10:16	WG1015996
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/01/2017 10:16	WG1015996
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/01/2017 10:16	WG1015996
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/01/2017 10:16	WG1015996
Vinyl acetate	U		0.645	5.00	1	09/01/2017 10:16	WG1015996
Vinyl chloride	U		0.118	0.500	1	09/01/2017 10:16	WG1015996
Xylenes, Total	U		0.316	1.50	1	09/01/2017 10:16	WG1015996
(S) Toluene-d8	102			80.0-120		09/08/2017 11:14	WG1015996
(S) Toluene-d8	103			80.0-120		09/01/2017 10:16	WG1015996
(S) Dibromofluoromethane	101			76.0-123		09/01/2017 10:16	WG1015996
(S) Dibromofluoromethane	106			76.0-123		09/08/2017 11:14	WG1015996
(S) 4-Bromofluorobenzene	104			80.0-120		09/08/2017 11:14	WG1015996
(S) 4-Bromofluorobenzene	108			80.0-120		09/01/2017 10:16	WG1015996

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Total Solids by Method 2540 G-2011

[L933267-01,02,04,05,06,07,08](#)

Method Blank (MB)

(MB) R3247741-1 09/07/17 13:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000400	%	%	%

L933266-13 Original Sample (OS) • Duplicate (DUP)

(OS) L933266-13 09/07/17 13:21 • (DUP) R3247741-3 09/07/17 13:21

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	72.0	72.2	1	0.270	%	5

Laboratory Control Sample (LCS)

(LCS) R3247741-2 09/07/17 13:21

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

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Total Solids by Method 2540 G-2011

[L933267-09.10.11.12.13](#)

Method Blank (MB)

(MB) R3247724-1 09/07/17 11:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.00140	%	%	%

L933267-09 Original Sample (OS) • Duplicate (DUP)

(OS) L933267-09 09/07/17 11:37 • (DUP) R3247724-3 09/07/17 11:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	93.2	93.5	1	0.248	%	5

Laboratory Control Sample (LCS)

(LCS) R3247724-2 09/07/17 11:37

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L933267-01.02.07](#)

Method Blank (MB)

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	U		0.0339	0.100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	95.9			77.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier		LCSD Qualifier		RPD %	RPD Limits %
							LCSD Qualifier	RPD	LCSD Qualifier	RPD		
Gasoline Range Organics-NWTPH	5.50	5.14	5.31	93.5	96.6	70.0-133					3.24	20
^(S) <i>a,a</i> -Trifluorotoluene(FID)				101	102	77.0-120						

Public Review Draft



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Volatile Organic Compounds (GC) by Method NWTPHGX

[L933267-03](#)

Method Blank (MB)

(MB) R3247051-3 09/03/17 15:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l

Gasoline Range Organics-NWTPH	U		316	100
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^(S) a,a-o-Trifluorotoluene(FID)	97.5			77.0-122
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247051-1 09/03/17 14:16 • (LCSD) R3247051-2 09/03/17 15:03

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%				%	%

Gasoline Range Organics-NWTPH	5500	5700	5650	104	103	72.0-134			0.890	20
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^(S) a,a,o-Trifluorotoluene(FID)				110	110	77.0-122				
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L9333750-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L9333750-05 09/03/17 22:57 • (MS) R3247051-4 09/03/17 23:21 • (MSD) R3247051-5 09/03/17 23:44

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%					%	%

Gasoline Range Organics-NWTPH	5500	45.0	6360	6300	115	114	1	23.0-159			0.810	20
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^(S) a,a,o-Trifluorotoluene(FID)					108	109		77.0-122				
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Method Blank (MB)

(MB) R3246436-3 09/01/17 09:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	0.169	J	0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3246436-3 09/01/17 09:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	3.47	J	0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) 4-Bromofluorobenzene	107			80.0-120

1 Cp
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Public Review Draft

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3246436-1 09/01/17 08:14 • (LCSD) R3246436-2 09/01/17 08:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	178	183	142	147	10.0-160			3.17	23
Acrylonitrile	125	168	146	134	117	60.0-142			14.1	20
Benzene	25.0	27.3	26.5	109	106	69.0-123			2.95	20
Bromobenzene	25.0	26.9	26.7	107	107	79.0-120			0.680	20
Bromodichloromethane	25.0	27.6	27.1	110	108	76.0-120			2.05	20
Bromochloromethane	25.0	26.6	26.2	106	105	76.0-122			1.59	20
Bromoform	25.0	28.2	27.7	113	111	67.0-132			1.72	20
Bromomethane	25.0	14.8	18.2	59.3	73.0	18.0-160		U3	20.6	20
n-Butylbenzene	25.0	30.0	29.7	120	119	72.0-126			0.740	20
sec-Butylbenzene	25.0	28.1	28.0	112	112	74.0-121			0.150	20
tert-Butylbenzene	25.0	27.6	27.4	111	109	75.0-122			1.06	20
Carbon disulfide	25.0	25.5	25.0	102	99.8	55.0-127			2.02	20
Carbon tetrachloride	25.0	26.1	25.2	104	101	63.0-122			3.54	20
Chlorobenzene	25.0	27.7	27.5	111	110	79.0-121			0.870	20
Chlorodibromomethane	25.0	27.7	27.8	111	111	75.0-125			0.410	20
Chloroethane	25.0	22.5	22.4	90.1	89.5	47.0-152			0.730	20
Chloroform	25.0	27.1	26.2	108	105	72.0-121			3.27	20
Chloromethane	25.0	21.4	21.0	85.8	83.9	48.0-139			2.24	20
2-Chlorotoluene	25.0	28.8	28.0	115	112	74.0-122			2.89	20
4-Chlorotoluene	25.0	27.9	28.2	112	113	79.0-120			0.930	20
1,2-Dibromo-3-Chloropropane	25.0	30.7	28.4	123	113	64.0-127			7.78	20
1,2-Dibromoethane	25.0	28.5	27.1	114	108	77.0-123			5.34	20
Dibromomethane	25.0	28.2	27.5	113	110	78.0-120			2.51	20
1,2-Dichlorobenzene	25.0	27.9	27.6	111	110	80.0-120			0.940	20
1,3-Dichlorobenzene	25.0	27.1	26.8	109	107	72.0-123			1.39	20
1,4-Dichlorobenzene	25.0	25.7	25.3	103	101	77.0-120			1.53	20
Dichlorodifluoromethane	25.0	24.3	23.8	97.1	95.2	49.0-155			2.01	20
1,1-Dichloroethane	25.0	28.4	27.8	114	111	70.0-126			2.13	20
1,2-Dichloroethane	25.0	28.6	27.4	114	109	67.0-126			4.41	20
1,1-Dichloroethene	25.0	25.7	24.7	103	98.8	64.0-129			4.11	20
cis-1,2-Dichloroethene	25.0	25.1	25.2	100	101	73.0-120			0.270	20
trans-1,2-Dichloroethene	25.0	26.0	25.4	104	102	71.0-121			2.31	20
1,2-Dichloropropane	25.0	28.7	27.7	115	111	75.0-125			3.59	20
1,1-Dichloropropene	25.0	28.0	27.4	112	110	71.0-129			2.13	20
1,3-Dichloropropene	25.0	28.3	26.9	113	108	80.0-121			5.14	20
cis-1,3-Dichloropropene	25.0	30.1	29.3	120	117	79.0-123			2.55	20
trans-1,3-Dichloropropene	25.0	25.9	25.2	104	101	74.0-127			2.69	20
trans-1,4-Dichloro-2-butene	25.0	21.9	21.0	87.6	84.2	55.0-134			4.02	20
2,2-Dichloropropane	25.0	28.6	27.1	114	108	60.0-125			5.31	20
Diisopropyl ether	25.0	27.3	26.7	109	107	59.0-133			2.23	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3246436-1 09/01/17 08:14 • (LCSD) R3246436-2 09/01/17 08:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	27.3	26.6	109	106	77.0-120			2.58	20
Hexachloro-1,3-butadiene	25.0	27.9	27.6	112	110	64.0-131			1.12	20
2-Hexanone	125	170	166	136	133	58.0-147			2.19	20
n-Hexane	25.0	27.8	27.7	111	111	56.0-124			0.280	20
Iodomethane	125	95.4	118	76.3	94.4	57.0-140		J3	212	20
Isopropylbenzene	25.0	28.0	27.7	112	111	75.0-120			1.06	20
p-Isopropyltoluene	25.0	29.0	28.5	116	114	74.0-126			1.57	20
2-Butanone (MEK)	125	175	176	140	141	37.0-158			0.400	20
Methylene Chloride	25.0	26.3	24.8	105	99.1	66.0-121			5.93	20
4-Methyl-2-pentanone (MIBK)	125	151	142	120	114	59.0-143			5.57	20
Methyl tert-butyl ether	25.0	26.6	25.6	106	102	64.0-123			3.88	20
Naphthalene	25.0	28.4	27.7	114	111	62.0-128			2.46	20
n-Propylbenzene	25.0	28.6	28.6	114	114	79.0-120			0.0700	20
Styrene	25.0	28.6	28.0	114	112	78.0-124			2.21	20
1,1,1,2-Tetrachloroethane	25.0	25.8	25.6	103	102	75.0-122			0.720	20
1,1,2,2-Tetrachloroethane	25.0	30.1	28.3	120	113	71.0-122			6.25	20
1,1,2-Trichlorotrifluoroethane	25.0	25.9	26.0	104	104	61.0-136			0.140	20
Tetrachloroethene	25.0	26.6	26.5	106	106	70.0-127			0.500	20
Toluene	25.0	26.3	26.3	105	105	77.0-120			0.200	20
1,2,3-Trichlorobenzene	25.0	27.2	27.7	109	111	61.0-133			1.72	20
1,2,4-Trichlorobenzene	25.0	27.2	27.4	109	110	69.0-129			0.530	20
1,1,1-Trichloroethane	25.0	26.8	26.6	107	106	68.0-122			1.01	20
1,1,2-Trichloroethane	25.0	26.4	25.5	106	102	78.0-120			3.54	20
Trichloroethene	25.0	25.8	25.4	103	102	78.0-120			1.24	20
Trichlorofluoromethane	25.0	22.3	22.0	89.2	87.8	56.0-137			1.56	20
1,2,3-Trichloropropane	25.0	29.5	29.0	118	116	72.0-124			1.77	20
1,2,4-Trimethylbenzene	25.0	27.5	27.3	110	109	75.0-120			0.660	20
1,2,3-Trimethylbenzene	25.0	25.2	24.7	101	98.7	75.0-120			2.29	20
1,3,5-Trimethylbenzene	25.0	27.6	27.5	110	110	75.0-120			0.470	20
Vinyl acetate	125	179	168	143	134	46.0-160			6.72	20
Vinyl chloride	25.0	22.5	22.1	90.1	88.5	64.0-133			1.78	20
Xylenes, Total	75.0	81.5	80.8	109	108	77.0-120			0.860	20
(S) Toluene-d8				102	102	80.0-120				
(S) Dibromofluoromethane				100	99.9	76.0-123				
(S) 4-Bromofluorobenzene				105	106	80.0-120				

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Method Blank (MB)

(MB) R3246905-4 09/01/17 14:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3246905-4 09/01/17 14:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
Isopropylbenzene	U		0.126	0.500
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	101			80.0-120
(S) Dibromofluoromethane	103			76.0-123
(S) 4-Bromofluorobenzene	99.1			80.0-120

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3246905-1 09/01/17 13:06 • (LCSD) R3246905-2 09/01/17 13:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	148	164	119	131	10.0-160			10.1	23
Acrylonitrile	125	140	139	112	111	60.0-142			1.03	20
Benzene	25.0	26.9	26.4	107	105	69.0-123			1.93	20
Bromobenzene	25.0	23.9	23.8	95.6	95.3	79.0-120			0.340	20
Bromodichloromethane	25.0	26.7	26.2	107	105	76.0-120			1.62	20
Bromochloromethane	25.0	27.0	26.8	108	107	76.0-122			0.930	20
Bromoform	25.0	24.7	24.6	98.8	98.4	67.0-132			0.460	20
Bromomethane	25.0	28.5	27.5	114	110	18.0-160			3.76	20
n-Butylbenzene	25.0	28.4	28.6	114	114	72.0-126			0.630	20
sec-Butylbenzene	25.0	26.1	25.7	104	103	74.0-121			1.64	20
tert-Butylbenzene	25.0	25.3	25.4	101	102	75.0-122			0.610	20
Carbon disulfide	25.0	26.3	25.6	105	103	55.0-127			2.59	20
Carbon tetrachloride	25.0	26.1	25.5	104	102	63.0-122			2.44	20
Chlorobenzene	25.0	24.5	24.7	97.8	98.7	79.0-121			0.910	20
Chlorodibromomethane	25.0	25.5	25.4	102	102	75.0-125			0.280	20
Chloroethane	25.0	28.4	28.0	114	112	47.0-152			1.71	20
Chloroform	25.0	27.2	26.9	109	108	72.0-121			1.02	20
Chloromethane	25.0	25.6	25.4	102	101	48.0-139			1.00	20
2-Chlorotoluene	25.0	25.0	24.7	100	98.6	74.0-122			1.50	20
4-Chlorotoluene	25.0	24.6	24.4	98.5	97.6	79.0-120			0.970	20
1,2-Dibromo-3-Chloropropane	25.0	25.7	26.3	103	105	64.0-127			2.29	20
1,2-Dibromoethane	25.0	24.6	25.0	98.3	100	77.0-123			1.90	20
Dibromomethane	25.0	26.4	26.6	106	106	78.0-120			0.720	20
1,2-Dichlorobenzene	25.0	25.9	25.8	104	103	80.0-120			0.560	20
1,3-Dichlorobenzene	25.0	25.0	25.0	100	100	72.0-123			0.0700	20
1,4-Dichlorobenzene	25.0	24.6	24.7	98.6	99.0	77.0-120			0.410	20
Dichlorodifluoromethane	25.0	26.1	26.0	104	104	49.0-155			0.300	20
trans-1,4-Dichloro-2-butene	25.0	24.8	25.1	99.2	101	55.0-134			1.28	20
1,1-Dichloroethane	25.0	28.0	27.9	112	111	70.0-126			0.690	20
1,2-Dichloroethane	25.0	28.9	28.8	116	115	67.0-126			0.490	20
1,1-Dichloroethene	25.0	27.1	26.7	108	107	64.0-129			1.25	20
cis-1,2-Dichloroethene	25.0	26.9	26.3	108	105	73.0-120			2.40	20
trans-1,2-Dichloroethene	25.0	26.8	26.4	107	106	71.0-121			1.39	20
1,2-Dichloropropane	25.0	27.9	27.4	112	110	75.0-125			1.78	20
1,1-Dichloropropene	25.0	27.4	27.3	110	109	71.0-129			0.260	20
1,3-Dichloropropene	25.0	24.8	24.8	99.1	99.1	80.0-121			0.0600	20
cis-1,3-Dichloropropene	25.0	28.2	28.3	113	113	79.0-123			0.310	20
trans-1,3-Dichloropropene	25.0	27.8	27.8	111	111	74.0-127			0.0800	20
2,2-Dichloropropane	25.0	26.0	25.0	104	100	60.0-125			3.91	20
Di-isopropyl ether	25.0	27.5	27.0	110	108	59.0-133			1.91	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3246905-1 09/01/17 13:06 • (LCSD) R3246905-2 09/01/17 13:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.3	24.2	97.1	97.0	77.0-120			0.160	20
Hexachloro-1,3-butadiene	25.0	29.7	31.5	119	126	64.0-131			5.76	20
2-Hexanone	125	114	116	91.2	93.0	58.0-147			1.95	20
n-Hexane	25.0	27.1	26.4	108	105	56.0-124			2.56	20
Iodomethane	125	134	132	107	105	57.0-140			1.91	20
Isopropylbenzene	25.0	24.6	24.3	98.3	97.1	75.0-120			1.15	20
p-Isopropyltoluene	25.0	27.0	26.8	108	107	74.0-126			0.760	20
2-Butanone (MEK)	125	148	148	118	119	37.0-158			0.430	20
Methylene Chloride	25.0	26.5	26.0	106	104	66.0-121			2.05	20
4-Methyl-2-pentanone (MIBK)	125	130	131	104	105	59.0-143			0.790	20
Methyl tert-butyl ether	25.0	26.2	26.0	105	104	64.0-123			0.420	20
Naphthalene	25.0	27.2	28.0	109	112	62.0-128			2.87	20
n-Propylbenzene	25.0	25.6	25.5	102	102	79.0-120			0.510	20
Styrene	25.0	25.2	24.9	101	99.5	78.0-124			1.27	20
1,1,1,2-Tetrachloroethane	25.0	25.2	24.9	101	99.7	75.0-122			1.05	20
1,1,2,2-Tetrachloroethane	25.0	25.0	24.6	99.9	98.3	71.0-122			1.63	20
Tetrachloroethene	25.0	23.9	23.8	95.6	95.2	70.0-127			0.450	20
Toluene	25.0	24.3	24.3	97.3	97.4	77.0-120			0.0600	20
1,1,2-Trichlorotrifluoroethane	25.0	26.8	26.4	107	106	61.0-136			1.45	20
1,2,3-Trichlorobenzene	25.0	31.2	31.5	125	126	61.0-133			1.17	20
1,2,4-Trichlorobenzene	25.0	31.1	31.6	124	127	69.0-129			1.75	20
1,1,1-Trichloroethane	25.0	27.7	26.9	111	107	68.0-122			2.92	20
1,1,2-Trichloroethane	25.0	24.9	25.1	99.7	100	78.0-120			0.650	20
Trichloroethene	25.0	25.9	26.0	104	104	78.0-120			0.490	20
Trichlorofluoromethane	25.0	28.6	28.4	115	114	56.0-137			0.900	20
1,2,3-Trichloropropane	25.0	24.5	24.5	98.2	98.0	72.0-124			0.120	20
1,2,3-Trimethylbenzene	25.0	24.1	23.9	96.5	95.8	75.0-120			0.760	20
1,2,4-Trimethylbenzene	25.0	25.5	25.4	102	102	75.0-120			0.310	20
1,3,5-Trimethylbenzene	25.0	25.5	25.1	102	100	75.0-120			1.51	20
Vinyl acetate	125	140	135	112	108	46.0-160			3.57	20
Vinyl chloride	25.0	28.0	27.6	112	110	64.0-133			1.56	20
Xylenes, Total	75.0	74.3	73.9	99.1	98.5	77.0-120			0.540	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc



Method Blank (MB)

(MB) R324794-3 09/04/17 14:29

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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1 Cp
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Method Blank (MB)

(MB) R3247494-3 09/04/17 14:29

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	109			80.0-120
(S) Dibromofluoromethane	91.4			74.0-131
(S) 4-Bromofluorobenzene	86.3			64.0-132

1 Cp
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247494-1 09/04/17 13:28 • (LCSD) R3247494-4 09/04/17 15:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0862	0.0896	69.0	71.7	11.0-160			3.83	23
Acrylonitrile	0.125	0.0991	0.0989	79.2	79.1	61.0-143			0.150	20
Benzene	0.0250	0.0217	0.0201	86.6	80.5	71.0-124			7.37	20
Bromobenzene	0.0250	0.0221	0.0203	88.5	81.2	78.0-120			8.67	20
Bromodichloromethane	0.0250	0.0243	0.0230	97.4	91.8	75.0-120			5.86	20
Bromoform	0.0250	0.0262	0.0243	105	97.2	65.0-133			7.56	20
Bromochloromethane	0.0250	0.0238	0.0230	95.1	91.9	80.0-121			3.45	20
Bromomethane	0.0250	0.0218	0.0212	87.2	84.8	26.0-160			2.78	20
n-Butylbenzene	0.0250	0.0244	0.0228	97.5	91.2	73.0-126			6.68	20
sec-Butylbenzene	0.0250	0.0238	0.0221	95.2	88.4	75.0-121			7.43	20
tert-Butylbenzene	0.0250	0.0242	0.0226	96.9	90.4	74.0-122			6.96	20
Carbon tetrachloride	0.0250	0.0227	0.0216	90.9	86.6	66.0-123			4.86	20
Carbon disulfide	0.0250	0.0186	0.0166	74.5	66.2	53.0-130			11.8	20
Chlorobenzene	0.0250	0.0300	0.0272	120	109	79.0-121			9.82	20
Chlorodibromomethane	0.0250	0.0297	0.0272	119	109	74.0-128			8.76	20
Chloroethane	0.0250	0.0216	0.0203	86.4	81.4	51.0-147			6.02	20
Chloroform	0.0250	0.0221	0.0211	88.5	84.5	73.0-123			4.59	20
Chloromethane	0.0250	0.0176	0.0178	70.3	71.2	51.0-138			1.22	20
2-Chlorotoluene	0.0250	0.0235	0.0218	93.9	87.1	72.0-124			7.53	20
4-Chlorotoluene	0.0250	0.0228	0.0211	91.4	84.3	78.0-120			8.04	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0261	0.0247	104	98.7	65.0-126			5.68	20
1,2-Dibromoethane	0.0250	0.0286	0.0263	114	105	78.0-122			8.51	20
Dibromomethane	0.0250	0.0240	0.0229	96.1	91.7	79.0-120			4.69	20
1,2-Dichlorobenzene	0.0250	0.0272	0.0253	109	101	80.0-120			7.09	20
1,3-Dichlorobenzene	0.0250	0.0272	0.0258	109	103	72.0-123			5.16	20
1,4-Dichlorobenzene	0.0250	0.0253	0.0240	101	95.9	77.0-120			5.47	20
Dichlorodifluoromethane	0.0250	0.0208	0.0246	83.2	98.4	49.0-155			16.8	20
trans-1,4-Dichloro-2-butene	0.0250	0.0224	0.0216	89.7	86.5	68.0-126			3.68	20
1,1-Dichloroethane	0.0250	0.0217	0.0208	86.7	83.0	70.0-128			4.32	20
1,2-Dichloroethane	0.0250	0.0219	0.0206	87.5	82.6	69.0-128			5.72	20
1,1-Dichloroethene	0.0250	0.0230	0.0214	92.0	85.6	63.0-131			7.16	20
cis-1,2-Dichloroethene	0.0250	0.0212	0.0200	84.8	80.2	74.0-123			5.60	20
trans-1,2-Dichloroethene	0.0250	0.0205	0.0191	82.0	76.3	72.0-122			7.25	20
1,2-Dichloropropane	0.0250	0.0240	0.0227	96.0	90.8	75.0-126			5.58	20
1,1-Dichloropropene	0.0250	0.0207	0.0194	82.8	77.6	72.0-130			6.49	20
1,3-Dichloropropene	0.0250	0.0283	0.0265	113	106	80.0-121			6.52	20
cis-1,3-Dichloropropene	0.0250	0.0293	0.0273	117	109	80.0-125			7.30	20
trans-1,3-Dichloropropene	0.0250	0.0305	0.0278	122	111	75.0-129			9.21	20
2,2-Dichloropropane	0.0250	0.0205	0.0197	81.9	78.6	60.0-129			4.15	20
Di-isopropyl ether	0.0250	0.0193	0.0181	77.2	72.4	62.0-133			6.44	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247494-1 09/04/17 13:28 • (LCSD) R3247494-4 09/04/17 15:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0271	0.0248	109	99.0	77.0-120			9.17	20
Hexachloro-1,3-butadiene	0.0250	0.0287	0.0274	115	110	68.0-128			4.71	20
2-Hexanone	0.125	0.127	0.129	102	103	61.0-143			1.05	20
Isopropylbenzene	0.0250	0.0229	0.0212	91.6	85.0	75.0-120			7.53	20
n-Hexane	0.0250	0.0158	0.0146	63.1	58.5	57.0-125			7.68	20
Iodomethane	0.125	0.138	0.129	111	103	67.0-132			7.02	20
p-Isopropyltoluene	0.0250	0.0253	0.0239	101	95.5	74.0-125			5.71	20
2-Butanone (MEK)	0.125	0.0978	0.106	78.3	85.1	37.0-159			8.38	20
Methylene Chloride	0.0250	0.0216	0.0194	86.6	77.7	67.0-123			10.9	20
4-Methyl-2-pentanone (MIBK)	0.125	0.121	0.120	96.6	95.9	60.0-144			0.750	20
Methyl tert-butyl ether	0.0250	0.0215	0.0206	85.9	82.4	66.0-125			4.13	20
Naphthalene	0.0250	0.0245	0.0230	98.0	91.8	64.0-125			6.46	20
n-Propylbenzene	0.0250	0.0234	0.0217	93.6	86.9	78.0-120			7.46	20
Styrene	0.0250	0.0246	0.0224	98.3	89.5	78.0-124			9.33	20
1,1,1,2-Tetrachloroethane	0.0250	0.0277	0.0261	111	104	74.0-124			6.02	20
1,1,2,2-Tetrachloroethane	0.0250	0.0229	0.0221	91.5	88.5	73.0-120			3.28	20
Tetrachloroethene	0.0250	0.0310	0.0285	124	114	70.0-127			8.13	20
Toluene	0.0250	0.0257	0.0234	103	93.7	77.0-120			9.11	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0246	0.0229	98.4	91.6	64.0-135			7.06	20
1,2,3-Trichlorobenzene	0.0250	0.0284	0.0272	114	109	68.0-126			4.31	20
1,2,4-Trichlorobenzene	0.0250	0.0289	0.0281	116	112	70.0-127			2.90	20
1,1,1-Trichloroethane	0.0250	0.0214	0.0203	85.4	81.2	69.0-125			5.07	20
1,1,2-Trichloroethane	0.0250	0.0277	0.0254	111	102	78.0-120			8.41	20
Trichloroethene	0.0250	0.0258	0.0246	103	98.2	79.0-120			5.12	20
Trichlorofluoromethane	0.0250	0.0280	0.0266	112	106	59.0-136			5.31	20
1,2,3-Trichloropropane	0.0250	0.0224	0.0222	89.5	88.7	73.0-124			0.860	20
1,2,3-Trimethylbenzene	0.0250	0.0218	0.0201	87.4	80.6	76.0-120			8.06	20
1,2,4-Trimethylbenzene	0.0250	0.0216	0.0206	86.2	82.3	75.0-120			4.63	20
1,3,5-Trimethylbenzene	0.0250	0.0227	0.0215	91.0	86.1	75.0-120			5.52	20
Vinyl chloride	0.0250	0.0236	0.0240	94.4	96.1	63.0-134			1.86	20
Xylenes, Total	0.0750	0.0809	0.0733	108	97.7	77.0-120			9.86	20
Vinyl acetate	0.125	0.114	0.110	91.2	88.0	58.0-156			3.63	20
(S) Toluene-d8				110	108	80.0-120				
(S) Dibromofluoromethane				88.3	89.2	74.0-131				
(S) 4-Bromofluorobenzene				84.9	85.0	64.0-132				

Public Review Draft

1 Cp
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L933267-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933267-01 09/04/17 19:52 • (MS) R3247494-5 09/04/17 16:05 • (MSD) R3247494-6 09/04/17 16:26

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.151	U	4.31	4.54	28.6	30.1	100	10.0-160			5.27	36
Acrylonitrile	0.151	U	5.70	6.47	37.8	42.9	100	14.0-160			12.5	33
Benzene	0.0302	0.304	1.14	1.38	27.7	35.6	100	13.0-146			18.9	27
Bromobenzene	0.0302	U	1.29	1.60	42.7	53.2	100	10.0-149			21.8	33
Bromodichloromethane	0.0302	U	1.18	1.58	39.2	52.5	100	15.0-142		J3	29.0	28
Bromoform	0.0302	U	1.33	1.77	44.0	58.7	100	10.0-147			28.7	31
Bromomethane	0.0302	U	0.487	0.689	16.1	22.8	100	10.0-160		J3	34.4	32
Bromochloromethane	0.0302	U	0.992	1.27	32.9	42.1	100	24.0-146			24.5	27
n-Butylbenzene	0.0302	0.973	1.85	2.02	29.0	34.8	100	10.0-154			9.03	37
sec-Butylbenzene	0.0302	0.642	1.73	1.91	36.2	42.0	100	10.0-151			9.64	36
tert-Butylbenzene	0.0302	U	1.21	1.49	40.0	49.4	100	10.0-152			21.0	35
Carbon tetrachloride	0.0302	U	0.879	1.11	29.1	36.9	100	13.0-140			23.5	30
Chlorobenzene	0.0302	U	1.29	1.66	42.9	55.2	100	10.0-149			25.1	31
Chlorodibromomethane	0.0302	U	1.40	1.83	46.4	60.8	100	12.0-147			26.9	29
Carbon disulfide	0.0302	U	0.185	0.222	6.14	7.37	100	10.0-141		J6	18.3	30
Chloroethane	0.0302	U	0.565	0.725	18.7	24.0	100	10.0-159		J6	24.8	33
Chloroform	0.0302	U	1.04	1.36	34.3	45.0	100	18.0-148			26.9	28
Chloromethane	0.0302	U	0.392	0.483	13.0	16.0	100	10.0-146			20.8	29
2-Chlorotoluene	0.0302	U	1.44	1.72	47.6	56.9	100	10.0-151			17.8	35
4-Chlorotoluene	0.0302	U	0.998	1.34	33.1	44.5	100	10.0-150			29.3	35
1,2-Dibromo-3-Chloropropane	0.0302	U	1.37	1.90	45.4	63.2	100	10.0-149			32.7	34
1,2-Dibromoethane	0.0302	U	1.27	1.62	42.1	53.7	100	14.0-145			24.3	28
Dibromomethane	0.0302	U	1.08	1.45	35.8	48.0	100	18.0-144		J3	29.2	27
1,2-Dichlorobenzene	0.0302	U	1.30	1.78	43.1	58.9	100	10.0-153			30.9	34
1,3-Dichlorobenzene	0.0302	U	1.20	1.61	39.7	53.3	100	10.0-150			29.2	35
1,4-Dichlorobenzene	0.0302	U	1.13	1.51	37.6	50.1	100	10.0-148			28.4	34
Dichlorodifluoromethane	0.0302	U	0.645	0.733	21.4	24.3	100	10.0-160			12.8	30
1,1-Dichloroethane	0.0302	U	0.950	1.21	31.5	40.0	100	19.0-148			23.8	28
1,2-Dichloroethane	0.0302	U	0.941	1.29	31.2	42.9	100	17.0-147		J3	31.6	27
trans-1,4-Dichloro-2-butene	0.0302	U	1.26	1.52	41.9	50.3	100	10.0-160			18.2	40
1,1-Dichloroethene	0.0302	U	0.747	0.913	24.8	30.3	100	10.0-150			20.1	31
cis-1,2-Dichloroethene	0.0302	U	0.899	1.09	29.8	36.1	100	16.0-145			19.0	28
trans-1,2-Dichloroethene	0.0302	U	0.568	0.741	18.8	24.6	100	11.0-142			26.6	29
1,2-Dichloropropane	0.0302	U	1.15	1.48	38.0	49.0	100	17.0-148			25.3	28
1,1-Dichloropropene	0.0302	U	0.667	0.868	22.1	28.8	100	10.0-150		J3	26.2	30
1,3-Dichloropropene	0.0302	U	1.32	1.73	43.7	57.5	100	16.0-148		J3	27.3	27
cis-1,3-Dichloropropene	0.0302	U	1.23	1.64	40.7	54.5	100	13.0-150		J3	29.0	28
trans-1,3-Dichloropropene	0.0302	U	1.34	1.74	44.4	57.7	100	10.0-152			26.0	29
2,2-Dichloropropene	0.0302	U	0.859	1.15	28.5	38.2	100	16.0-143			29.1	30

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L933267-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933267-01 09/04/17 19:52 • (MS) R3247494-5 09/04/17 16:05 • (MSD) R3247494-6 09/04/17 16:26

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0302	U	0.966	1.24	32.0	41.0	100	16.0-149			24.4	28
Ethylbenzene	0.0302	4.74	5.89	6.03	38.1	42.7	100	10.0-147			2.35	31
Hexachloro-1,3-butadiene	0.0302	U	1.05	1.54	34.9	50.9	100	10.0-154			37.4	40
Isopropylbenzene	0.0302	0.851	1.91	2.20	35.3	44.7	100	10.0-147			13.8	33
2-Hexanone	0.151	U	6.45	8.87	42.8	58.8	100	12.0-158		J3	31.5	30
p-Isopropyltoluene	0.0302	0.255	1.46	1.70	39.8	47.9	100	10.0-156			15.4	37
2-Butanone (MEK)	0.151	U	5.50	6.65	36.5	44.1	100	10.0-160			19.0	33
n-Hexane	0.0302	U	0.272	0.326	9.03	10.8	100	10.0-140		J6	18.1	34
Iodomethane	0.151	U	4.03	5.12	26.7	34.0	100	10.0-157			23.8	34
Methylene Chloride	0.0302	U	0.768	0.989	25.5	32.8	100	16.0-139			25.2	29
4-Methyl-2-pentanone (MIBK)	0.151	U	8.37	10.0	55.5	66.6	100	12.0-160			18.1	32
Methyl tert-butyl ether	0.0302	U	1.04	1.38	34.6	45.7	100	21.0-145			27.5	29
Naphthalene	0.0302	5.21	6.07	6.68	28.7	48.8	100	10.0-153			9.51	36
n-Propylbenzene	0.0302	2.84	3.80	4.00	31.5	38.3	100	10.0-151			5.21	34
Styrene	0.0302	U	1.06	1.51	35.1	50.1	100	10.0-155		J3	35.2	34
1,1,1,2-Tetrachloroethane	0.0302	U	1.38	1.80	45.7	59.8	100	10.0-147			26.7	30
1,1,2,2-Tetrachloroethane	0.0302	U	1.44	1.88	47.7	62.3	100	10.0-155			26.5	31
Tetrachloroethene	0.0302	U	0.991	1.31	32.9	43.3	100	10.0-144			27.5	32
Toluene	0.0302	0.372	1.33	1.60	31.7	40.8	100	10.0-144			18.8	28
1,1,2-Trichlorofluoroethane	0.0302	U	0.976	1.17	32.4	38.8	100	10.0-153			18.1	33
1,2,3-Trichlorobenzene	0.0302	U	1.24	1.70	41.2	56.5	100	10.0-153			31.3	40
1,2,4-Trichlorobenzene	0.0302	U	1.20	1.59	39.7	52.6	100	10.0-156			28.1	40
1,1,1-Trichloroethane	0.0302	U	0.926	1.21	30.7	40.2	100	18.0-145			26.8	29
1,1,2-Trichloroethane	0.0302	U	1.64	2.06	54.5	68.3	100	12.0-151			22.4	28
Trichloroethene	0.0302	U	0.994	1.27	33.0	42.2	100	11.0-148			24.6	29
Trichlorofluoromethane	0.0302	U	0.847	1.11	28.1	36.8	100	10.0-157			26.8	34
1,2,3-Trichloropropene	0.0302	U	1.31	1.72	43.3	56.9	100	10.0-154			27.1	32
1,2,3-Trimethylbenzene	0.0302	5.03	5.56	5.77	17.3	24.4	100	10.0-150			3.77	33
1,2,4-Trimethylbenzene	0.0302	7.0	16.6	16.4	0.000	0.000	100	10.0-151		V	1.39	34
1,3,5-Trimethylbenzene	0.0302	3.37	4.18	4.32	27.1	31.7	100	10.0-150			3.30	33
Vinyl chloride	0.0302	U	0.545	0.675	18.1	22.4	100	10.0-150			21.3	29
Xylenes, Total	0.0905	6.02	9.14	9.84	34.6	42.3	100	10.0-150			7.37	31
Vinyl acetate	0.151	U	3.47	4.29	23.0	28.5	100	10.0-160			21.3	40
(S) Toluene-d8					106	106		80.0-120				
(S) Dibromofluoromethane					87.8	88.1		74.0-131				
(S) 4-Bromofluorobenzene					91.2	89.3		64.0-132				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

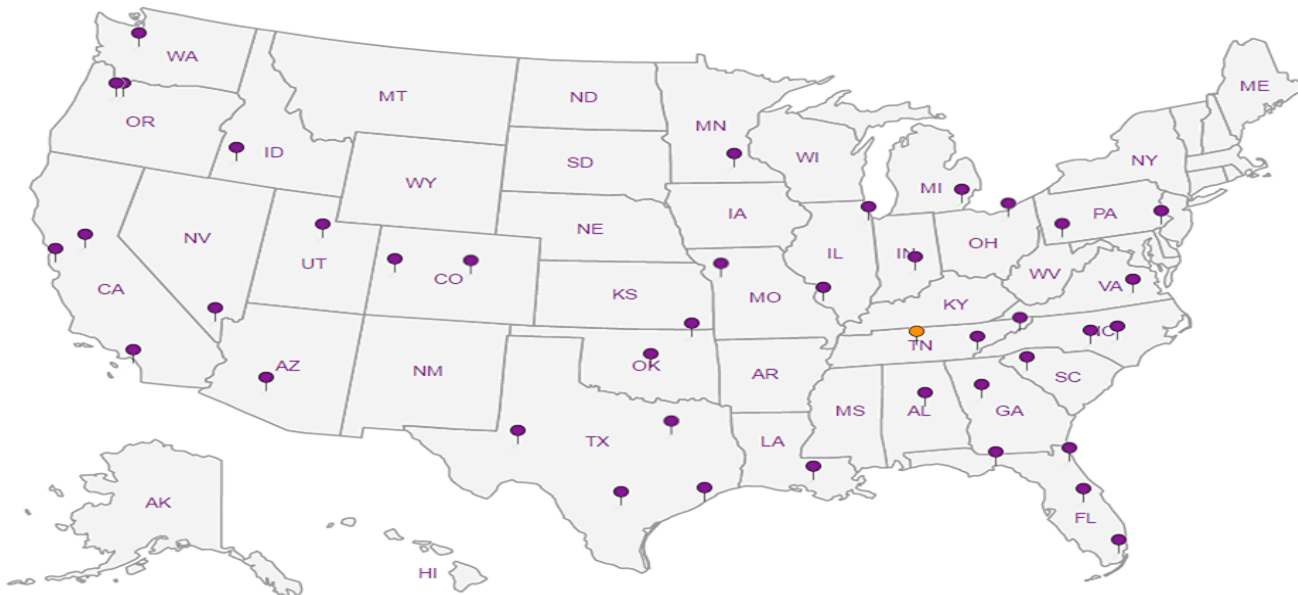
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeman

Email To: bhaldeman@pesenv.com

Project Description: **American Linen Project**

City/State Collected: **SEATTLE, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.602

Lab Project #
PESENVWA-ALP

Collected by (login):
SHANNON MCKERNAN

Site/Facility ID #
1413.001.02.602

P.O. #

Collected by (signature):
SMB

Rush? (Lab MUST be notified)

Quote #

Immediately Packed on ice N Y X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of Containers

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Pres

NWTPHGX 2ozClr-NoPres

NWTPHGX 40mlAmb HCl

TS 4ozClr-NoPres

V8260C 40ml/NaHSO4/Syr/MeOH

V8260C 40mlAmb-HCl

Analysis / Container / Preservative

Chain of Custody Page 1 of 2



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# **1933267**

Table **B169**

Account: **PESENVSWA**

Template: **T126584**

Prelogin: **P613271**

TSR: **110 - Brian Ford**

PB:

Shipped Via: **FedEx Ground**

Remarks

Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Pres	Analysis / Container / Preservative
B-205-10	GRAB	SS	10	8/30/17	0930	5A	X
B-205-55		SS	55		1135	5A	X
B-MW-140-15		SS	15		1030	6A	X
B-MW-140-25		SS	25		1100	4A	X
B-MW-140-35		SS	35		1135	4A	X
B-B-205-65		SS	65		1220	5A	X
B-205-75		SS	75		1500	5A	X
B-904-50		SS	50		1605	5A	X
B-MW-140-45		SS	45		1220	4A	X

Remarks:

Samples returned via:
UPS FedEx Counter

Tracking # **7474 09210241**

Relinquished by: (Signature)

Date: **8/30/17**

Time: **1630**

Received by: (Signature)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

pH Temp
Flow Other

Tip Blank Received: Yes/No
HCL/MeOH

Temp: **57°C** Bottles Received: **59**

Date: **8/31/17** Time: **0845**

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VQA Zero Headpace: Y N
Preservation Correct/Checked: Y N

If preservation required by Login: Date/Time

Hold:

Condition: **NCI / 00**

PES Environmental, Inc. - WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Report to:
Bill Haldeaman

Email To: bhaldeaman@pesenv.com

Project
American Linen Project

City/State
 Collected **SEATTLE, WA**

Phone: **206-529-3980**
 Fax: **206-529-3985**

Client Project #
1413 001 02.002

Lab Project #
PESENVSWA-ALP

Collected by (print):
SHANNON MCKERNAN

Site/Facility ID #
1413.001.02.002

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on Ice: N Y

Same Day Five Day
 Next Day 5 Day (Frid Only)
 Two Day 10 Day (Frid Only)
 Three Day

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Ints	Analysis / Container / Preservative
B ^c MW-140-55	GRAB	SS	55	8/30/17	1320	4	NWTPHGX 2ozClr-NoPres
B ^c MW-140-65		SS	65		1435	4	NWTPHGX 40mlAmb HCl
B ^c MW-140-75		SS	75		1535	4	TS 4ozClr-NoPres
B ^c RPB/LANK-083017		NA ^{SS}	NA	6/8/17	NK	1 ^{SS}	V8260C 40ml/NaHSO4/Syr/MeOH
B-		SS				4	V8260C 40mlAmb-HCl
B-		SS				4	
B-		SS				4	
B-		SS				4	
B-		SS				4	
B-		SS				4	

Remarks:

Tracking # **7474 012 024**

Received by: (Signature)

Received by: (Signature)

Date: **8/30/17** Time: **1630**

Date: **8/31/17** Time: **0845**

Temp: **5.70** °C Bottles Received: **59**

Temp: **5.10** °C Bottles Received: **59**

Flow: _____ Other: _____

pH: _____ Temp: _____

Sample returned via: UPS FedEx Courier

Matrix: SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Waste Water
 DW - Drinking Water
 OT - Other _____

Sample Receipt Checklist

COC Seal Present/Intact: Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

If Applicable
 VOA Zero Headpace: Y N

Preservation Correct/Checked: Y N

Relinquished by: (Signature)

Relinquished by: (Signature)

Relinquished by: (Signature)

Received by: (Signature)

Received by: (Signature)

Date: **8/31/17** Time: **0845**

Hold: NCE OK

Chain of Custody Page 2 of 2

12055 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

Acctnum: PESENVSWA
 Template: T126584
 Prelogin: P613271
 TSR: 110 - Brian Ford
 PB:

Shipped Via: **FedEx Ground**

Remarks: _____ Sample # (lab only)

September 11, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L933455
Samples Received: 09/01/2017
Project Number: 1413.001.02.602
Description: American Linen Project

Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	2 Tc
Cn: Case Narrative	5	
Sr: Sample Results	6	3 Ss
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MW-137-25 L933455-02	8	4 Cn
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MW-137-45 L933455-04	12	5 Sr
MW-140-130 L933455-05	14	
MW-140-140 L933455-06	16	
MW-137-75 L933455-07	18	6 Qc
MW-137-76-W L933455-08	20	
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Qc: Quality Control Summary	24	8 Al
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Gl: Glossary of Terms	39	
Al: Accreditations & Locations	40	
Sc: Sample Chain of Custody	41	



MW-140-90 L933455-01 Solid

Collected by Shannon McKernan
 Collected date/time 08/30/17 17:40
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017807	1	09/08/17 09:09	09/08/17 09:23	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016411	1	08/30/17 17:40	09/02/17 20:18	ACG

1 Cp

2 Tc

3 Ss

MW-137-25 L933455-02 Solid

Collected by Shannon McKernan
 Collected date/time 08/31/17 09:50
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017807	1	09/08/17 09:09	09/08/17 09:23	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016832	1	08/31/17 09:50	09/05/17 19:57	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016411	1	08/31/17 09:50	09/02/17 20:44	ACG

4 Cn

5 Sr

6 Qc

MW-140-110 L933455-03 Solid

Collected by Shannon McKernan
 Collected date/time 08/31/17 10:45
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017807	1	09/08/17 09:09	09/08/17 09:23	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016411	1	08/31/17 10:45	09/02/17 21:10	ACG

7 Gl

8 Al

9 Sc

MW-137-45 L933455-04 Solid

Collected by Shannon McKernan
 Collected date/time 08/31/17 11:40
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017807	1	09/08/17 09:09	09/08/17 09:23	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016832	1	08/31/17 11:40	09/05/17 20:19	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016411	25	08/31/17 11:40	09/05/17 16:45	ACG

MW-140-130 L933455-05 Solid

Collected by Shannon McKernan
 Collected date/time 08/31/17 12:40
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017807	1	09/08/17 09:09	09/08/17 09:23	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016411	1	08/31/17 12:40	09/05/17 17:11	ACG

MW-140-140 L933455-06 Solid

Collected by Shannon McKernan
 Collected date/time 08/31/17 14:15
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017807	1	09/08/17 09:09	09/08/17 09:23	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016411	25	08/31/17 14:15	09/06/17 12:42	BMB

MW-137-75 L933455-07 Solid

Collected by Shannon McKernan
 Collected date/time 08/31/17 15:25
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1017937	1	09/07/17 16:33	09/07/17 16:54	MLW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016411	1	08/31/17 15:25	09/05/17 18:02	ACG



MW-137-76-W L933455-08 GW

Collected by Shannon McKernan
 Collected date/time 08/31/17 15:30
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016529	5	09/03/17 18:37	09/03/17 18:37	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016388	5	09/02/17 17:10	09/02/17 17:10	ACG

¹ Cp

² Tc

³ Ss

B-905-60-W L933455-09 GW

Collected by Shannon McKernan
 Collected date/time 08/31/17 15:45
 Received date/time 09/01/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1016529	1	09/03/17 19:01	09/03/17 19:01	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1016388	5	09/02/17 17:30	09/02/17 17:30	ACG

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.0		1	09/08/2017 09:23	WG1017807

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0118	0.0588	1	09/02/2017 20:18	WG1016411
Acrylonitrile	U		0.00211	0.0118	1	09/02/2017 20:18	WG1016411
Benzene	U		0.000318	0.00118	1	09/02/2017 20:18	WG1016411
Bromobenzene	U		0.000334	0.00118	1	09/02/2017 20:18	WG1016411
Bromodichloromethane	U		0.000299	0.00118	1	09/02/2017 20:18	WG1016411
Bromochloromethane	U		0.000459	0.00588	1	09/02/2017 20:18	WG1016411
Bromoform	U		0.000499	0.00118	1	09/02/2017 20:18	WG1016411
Bromomethane	U		0.00158	0.00588	1	09/02/2017 20:18	WG1016411
n-Butylbenzene	U		0.000303	0.00118	1	09/02/2017 20:18	WG1016411
sec-Butylbenzene	U	J4	0.000236	0.00118	1	09/02/2017 20:18	WG1016411
tert-Butylbenzene	U		0.000242	0.00118	1	09/02/2017 20:18	WG1016411
Carbon disulfide	U		0.000260	0.00118	1	09/02/2017 20:18	WG1016411
Carbon tetrachloride	U		0.000386	0.00118	1	09/02/2017 20:18	WG1016411
Chlorobenzene	U		0.000249	0.00118	1	09/02/2017 20:18	WG1016411
Chlorodibromomethane	U		0.000439	0.00118	1	09/02/2017 20:18	WG1016411
Chloroethane	U		0.00111	0.00588	1	09/02/2017 20:18	WG1016411
Chloroform	U		0.000269	0.00588	1	09/02/2017 20:18	WG1016411
Chloromethane	U		0.000441	0.00294	1	09/02/2017 20:18	WG1016411
2-Chlorotoluene	U		0.000354	0.00118	1	09/02/2017 20:18	WG1016411
4-Chlorotoluene	U		0.000282	0.00118	1	09/02/2017 20:18	WG1016411
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00588	1	09/02/2017 20:18	WG1016411
1,2-Dibromoethane	U		0.000403	0.00118	1	09/02/2017 20:18	WG1016411
Dibromomethane	U		0.000449	0.00118	1	09/02/2017 20:18	WG1016411
1,2-Dichlorobenzene	U		0.000359	0.00118	1	09/02/2017 20:18	WG1016411
1,3-Dichlorobenzene	U		0.000281	0.00118	1	09/02/2017 20:18	WG1016411
1,4-Dichlorobenzene	U		0.000266	0.00118	1	09/02/2017 20:18	WG1016411
Dichlorodifluoromethane	U		0.000839	0.00588	1	09/02/2017 20:18	WG1016411
1,1-Dichloroethane	U		0.000234	0.00118	1	09/02/2017 20:18	WG1016411
1,2-Dichloroethane	U		0.000312	0.00118	1	09/02/2017 20:18	WG1016411
1,1-Dichloroethene	U		0.000356	0.00118	1	09/02/2017 20:18	WG1016411
cis-1,2-Dichloroethene	U		0.000276	0.00118	1	09/02/2017 20:18	WG1016411
trans-1,2-Dichloroethene	U		0.000311	0.00118	1	09/02/2017 20:18	WG1016411
1,2-Dichloropropane	U		0.000421	0.00118	1	09/02/2017 20:18	WG1016411
1,1-Dichloropropene	U		0.000373	0.00118	1	09/02/2017 20:18	WG1016411
1,3-Dichloropropane	U		0.000244	0.00118	1	09/02/2017 20:18	WG1016411
cis-1,3-Dichloropropene	U		0.000308	0.00118	1	09/02/2017 20:18	WG1016411
trans-1,3-Dichloropropene	U		0.000314	0.00118	1	09/02/2017 20:18	WG1016411
trans-1,4-Dichloro-2-butene	U		0.000915	0.00294	1	09/02/2017 20:18	WG1016411
2,2-Dichloropropane	U		0.000328	0.00118	1	09/02/2017 20:18	WG1016411
Di-isopropyl ether	U		0.000292	0.00118	1	09/02/2017 20:18	WG1016411
Ethylbenzene	U		0.000349	0.00118	1	09/02/2017 20:18	WG1016411
Hexachloro-1,3-butadiene	U		0.000402	0.00118	1	09/02/2017 20:18	WG1016411
2-Hexanone	U		0.00161	0.0118	1	09/02/2017 20:18	WG1016411
n-Hexane	0.00188	J	0.000341	0.0118	1	09/02/2017 20:18	WG1016411
Iodomethane	U		0.00298	0.0118	1	09/02/2017 20:18	WG1016411
Isopropylbenzene	U		0.000286	0.00118	1	09/02/2017 20:18	WG1016411
p-Isopropyltoluene	U		0.000240	0.00118	1	09/02/2017 20:18	WG1016411
2-Butanone (MEK)	U		0.00551	0.0118	1	09/02/2017 20:18	WG1016411
Methylene Chloride	U		0.00118	0.00588	1	09/02/2017 20:18	WG1016411
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0118	1	09/02/2017 20:18	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/30/17 17:40

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000249	0.00118	1	09/02/2017 20:18	WG1016411
Naphthalene	U		0.00118	0.00588	1	09/02/2017 20:18	WG1016411
n-Propylbenzene	U	J4	0.000242	0.00118	1	09/02/2017 20:18	WG1016411
Styrene	U		0.000275	0.00118	1	09/02/2017 20:18	WG1016411
1,1,1,2-Tetrachloroethane	U		0.000311	0.00118	1	09/02/2017 20:18	WG1016411
1,1,2,2-Tetrachloroethane	U		0.000429	0.00118	1	09/02/2017 20:18	WG1016411
1,1,2-Trichlorotrifluoroethane	U		0.000429	0.00118	1	09/02/2017 20:18	WG1016411
Tetrachloroethene	U		0.000325	0.00118	1	09/02/2017 20:18	WG1016411
Toluene	U		0.000511	0.00588	1	09/02/2017 20:18	WG1016411
1,2,3-Trichlorobenzene	U		0.000360	0.00118	1	09/02/2017 20:18	WG1016411
1,2,4-Trichlorobenzene	U		0.000456	0.00118	1	09/02/2017 20:18	WG1016411
1,1,1-Trichloroethane	U		0.000336	0.00118	1	09/02/2017 20:18	WG1016411
1,1,2-Trichloroethane	U		0.000326	0.00118	1	09/02/2017 20:18	WG1016411
Trichloroethene	U		0.000328	0.00118	1	09/02/2017 20:18	WG1016411
Trichlorofluoromethane	U		0.000449	0.00588	1	09/02/2017 20:18	WG1016411
1,2,3-Trichloropropane	U		0.000872	0.00294	1	09/02/2017 20:18	WG1016411
1,2,4-Trimethylbenzene	U		0.000248	0.00118	1	09/02/2017 20:18	WG1016411
1,2,3-Trimethylbenzene	U		0.000338	0.00118	1	09/02/2017 20:18	WG1016411
1,3,5-Trimethylbenzene	U		0.000313	0.00118	1	09/02/2017 20:18	WG1016411
Vinyl acetate	U		0.00281	0.0118	1	09/02/2017 20:18	WG1016411
Vinyl chloride	U		0.000342	0.00118	1	09/02/2017 20:18	WG1016411
Xylenes, Total	U		0.000821	0.00353	1	09/02/2017 20:18	WG1016411
(S) Toluene-d8	94.3			80.0-120		09/02/2017 20:18	WG1016411
(S) Dibromofluoromethane	112			74.0-131		09/02/2017 20:18	WG1016411
(S) 4-Bromofluorobenzene	103			64.0-132		09/02/2017 20:18	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	09/08/2017 09:23	WG1017807

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0370	0.109	1	09/05/2017 19:57	WG1016832
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-120		09/05/2017 19:57	WG1016832

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0109	0.0545	1	09/02/2017 20:44	WG1016411
Acrylonitrile	U		0.00195	0.0109	1	09/02/2017 20:44	WG1016411
Benzene	U		0.000294	0.00109	1	09/02/2017 20:44	WG1016411
Bromobenzene	U		0.000310	0.00109	1	09/02/2017 20:44	WG1016411
Bromodichloromethane	U		0.000277	0.00109	1	09/02/2017 20:44	WG1016411
Bromochloromethane	U		0.000425	0.00545	1	09/02/2017 20:44	WG1016411
Bromoform	U		0.000462	0.00109	1	09/02/2017 20:44	WG1016411
Bromomethane	U		0.00146	0.00545	1	09/02/2017 20:44	WG1016411
n-Butylbenzene	U		0.000281	0.00109	1	09/02/2017 20:44	WG1016411
sec-Butylbenzene	U	J4	0.000219	0.00109	1	09/02/2017 20:44	WG1016411
tert-Butylbenzene	U		0.000225	0.00109	1	09/02/2017 20:44	WG1016411
Carbon disulfide	U		0.000241	0.00109	1	09/02/2017 20:44	WG1016411
Carbon tetrachloride	U		0.000358	0.00109	1	09/02/2017 20:44	WG1016411
Chlorobenzene	U		0.000231	0.00109	1	09/02/2017 20:44	WG1016411
Chlorodibromomethane	U		0.000407	0.00109	1	09/02/2017 20:44	WG1016411
Chloroethane	U		0.00103	0.00545	1	09/02/2017 20:44	WG1016411
Chloroform	U		0.000250	0.00545	1	09/02/2017 20:44	WG1016411
Chloromethane	U		0.000409	0.00273	1	09/02/2017 20:44	WG1016411
2-Chlorotoluene	U		0.000328	0.00109	1	09/02/2017 20:44	WG1016411
4-Chlorotoluene	U		0.000262	0.00109	1	09/02/2017 20:44	WG1016411
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00545	1	09/02/2017 20:44	WG1016411
1,2-Dibromoethane	U		0.000374	0.00109	1	09/02/2017 20:44	WG1016411
Dibromomethane	U		0.000417	0.00109	1	09/02/2017 20:44	WG1016411
1,2-Dichlorobenzene	U		0.000333	0.00109	1	09/02/2017 20:44	WG1016411
1,3-Dichlorobenzene	U		0.000261	0.00109	1	09/02/2017 20:44	WG1016411
1,4-Dichlorobenzene	U		0.000246	0.00109	1	09/02/2017 20:44	WG1016411
Dichlorodifluoromethane	U		0.000778	0.00545	1	09/02/2017 20:44	WG1016411
1,1-Dichloroethane	U		0.000217	0.00109	1	09/02/2017 20:44	WG1016411
1,2-Dichloroethane	U		0.000289	0.00109	1	09/02/2017 20:44	WG1016411
1,1-Dichloroethene	U		0.000330	0.00109	1	09/02/2017 20:44	WG1016411
cis-1,2-Dichloroethene	0.000783	J	0.000256	0.00109	1	09/02/2017 20:44	WG1016411
trans-1,2-Dichloroethene	U		0.000288	0.00109	1	09/02/2017 20:44	WG1016411
1,2-Dichloropropane	U		0.000390	0.00109	1	09/02/2017 20:44	WG1016411
1,1-Dichloropropene	U		0.000346	0.00109	1	09/02/2017 20:44	WG1016411
1,3-Dichloropropane	U		0.000226	0.00109	1	09/02/2017 20:44	WG1016411
cis-1,3-Dichloropropene	U		0.000286	0.00109	1	09/02/2017 20:44	WG1016411
trans-1,3-Dichloropropene	U		0.000291	0.00109	1	09/02/2017 20:44	WG1016411
trans-1,4-Dichloro-2-butene	U		0.000849	0.00273	1	09/02/2017 20:44	WG1016411
2,2-Dichloropropane	U		0.000304	0.00109	1	09/02/2017 20:44	WG1016411
Di-isopropyl ether	U		0.000270	0.00109	1	09/02/2017 20:44	WG1016411
Ethylbenzene	U		0.000324	0.00109	1	09/02/2017 20:44	WG1016411
Hexachloro-1,3-butadiene	U		0.000373	0.00109	1	09/02/2017 20:44	WG1016411
2-Hexanone	U		0.00149	0.0109	1	09/02/2017 20:44	WG1016411
n-Hexane	0.00162	J	0.000316	0.0109	1	09/02/2017 20:44	WG1016411

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/31/17 09:50

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00276	0.0109	1	09/02/2017 20:44	WG1016411
Isopropylbenzene	U		0.000265	0.00109	1	09/02/2017 20:44	WG1016411
p-Isopropyltoluene	U		0.000223	0.00109	1	09/02/2017 20:44	WG1016411
2-Butanone (MEK)	U		0.00510	0.0109	1	09/02/2017 20:44	WG1016411
Methylene Chloride	U		0.00109	0.00545	1	09/02/2017 20:44	WG1016411
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0109	1	09/02/2017 20:44	WG1016411
Methyl tert-butyl ether	U		0.000231	0.00109	1	09/02/2017 20:44	WG1016411
Naphthalene	U		0.00109	0.00545	1	09/02/2017 20:44	WG1016411
n-Propylbenzene	U	J4	0.000225	0.00109	1	09/02/2017 20:44	WG1016411
Styrene	U		0.000255	0.00109	1	09/02/2017 20:44	WG1016411
1,1,1,2-Tetrachloroethane	U		0.000288	0.00109	1	09/02/2017 20:44	WG1016411
1,1,2,2-Tetrachloroethane	U		0.000398	0.00109	1	09/02/2017 20:44	WG1016411
1,1,2-Trichlorotrifluoroethane	U		0.000398	0.00109	1	09/02/2017 20:44	WG1016411
Tetrachloroethene	0.00174		0.000301	0.00109	1	09/02/2017 20:44	WG1016411
Toluene	U		0.000473	0.00545	1	09/02/2017 20:44	WG1016411
1,2,3-Trichlorobenzene	U		0.000334	0.00109	1	09/02/2017 20:44	WG1016411
1,2,4-Trichlorobenzene	U		0.000423	0.00109	1	09/02/2017 20:44	WG1016411
1,1,1-Trichloroethane	U		0.000312	0.00109	1	09/02/2017 20:44	WG1016411
1,1,2-Trichloroethane	U		0.000302	0.00109	1	09/02/2017 20:44	WG1016411
Trichloroethene	0.00245		0.000304	0.00109	1	09/02/2017 20:44	WG1016411
Trichlorofluoromethane	U		0.000417	0.00545	1	09/02/2017 20:44	WG1016411
1,2,3-Trichloropropane	U		0.000808	0.00273	1	09/02/2017 20:44	WG1016411
1,2,4-Trimethylbenzene	U		0.000230	0.00109	1	09/02/2017 20:44	WG1016411
1,2,3-Trimethylbenzene	U		0.000313	0.00109	1	09/02/2017 20:44	WG1016411
1,3,5-Trimethylbenzene	U		0.000290	0.00109	1	09/02/2017 20:44	WG1016411
Vinyl acetate	U		0.00261	0.0109	1	09/02/2017 20:44	WG1016411
Vinyl chloride	U		0.000317	0.00109	1	09/02/2017 20:44	WG1016411
Xylenes, Total	U		0.000761	0.00327	1	09/02/2017 20:44	WG1016411
(S) Toluene-d8	96.2			80.0-120		09/02/2017 20:44	WG1016411
(S) Dibromofluoromethane	111			74.0-131		09/02/2017 20:44	WG1016411
(S) 4-Bromofluorobenzene	102			64.0-132		09/02/2017 20:44	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.4		1	09/08/2017 09:23	WG1017807

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0116	0.0579	1	09/02/2017 21:10	WG1016411
Acrylonitrile	U		0.00207	0.0116	1	09/02/2017 21:10	WG1016411
Benzene	U		0.000313	0.00116	1	09/02/2017 21:10	WG1016411
Bromobenzene	U		0.000329	0.00116	1	09/02/2017 21:10	WG1016411
Bromodichloromethane	U		0.000294	0.00116	1	09/02/2017 21:10	WG1016411
Bromochloromethane	U		0.000452	0.00579	1	09/02/2017 21:10	WG1016411
Bromoform	U		0.000491	0.00116	1	09/02/2017 21:10	WG1016411
Bromomethane	U		0.00155	0.00579	1	09/02/2017 21:10	WG1016411
n-Butylbenzene	U		0.000299	0.00116	1	09/02/2017 21:10	WG1016411
sec-Butylbenzene	U	J4	0.000233	0.00116	1	09/02/2017 21:10	WG1016411
tert-Butylbenzene	U		0.000239	0.00116	1	09/02/2017 21:10	WG1016411
Carbon disulfide	U		0.000256	0.00116	1	09/02/2017 21:10	WG1016411
Carbon tetrachloride	U		0.000380	0.00116	1	09/02/2017 21:10	WG1016411
Chlorobenzene	U		0.000245	0.00116	1	09/02/2017 21:10	WG1016411
Chlorodibromomethane	U		0.000432	0.00116	1	09/02/2017 21:10	WG1016411
Chloroethane	U		0.00110	0.00579	1	09/02/2017 21:10	WG1016411
Chloroform	U		0.000265	0.00579	1	09/02/2017 21:10	WG1016411
Chloromethane	U		0.000434	0.00290	1	09/02/2017 21:10	WG1016411
2-Chlorotoluene	U		0.000349	0.00116	1	09/02/2017 21:10	WG1016411
4-Chlorotoluene	U		0.000278	0.00116	1	09/02/2017 21:10	WG1016411
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00579	1	09/02/2017 21:10	WG1016411
1,2-Dibromoethane	U		0.000397	0.00116	1	09/02/2017 21:10	WG1016411
Dibromomethane	U		0.000442	0.00116	1	09/02/2017 21:10	WG1016411
1,2-Dichlorobenzene	U		0.000353	0.00116	1	09/02/2017 21:10	WG1016411
1,3-Dichlorobenzene	U		0.000277	0.00116	1	09/02/2017 21:10	WG1016411
1,4-Dichlorobenzene	U		0.000262	0.00116	1	09/02/2017 21:10	WG1016411
Dichlorodifluoromethane	U		0.000826	0.00579	1	09/02/2017 21:10	WG1016411
1,1-Dichloroethane	U		0.000230	0.00116	1	09/02/2017 21:10	WG1016411
1,2-Dichloroethane	U		0.000307	0.00116	1	09/02/2017 21:10	WG1016411
1,1-Dichloroethene	U		0.000351	0.00116	1	09/02/2017 21:10	WG1016411
cis-1,2-Dichloroethene	U		0.000272	0.00116	1	09/02/2017 21:10	WG1016411
trans-1,2-Dichloroethene	U		0.000306	0.00116	1	09/02/2017 21:10	WG1016411
1,2-Dichloropropane	U		0.000415	0.00116	1	09/02/2017 21:10	WG1016411
1,1-Dichloropropene	U		0.000367	0.00116	1	09/02/2017 21:10	WG1016411
1,3-Dichloropropane	U		0.000240	0.00116	1	09/02/2017 21:10	WG1016411
cis-1,3-Dichloropropene	U		0.000303	0.00116	1	09/02/2017 21:10	WG1016411
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	09/02/2017 21:10	WG1016411
trans-1,4-Dichloro-2-butene	U		0.000901	0.00290	1	09/02/2017 21:10	WG1016411
2,2-Dichloropropane	U		0.000323	0.00116	1	09/02/2017 21:10	WG1016411
Di-isopropyl ether	U		0.000287	0.00116	1	09/02/2017 21:10	WG1016411
Ethylbenzene	U		0.000344	0.00116	1	09/02/2017 21:10	WG1016411
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	09/02/2017 21:10	WG1016411
2-Hexanone	U		0.00159	0.0116	1	09/02/2017 21:10	WG1016411
n-Hexane	0.000364	J	0.000336	0.0116	1	09/02/2017 21:10	WG1016411
Iodomethane	U		0.00293	0.0116	1	09/02/2017 21:10	WG1016411
Isopropylbenzene	U		0.000281	0.00116	1	09/02/2017 21:10	WG1016411
p-Isopropyltoluene	U		0.000236	0.00116	1	09/02/2017 21:10	WG1016411
2-Butanone (MEK)	U		0.00542	0.0116	1	09/02/2017 21:10	WG1016411
Methylene Chloride	U		0.00116	0.00579	1	09/02/2017 21:10	WG1016411
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	09/02/2017 21:10	WG1016411



Collected date/time: 08/31/17 10:45

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00116	1	09/02/2017 21:10	WG1016411
Naphthalene	U		0.00116	0.00579	1	09/02/2017 21:10	WG1016411
n-Propylbenzene	U	J4	0.000239	0.00116	1	09/02/2017 21:10	WG1016411
Styrene	U		0.000271	0.00116	1	09/02/2017 21:10	WG1016411
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	09/02/2017 21:10	WG1016411
1,1,2,2-Tetrachloroethane	U		0.000423	0.00116	1	09/02/2017 21:10	WG1016411
1,1,2-Trichlorotrifluoroethane	U		0.000423	0.00116	1	09/02/2017 21:10	WG1016411
Tetrachloroethene	U		0.000320	0.00116	1	09/02/2017 21:10	WG1016411
Toluene	U		0.000503	0.00579	1	09/02/2017 21:10	WG1016411
1,2,3-Trichlorobenzene	U		0.000354	0.00116	1	09/02/2017 21:10	WG1016411
1,2,4-Trichlorobenzene	U		0.000449	0.00116	1	09/02/2017 21:10	WG1016411
1,1,1-Trichloroethane	U		0.000331	0.00116	1	09/02/2017 21:10	WG1016411
1,1,2-Trichloroethane	U		0.000321	0.00116	1	09/02/2017 21:10	WG1016411
Trichloroethene	U		0.000323	0.00116	1	09/02/2017 21:10	WG1016411
Trichlorofluoromethane	U		0.000442	0.00579	1	09/02/2017 21:10	WG1016411
1,2,3-Trichloropropane	U		0.000858	0.00290	1	09/02/2017 21:10	WG1016411
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	09/02/2017 21:10	WG1016411
1,2,3-Trimethylbenzene	U		0.000332	0.00116	1	09/02/2017 21:10	WG1016411
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	09/02/2017 21:10	WG1016411
Vinyl acetate	U		0.00277	0.0116	1	09/02/2017 21:10	WG1016411
Vinyl chloride	U		0.000337	0.00116	1	09/02/2017 21:10	WG1016411
Xylenes, Total	U		0.000808	0.00347	1	09/02/2017 21:10	WG1016411
(S) Toluene-d8	96.8			80.0-120		09/02/2017 21:10	WG1016411
(S) Dibromofluoromethane	112			74.0-131		09/02/2017 21:10	WG1016411
(S) 4-Bromofluorobenzene	101			64.0-132		09/02/2017 21:10	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.4		1	09/08/2017 09:23	WG1017807

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0384	0.113	1	09/05/2017 20:19	WG1016832
(S) a,a,a-Trifluorotoluene(FID)	98.3			77.0-120		09/05/2017 20:19	WG1016832

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.283	1.41	25	09/05/2017 16:45	WG1016411
Acrylonitrile	U		0.0507	0.283	25	09/05/2017 16:45	WG1016411
Benzene	U		0.00764	0.0283	25	09/05/2017 16:45	WG1016411
Bromobenzene	U		0.00803	0.0283	25	09/05/2017 16:45	WG1016411
Bromodichloromethane	U		0.00719	0.0283	25	09/05/2017 16:45	WG1016411
Bromochloromethane	U		0.0110	0.141	25	09/05/2017 16:45	WG1016411
Bromoform	U		0.0120	0.0283	25	09/05/2017 16:45	WG1016411
Bromomethane	U		0.0379	0.141	25	09/05/2017 16:45	WG1016411
n-Butylbenzene	U		0.00730	0.0283	25	09/05/2017 16:45	WG1016411
sec-Butylbenzene	U	J4	0.00568	0.0283	25	09/05/2017 16:45	WG1016411
tert-Butylbenzene	U		0.00583	0.0283	25	09/05/2017 16:45	WG1016411
Carbon disulfide	U		0.00625	0.0283	25	09/05/2017 16:45	WG1016411
Carbon tetrachloride	U		0.00928	0.0283	25	09/05/2017 16:45	WG1016411
Chlorobenzene	U		0.00600	0.0283	25	09/05/2017 16:45	WG1016411
Chlorodibromomethane	U		0.0105	0.0283	25	09/05/2017 16:45	WG1016411
Chloroethane	U		0.0267	0.141	25	09/05/2017 16:45	WG1016411
Chloroform	U		0.00647	0.141	25	09/05/2017 16:45	WG1016411
Chloromethane	U		0.0106	0.0707	25	09/05/2017 16:45	WG1016411
2-Chlorotoluene	U		0.00851	0.0283	25	09/05/2017 16:45	WG1016411
4-Chlorotoluene	U		0.00679	0.0283	25	09/05/2017 16:45	WG1016411
1,2-Dibromo-3-Chloropropane	U		0.0296	0.141	25	09/05/2017 16:45	WG1016411
1,2-Dibromoethane	U		0.00971	0.0283	25	09/05/2017 16:45	WG1016411
Dibromomethane	U		0.0108	0.0283	25	09/05/2017 16:45	WG1016411
1,2-Dichlorobenzene	U		0.00862	0.0283	25	09/05/2017 16:45	WG1016411
1,3-Dichlorobenzene	U		0.00677	0.0283	25	09/05/2017 16:45	WG1016411
1,4-Dichlorobenzene	U		0.00639	0.0283	25	09/05/2017 16:45	WG1016411
Dichlorodifluoromethane	U		0.0201	0.141	25	09/05/2017 16:45	WG1016411
1,1-Dichloroethane	U		0.00564	0.0283	25	09/05/2017 16:45	WG1016411
1,2-Dichloroethane	U		0.00749	0.0283	25	09/05/2017 16:45	WG1016411
1,1-Dichloroethene	U		0.00858	0.0283	25	09/05/2017 16:45	WG1016411
cis-1,2-Dichloroethene	0.00753	J	0.00665	0.0283	25	09/05/2017 16:45	WG1016411
trans-1,2-Dichloroethene	U		0.00747	0.0283	25	09/05/2017 16:45	WG1016411
1,2-Dichloropropane	U		0.0101	0.0283	25	09/05/2017 16:45	WG1016411
1,1-Dichloropropene	U		0.00896	0.0283	25	09/05/2017 16:45	WG1016411
1,3-Dichloropropane	U		0.00586	0.0283	25	09/05/2017 16:45	WG1016411
cis-1,3-Dichloropropene	U		0.00741	0.0283	25	09/05/2017 16:45	WG1016411
trans-1,3-Dichloropropene	U		0.00756	0.0283	25	09/05/2017 16:45	WG1016411
trans-1,4-Dichloro-2-butene	U		0.0220	0.0707	25	09/05/2017 16:45	WG1016411
2,2-Dichloropropane	U		0.00790	0.0283	25	09/05/2017 16:45	WG1016411
Di-isopropyl ether	U		0.00702	0.0283	25	09/05/2017 16:45	WG1016411
Ethylbenzene	U		0.00840	0.0283	25	09/05/2017 16:45	WG1016411
Hexachloro-1,3-butadiene	U		0.00968	0.0283	25	09/05/2017 16:45	WG1016411
2-Hexanone	U		0.0387	0.283	25	09/05/2017 16:45	WG1016411
n-Hexane	0.0117	J	0.00820	0.283	25	09/05/2017 16:45	WG1016411

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 08/31/17 11:40

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0715	0.283	25	09/05/2017 16:45	WG1016411
Isopropylbenzene	U		0.00688	0.0283	25	09/05/2017 16:45	WG1016411
p-Isopropyltoluene	U		0.00577	0.0283	25	09/05/2017 16:45	WG1016411
2-Butanone (MEK)	U		0.132	0.283	25	09/05/2017 16:45	WG1016411
Methylene Chloride	U		0.0283	0.141	25	09/05/2017 16:45	WG1016411
4-Methyl-2-pentanone (MIBK)	U		0.0532	0.283	25	09/05/2017 16:45	WG1016411
Methyl tert-butyl ether	U		0.00600	0.0283	25	09/05/2017 16:45	WG1016411
Naphthalene	U		0.0283	0.141	25	09/05/2017 16:45	WG1016411
n-Propylbenzene	U	J4	0.00583	0.0283	25	09/05/2017 16:45	WG1016411
Styrene	U		0.00662	0.0283	25	09/05/2017 16:45	WG1016411
1,1,1,2-Tetrachloroethane	U		0.00747	0.0283	25	09/05/2017 16:45	WG1016411
1,1,2,2-Tetrachloroethane	U		0.0103	0.0283	25	09/05/2017 16:45	WG1016411
1,1,2-Trichlorotrifluoroethane	U		0.0103	0.0283	25	09/05/2017 16:45	WG1016411
Tetrachloroethene	U		0.00781	0.0283	25	09/05/2017 16:45	WG1016411
Toluene	U		0.0122	0.141	25	09/05/2017 16:45	WG1016411
1,2,3-Trichlorobenzene	U		0.00866	0.0283	25	09/05/2017 16:45	WG1016411
1,2,4-Trichlorobenzene	U		0.0110	0.0283	25	09/05/2017 16:45	WG1016411
1,1,1-Trichloroethane	U		0.00809	0.0283	25	09/05/2017 16:45	WG1016411
1,1,2-Trichloroethane	U		0.00783	0.0283	25	09/05/2017 16:45	WG1016411
Trichloroethene	U		0.00790	0.0283	25	09/05/2017 16:45	WG1016411
Trichlorofluoromethane	U		0.0108	0.141	25	09/05/2017 16:45	WG1016411
1,2,3-Trichloropropane	U		0.0209	0.0707	25	09/05/2017 16:45	WG1016411
1,2,4-Trimethylbenzene	U		0.00597	0.0283	25	09/05/2017 16:45	WG1016411
1,2,3-Trimethylbenzene	U		0.00813	0.0283	25	09/05/2017 16:45	WG1016411
1,3,5-Trimethylbenzene	U		0.00753	0.0283	25	09/05/2017 16:45	WG1016411
Vinyl acetate	U		0.0677	0.283	25	09/05/2017 16:45	WG1016411
Vinyl chloride	U		0.00824	0.0283	25	09/05/2017 16:45	WG1016411
Xylenes, Total	U		0.0197	0.0849	25	09/05/2017 16:45	WG1016411
(S) Toluene-d8	101			80.0-120		09/05/2017 16:45	WG1016411
(S) Dibromofluoromethane	98.9			74.0-131		09/05/2017 16:45	WG1016411
(S) 4-Bromofluorobenzene	98.8			64.0-132		09/05/2017 16:45	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L933455-04 WG1016411: No low level sodium bisulfite vial remaining.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.4		1	09/08/2017 09:23	WG1017807

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0565	1	09/05/2017 17:11	WG1016411
Acrylonitrile	U		0.00202	0.0113	1	09/05/2017 17:11	WG1016411
Benzene	U		0.000305	0.00113	1	09/05/2017 17:11	WG1016411
Bromobenzene	U		0.000321	0.00113	1	09/05/2017 17:11	WG1016411
Bromodichloromethane	U		0.000287	0.00113	1	09/05/2017 17:11	WG1016411
Bromochloromethane	U		0.000441	0.00565	1	09/05/2017 17:11	WG1016411
Bromoform	U		0.000479	0.00113	1	09/05/2017 17:11	WG1016411
Bromomethane	U		0.00152	0.00565	1	09/05/2017 17:11	WG1016411
n-Butylbenzene	U		0.000292	0.00113	1	09/05/2017 17:11	WG1016411
sec-Butylbenzene	U	J4	0.000227	0.00113	1	09/05/2017 17:11	WG1016411
tert-Butylbenzene	U		0.000233	0.00113	1	09/05/2017 17:11	WG1016411
Carbon disulfide	U		0.000250	0.00113	1	09/05/2017 17:11	WG1016411
Carbon tetrachloride	U		0.000371	0.00113	1	09/05/2017 17:11	WG1016411
Chlorobenzene	U		0.000240	0.00113	1	09/05/2017 17:11	WG1016411
Chlorodibromomethane	U		0.000422	0.00113	1	09/05/2017 17:11	WG1016411
Chloroethane	U		0.00107	0.00565	1	09/05/2017 17:11	WG1016411
Chloroform	U		0.000259	0.00565	1	09/05/2017 17:11	WG1016411
Chloromethane	U		0.000424	0.00283	1	09/05/2017 17:11	WG1016411
2-Chlorotoluene	U		0.000340	0.00113	1	09/05/2017 17:11	WG1016411
4-Chlorotoluene	U		0.000271	0.00113	1	09/05/2017 17:11	WG1016411
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00565	1	09/05/2017 17:11	WG1016411
1,2-Dibromoethane	U		0.000388	0.00113	1	09/05/2017 17:11	WG1016411
Dibromomethane	U		0.000432	0.00113	1	09/05/2017 17:11	WG1016411
1,2-Dichlorobenzene	U		0.000345	0.00113	1	09/05/2017 17:11	WG1016411
1,3-Dichlorobenzene	U		0.000270	0.00113	1	09/05/2017 17:11	WG1016411
1,4-Dichlorobenzene	U		0.000256	0.00113	1	09/05/2017 17:11	WG1016411
Dichlorodifluoromethane	U		0.000806	0.00565	1	09/05/2017 17:11	WG1016411
1,1-Dichloroethane	U		0.000225	0.00113	1	09/05/2017 17:11	WG1016411
1,2-Dichloroethane	U		0.000300	0.00113	1	09/05/2017 17:11	WG1016411
1,1-Dichloroethene	U		0.000343	0.00113	1	09/05/2017 17:11	WG1016411
cis-1,2-Dichloroethene	U		0.000266	0.00113	1	09/05/2017 17:11	WG1016411
trans-1,2-Dichloroethene	U		0.000298	0.00113	1	09/05/2017 17:11	WG1016411
1,2-Dichloropropane	U		0.000405	0.00113	1	09/05/2017 17:11	WG1016411
1,1-Dichloropropene	U		0.000358	0.00113	1	09/05/2017 17:11	WG1016411
1,3-Dichloropropane	U		0.000234	0.00113	1	09/05/2017 17:11	WG1016411
cis-1,3-Dichloropropene	U		0.000296	0.00113	1	09/05/2017 17:11	WG1016411
trans-1,3-Dichloropropene	U		0.000302	0.00113	1	09/05/2017 17:11	WG1016411
trans-1,4-Dichloro-2-butene	U		0.000880	0.00283	1	09/05/2017 17:11	WG1016411
2,2-Dichloropropane	U		0.000315	0.00113	1	09/05/2017 17:11	WG1016411
Di-isopropyl ether	U		0.000280	0.00113	1	09/05/2017 17:11	WG1016411
Ethylbenzene	U		0.000336	0.00113	1	09/05/2017 17:11	WG1016411
Hexachloro-1,3-butadiene	U		0.000387	0.00113	1	09/05/2017 17:11	WG1016411
2-Hexanone	U		0.00155	0.0113	1	09/05/2017 17:11	WG1016411
n-Hexane	0.000357	J	0.000328	0.0113	1	09/05/2017 17:11	WG1016411
Iodomethane	U		0.00286	0.0113	1	09/05/2017 17:11	WG1016411
Isopropylbenzene	U		0.000275	0.00113	1	09/05/2017 17:11	WG1016411
p-Isopropyltoluene	U		0.000231	0.00113	1	09/05/2017 17:11	WG1016411
2-Butanone (MEK)	U		0.00529	0.0113	1	09/05/2017 17:11	WG1016411
Methylene Chloride	U		0.00113	0.00565	1	09/05/2017 17:11	WG1016411
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	09/05/2017 17:11	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/31/17 12:40

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	09/05/2017 17:11	WG1016411
Naphthalene	U		0.00113	0.00565	1	09/05/2017 17:11	WG1016411
n-Propylbenzene	U	J4	0.000233	0.00113	1	09/05/2017 17:11	WG1016411
Styrene	U		0.000265	0.00113	1	09/05/2017 17:11	WG1016411
1,1,1,2-Tetrachloroethane	U		0.000298	0.00113	1	09/05/2017 17:11	WG1016411
1,1,2,2-Tetrachloroethane	U		0.000413	0.00113	1	09/05/2017 17:11	WG1016411
1,1,2-Trichlorotrifluoroethane	U		0.000413	0.00113	1	09/05/2017 17:11	WG1016411
Tetrachloroethene	U		0.000312	0.00113	1	09/05/2017 17:11	WG1016411
Toluene	U		0.000491	0.00565	1	09/05/2017 17:11	WG1016411
1,2,3-Trichlorobenzene	U		0.000346	0.00113	1	09/05/2017 17:11	WG1016411
1,2,4-Trichlorobenzene	U		0.000439	0.00113	1	09/05/2017 17:11	WG1016411
1,1,1-Trichloroethane	U		0.000323	0.00113	1	09/05/2017 17:11	WG1016411
1,1,2-Trichloroethane	U		0.000313	0.00113	1	09/05/2017 17:11	WG1016411
Trichloroethene	U		0.000315	0.00113	1	09/05/2017 17:11	WG1016411
Trichlorofluoromethane	U		0.000432	0.00565	1	09/05/2017 17:11	WG1016411
1,2,3-Trichloropropane	U		0.000838	0.00283	1	09/05/2017 17:11	WG1016411
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	09/05/2017 17:11	WG1016411
1,2,3-Trimethylbenzene	U		0.000324	0.00113	1	09/05/2017 17:11	WG1016411
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	09/05/2017 17:11	WG1016411
Vinyl acetate	U		0.00270	0.0113	1	09/05/2017 17:11	WG1016411
Vinyl chloride	U		0.000329	0.00113	1	09/05/2017 17:11	WG1016411
Xylenes, Total	U		0.000789	0.00339	1	09/05/2017 17:11	WG1016411
(S) Toluene-d8	95.1			80.0-120		09/05/2017 17:11	WG1016411
(S) Dibromofluoromethane	108			74.0-131		09/05/2017 17:11	WG1016411
(S) 4-Bromofluorobenzene	103			64.0-132		09/05/2017 17:11	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.5		1	09/08/2017 09:23	WG1017807

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.282	1.41	25	09/06/2017 12:42	WG1016411
Acrylonitrile	U		0.0506	0.282	25	09/06/2017 12:42	WG1016411
Benzene	U		0.00762	0.0282	25	09/06/2017 12:42	WG1016411
Bromobenzene	U	JO	0.00802	0.0282	25	09/06/2017 12:42	WG1016411
Bromodichloromethane	U		0.00717	0.0282	25	09/06/2017 12:42	WG1016411
Bromochloromethane	U		0.0110	0.141	25	09/06/2017 12:42	WG1016411
Bromoform	U		0.0120	0.0282	25	09/06/2017 12:42	WG1016411
Bromomethane	U		0.0378	0.141	25	09/06/2017 12:42	WG1016411
n-Butylbenzene	U		0.00728	0.0282	25	09/06/2017 12:42	WG1016411
sec-Butylbenzene	U	J4	0.00567	0.0282	25	09/06/2017 12:42	WG1016411
tert-Butylbenzene	U		0.00582	0.0282	25	09/06/2017 12:42	WG1016411
Carbon disulfide	U		0.00623	0.0282	25	09/06/2017 12:42	WG1016411
Carbon tetrachloride	U		0.00926	0.0282	25	09/06/2017 12:42	WG1016411
Chlorobenzene	U		0.00599	0.0282	25	09/06/2017 12:42	WG1016411
Chlorodibromomethane	U		0.0105	0.0282	25	09/06/2017 12:42	WG1016411
Chloroethane	U	JO	0.0267	0.141	25	09/06/2017 12:42	WG1016411
Chloroform	U		0.00646	0.141	25	09/06/2017 12:42	WG1016411
Chloromethane	U	JO	0.0106	0.0706	25	09/06/2017 12:42	WG1016411
2-Chlorotoluene	U		0.00849	0.0282	25	09/06/2017 12:42	WG1016411
4-Chlorotoluene	U		0.00678	0.0282	25	09/06/2017 12:42	WG1016411
1,2-Dibromo-3-Chloropropane	U		0.0296	0.141	25	09/06/2017 12:42	WG1016411
1,2-Dibromoethane	U		0.00969	0.0282	25	09/06/2017 12:42	WG1016411
Dibromomethane	U		0.0108	0.0282	25	09/06/2017 12:42	WG1016411
1,2-Dichlorobenzene	U		0.00861	0.0282	25	09/06/2017 12:42	WG1016411
1,3-Dichlorobenzene	U		0.00675	0.0282	25	09/06/2017 12:42	WG1016411
1,4-Dichlorobenzene	U		0.00638	0.0282	25	09/06/2017 12:42	WG1016411
Dichlorodifluoromethane	U		0.0201	0.141	25	09/06/2017 12:42	WG1016411
1,1-Dichloroethane	U		0.00562	0.0282	25	09/06/2017 12:42	WG1016411
1,2-Dichloroethane	U		0.00748	0.0282	25	09/06/2017 12:42	WG1016411
1,1-Dichloroethene	U		0.00856	0.0282	25	09/06/2017 12:42	WG1016411
cis-1,2-Dichloroethene	U		0.00664	0.0282	25	09/06/2017 12:42	WG1016411
trans-1,2-Dichloroethene	U		0.00745	0.0282	25	09/06/2017 12:42	WG1016411
1,2-Dichloropropane	U		0.0101	0.0282	25	09/06/2017 12:42	WG1016411
1,1-Dichloropropene	U		0.00894	0.0282	25	09/06/2017 12:42	WG1016411
1,3-Dichloropropane	U		0.00585	0.0282	25	09/06/2017 12:42	WG1016411
cis-1,3-Dichloropropene	U		0.00740	0.0282	25	09/06/2017 12:42	WG1016411
trans-1,3-Dichloropropene	U		0.00754	0.0282	25	09/06/2017 12:42	WG1016411
trans-1,4-Dichloro-2-butene	U	JO	0.0219	0.0706	25	09/06/2017 12:42	WG1016411
2,2-Dichloropropane	U		0.00788	0.0282	25	09/06/2017 12:42	WG1016411
Di-isopropyl ether	U	JO	0.00700	0.0282	25	09/06/2017 12:42	WG1016411
Ethylbenzene	U		0.00838	0.0282	25	09/06/2017 12:42	WG1016411
Hexachloro-1,3-butadiene	U		0.00966	0.0282	25	09/06/2017 12:42	WG1016411
2-Hexanone	U		0.0386	0.282	25	09/06/2017 12:42	WG1016411
n-Hexane	0.0157	J JO	0.00819	0.282	25	09/06/2017 12:42	WG1016411
Iodomethane	U		0.0714	0.282	25	09/06/2017 12:42	WG1016411
Isopropylbenzene	U		0.00687	0.0282	25	09/06/2017 12:42	WG1016411
p-Isopropyltoluene	U		0.00576	0.0282	25	09/06/2017 12:42	WG1016411
2-Butanone (MEK)	U	JO	0.132	0.282	25	09/06/2017 12:42	WG1016411
Methylene Chloride	U		0.0282	0.141	25	09/06/2017 12:42	WG1016411
4-Methyl-2-pentanone (MIBK)	U		0.0531	0.282	25	09/06/2017 12:42	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/31/17 14:15

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00599	0.0282	25	09/06/2017 12:42	WG1016411
Naphthalene	U		0.0282	0.141	25	09/06/2017 12:42	WG1016411
n-Propylbenzene	U	J4	0.00582	0.0282	25	09/06/2017 12:42	WG1016411
Styrene	U		0.00661	0.0282	25	09/06/2017 12:42	WG1016411
1,1,1,2-Tetrachloroethane	U		0.00745	0.0282	25	09/06/2017 12:42	WG1016411
1,1,2,2-Tetrachloroethane	U		0.0103	0.0282	25	09/06/2017 12:42	WG1016411
1,1,2-Trichlorotrifluoroethane	U		0.0103	0.0282	25	09/06/2017 12:42	WG1016411
Tetrachloroethene	U		0.00779	0.0282	25	09/06/2017 12:42	WG1016411
Toluene	U		0.0122	0.141	25	09/06/2017 12:42	WG1016411
1,2,3-Trichlorobenzene	U		0.00864	0.0282	25	09/06/2017 12:42	WG1016411
1,2,4-Trichlorobenzene	U		0.0110	0.0282	25	09/06/2017 12:42	WG1016411
1,1,1-Trichloroethane	U		0.00808	0.0282	25	09/06/2017 12:42	WG1016411
1,1,2-Trichloroethane	U		0.00782	0.0282	25	09/06/2017 12:42	WG1016411
Trichloroethene	U		0.00788	0.0282	25	09/06/2017 12:42	WG1016411
Trichlorofluoromethane	U		0.0108	0.141	25	09/06/2017 12:42	WG1016411
1,2,3-Trichloropropane	U		0.0209	0.0706	25	09/06/2017 12:42	WG1016411
1,2,4-Trimethylbenzene	U		0.00596	0.0282	25	09/06/2017 12:42	WG1016411
1,2,3-Trimethylbenzene	U		0.00811	0.0282	25	09/06/2017 12:42	WG1016411
1,3,5-Trimethylbenzene	U		0.00751	0.0282	25	09/06/2017 12:42	WG1016411
Vinyl acetate	U		0.0675	0.282	25	09/06/2017 12:42	WG1016411
Vinyl chloride	U		0.00822	0.0282	25	09/06/2017 12:42	WG1016411
Xylenes, Total	U		0.0197	0.0847	25	09/06/2017 12:42	WG1016411
(S) Toluene-d8	113			80.0-120		09/06/2017 12:42	WG1016411
(S) Dibromofluoromethane	89.7			74.0-131		09/06/2017 12:42	WG1016411
(S) 4-Bromofluorobenzene	93.7			64.0-132		09/06/2017 12:42	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/31/17 15:25

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.1		1	09/07/2017 16:54	WG1017937

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0138	J	0.0110	0.0549	1	09/05/2017 18:02	WG1016411
Acrylonitrile	U		0.00197	0.0110	1	09/05/2017 18:02	WG1016411
Benzene	0.000533	J	0.000296	0.00110	1	09/05/2017 18:02	WG1016411
Bromobenzene	U		0.000312	0.00110	1	09/05/2017 18:02	WG1016411
Bromodichloromethane	U		0.000279	0.00110	1	09/05/2017 18:02	WG1016411
Bromochloromethane	U		0.000428	0.00549	1	09/05/2017 18:02	WG1016411
Bromoform	U		0.000466	0.00110	1	09/05/2017 18:02	WG1016411
Bromomethane	U		0.00147	0.00549	1	09/05/2017 18:02	WG1016411
n-Butylbenzene	U		0.000283	0.00110	1	09/05/2017 18:02	WG1016411
sec-Butylbenzene	U	J4	0.000221	0.00110	1	09/05/2017 18:02	WG1016411
tert-Butylbenzene	U		0.000226	0.00110	1	09/05/2017 18:02	WG1016411
Carbon disulfide	0.000859	J	0.000243	0.00110	1	09/05/2017 18:02	WG1016411
Carbon tetrachloride	U		0.000360	0.00110	1	09/05/2017 18:02	WG1016411
Chlorobenzene	U		0.000233	0.00110	1	09/05/2017 18:02	WG1016411
Chlorodibromomethane	U		0.000410	0.00110	1	09/05/2017 18:02	WG1016411
Chloroethane	U		0.00104	0.00549	1	09/05/2017 18:02	WG1016411
Chloroform	U		0.000251	0.00549	1	09/05/2017 18:02	WG1016411
Chloromethane	U		0.000412	0.00274	1	09/05/2017 18:02	WG1016411
2-Chlorotoluene	U		0.000330	0.00110	1	09/05/2017 18:02	WG1016411
4-Chlorotoluene	U		0.000264	0.00110	1	09/05/2017 18:02	WG1016411
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00549	1	09/05/2017 18:02	WG1016411
1,2-Dibromoethane	U		0.000377	0.00110	1	09/05/2017 18:02	WG1016411
Dibromomethane	U		0.000419	0.00110	1	09/05/2017 18:02	WG1016411
1,2-Dichlorobenzene	U		0.000335	0.00110	1	09/05/2017 18:02	WG1016411
1,3-Dichlorobenzene	U		0.000262	0.00110	1	09/05/2017 18:02	WG1016411
1,4-Dichlorobenzene	U		0.000248	0.00110	1	09/05/2017 18:02	WG1016411
Dichlorodifluoromethane	U		0.000783	0.00549	1	09/05/2017 18:02	WG1016411
1,1-Dichloroethane	U		0.000218	0.00110	1	09/05/2017 18:02	WG1016411
1,2-Dichloroethane	U		0.000291	0.00110	1	09/05/2017 18:02	WG1016411
1,1-Dichloroethene	U		0.000333	0.00110	1	09/05/2017 18:02	WG1016411
cis-1,2-Dichloroethene	U		0.000258	0.00110	1	09/05/2017 18:02	WG1016411
trans-1,2-Dichloroethene	U		0.000290	0.00110	1	09/05/2017 18:02	WG1016411
1,2-Dichloropropane	U		0.000393	0.00110	1	09/05/2017 18:02	WG1016411
1,1-Dichloropropene	U		0.000348	0.00110	1	09/05/2017 18:02	WG1016411
1,3-Dichloropropane	U		0.000227	0.00110	1	09/05/2017 18:02	WG1016411
cis-1,3-Dichloropropene	U		0.000288	0.00110	1	09/05/2017 18:02	WG1016411
trans-1,3-Dichloropropene	U		0.000293	0.00110	1	09/05/2017 18:02	WG1016411
trans-1,4-Dichloro-2-butene	U		0.000854	0.00274	1	09/05/2017 18:02	WG1016411
2,2-Dichloropropane	U		0.000306	0.00110	1	09/05/2017 18:02	WG1016411
Di-isopropyl ether	U		0.000272	0.00110	1	09/05/2017 18:02	WG1016411
Ethylbenzene	U		0.000326	0.00110	1	09/05/2017 18:02	WG1016411
Hexachloro-1,3-butadiene	U		0.000375	0.00110	1	09/05/2017 18:02	WG1016411
2-Hexanone	U		0.00150	0.0110	1	09/05/2017 18:02	WG1016411
n-Hexane	U		0.000318	0.0110	1	09/05/2017 18:02	WG1016411
Iodomethane	U		0.00278	0.0110	1	09/05/2017 18:02	WG1016411
Isopropylbenzene	U		0.000267	0.00110	1	09/05/2017 18:02	WG1016411
p-Isopropyltoluene	U		0.000224	0.00110	1	09/05/2017 18:02	WG1016411
2-Butanone (MEK)	U		0.00514	0.0110	1	09/05/2017 18:02	WG1016411
Methylene Chloride	U		0.00110	0.00549	1	09/05/2017 18:02	WG1016411
4-Methyl-2-pentanone (MIBK)	U		0.00206	0.0110	1	09/05/2017 18:02	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/31/17 15:25

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	09/05/2017 18:02	WG1016411
Naphthalene	U		0.00110	0.00549	1	09/05/2017 18:02	WG1016411
n-Propylbenzene	U	J4	0.000226	0.00110	1	09/05/2017 18:02	WG1016411
Styrene	U		0.000257	0.00110	1	09/05/2017 18:02	WG1016411
1,1,1,2-Tetrachloroethane	U		0.000290	0.00110	1	09/05/2017 18:02	WG1016411
1,1,2,2-Tetrachloroethane	U		0.000401	0.00110	1	09/05/2017 18:02	WG1016411
1,1,2-Trichlorotrifluoroethane	U		0.000401	0.00110	1	09/05/2017 18:02	WG1016411
Tetrachloroethene	U		0.000303	0.00110	1	09/05/2017 18:02	WG1016411
Toluene	U		0.000477	0.00549	1	09/05/2017 18:02	WG1016411
1,2,3-Trichlorobenzene	U		0.000336	0.00110	1	09/05/2017 18:02	WG1016411
1,2,4-Trichlorobenzene	U		0.000426	0.00110	1	09/05/2017 18:02	WG1016411
1,1,1-Trichloroethane	U		0.000314	0.00110	1	09/05/2017 18:02	WG1016411
1,1,2-Trichloroethane	U		0.000304	0.00110	1	09/05/2017 18:02	WG1016411
Trichloroethene	U		0.000306	0.00110	1	09/05/2017 18:02	WG1016411
Trichlorofluoromethane	U		0.000419	0.00549	1	09/05/2017 18:02	WG1016411
1,2,3-Trichloropropane	U		0.000814	0.00274	1	09/05/2017 18:02	WG1016411
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	09/05/2017 18:02	WG1016411
1,2,3-Trimethylbenzene	U		0.000315	0.00110	1	09/05/2017 18:02	WG1016411
1,3,5-Trimethylbenzene	U		0.000292	0.00110	1	09/05/2017 18:02	WG1016411
Vinyl acetate	U		0.00262	0.0110	1	09/05/2017 18:02	WG1016411
Vinyl chloride	U		0.000319	0.00110	1	09/05/2017 18:02	WG1016411
Xylenes, Total	U		0.000766	0.00329	1	09/05/2017 18:02	WG1016411
(S) Toluene-d8	95.7			80.0-120		09/05/2017 18:02	WG1016411
(S) Dibromofluoromethane	110			74.0-131		09/05/2017 18:02	WG1016411
(S) 4-Bromofluorobenzene	103			64.0-132		09/05/2017 18:02	WG1016411

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/31/17 15:30

L933455

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	745		158	500	5	09/03/2017 18:37	WG1016529
(S) a,a,a-Trifluorotoluene(FID)	97.9			77.0-122		09/03/2017 18:37	WG1016529

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	44.6	J	5.25	125	5	09/02/2017 17:10	WG1016388
Acrylonitrile	U		4.36	25.0	5	09/02/2017 17:10	WG1016388
Benzene	0.658	J	0.448	2.50	5	09/02/2017 17:10	WG1016388
Bromobenzene	U		0.665	2.50	5	09/02/2017 17:10	WG1016388
Bromodichloromethane	U		0.400	2.50	5	09/02/2017 17:10	WG1016388
Bromochloromethane	U		0.725	2.50	5	09/02/2017 17:10	WG1016388
Bromoform	U		0.930	2.50	5	09/02/2017 17:10	WG1016388
Bromomethane	U		0.785	12.5	5	09/02/2017 17:10	WG1016388
n-Butylbenzene	U		0.715	2.50	5	09/02/2017 17:10	WG1016388
sec-Butylbenzene	U		0.670	2.50	5	09/02/2017 17:10	WG1016388
tert-Butylbenzene	U		0.915	2.50	5	09/02/2017 17:10	WG1016388
Carbon disulfide	U		0.505	2.50	5	09/02/2017 17:10	WG1016388
Carbon tetrachloride	U		0.795	2.50	5	09/02/2017 17:10	WG1016388
Chlorobenzene	U		0.700	2.50	5	09/02/2017 17:10	WG1016388
Chlorodibromomethane	U		0.640	2.50	5	09/02/2017 17:10	WG1016388
Chloroethane	U		0.705	12.5	5	09/02/2017 17:10	WG1016388
Chloroform	U		0.430	2.50	5	09/02/2017 17:10	WG1016388
Chloromethane	U		0.765	6.25	5	09/02/2017 17:10	WG1016388
2-Chlorotoluene	U		0.555	2.50	5	09/02/2017 17:10	WG1016388
4-Chlorotoluene	U		0.486	2.50	5	09/02/2017 17:10	WG1016388
1,2-Dibromo-3-Chloropropane	U		1.62	12.5	5	09/02/2017 17:10	WG1016388
1,2-Dibromoethane	U		0.965	2.50	5	09/02/2017 17:10	WG1016388
Dibromomethane	U		0.585	2.50	5	09/02/2017 17:10	WG1016388
1,2-Dichlorobenzene	U		0.505	2.50	5	09/02/2017 17:10	WG1016388
1,3-Dichlorobenzene	U		0.650	2.50	5	09/02/2017 17:10	WG1016388
1,4-Dichlorobenzene	U		0.605	2.50	5	09/02/2017 17:10	WG1016388
Dichlorodifluoromethane	U		0.635	12.5	5	09/02/2017 17:10	WG1016388
1,1-Dichloroethane	U		0.570	2.50	5	09/02/2017 17:10	WG1016388
1,2-Dichloroethane	U		0.540	2.50	5	09/02/2017 17:10	WG1016388
1,1-Dichloroethene	U		0.940	2.50	5	09/02/2017 17:10	WG1016388
cis-1,2-Dichloroethene	4.46		0.466	2.50	5	09/02/2017 17:10	WG1016388
trans-1,2-Dichloroethene	U		0.760	2.50	5	09/02/2017 17:10	WG1016388
1,2-Dichloropropane	U		0.950	2.50	5	09/02/2017 17:10	WG1016388
1,1-Dichloropropene	U		0.640	2.50	5	09/02/2017 17:10	WG1016388
1,3-Dichloropropane	U		0.735	5.00	5	09/02/2017 17:10	WG1016388
cis-1,3-Dichloropropene	U		0.488	2.50	5	09/02/2017 17:10	WG1016388
trans-1,3-Dichloropropene	U		1.11	2.50	5	09/02/2017 17:10	WG1016388
trans-1,4-Dichloro-2-butene	U		1.28	25.0	5	09/02/2017 17:10	WG1016388
2,2-Dichloropropane	U		0.464	2.50	5	09/02/2017 17:10	WG1016388
Di-isopropyl ether	U		0.462	2.50	5	09/02/2017 17:10	WG1016388
Ethylbenzene	U		0.790	2.50	5	09/02/2017 17:10	WG1016388
Hexachloro-1,3-butadiene	U		0.785	5.00	5	09/02/2017 17:10	WG1016388
2-Hexanone	U		3.78	25.0	5	09/02/2017 17:10	WG1016388
n-Hexane	2.43	J	1.52	25.0	5	09/02/2017 17:10	WG1016388
Iodomethane	U		1.88	50.0	5	09/02/2017 17:10	WG1016388
Isopropylbenzene	U		0.630	2.50	5	09/02/2017 17:10	WG1016388
p-Isopropyltoluene	U		0.690	2.50	5	09/02/2017 17:10	WG1016388
2-Butanone (MEK)	12.2	J	6.40	25.0	5	09/02/2017 17:10	WG1016388



Collected date/time: 08/31/17 15:30

L933455

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		5.35	12.5	5	09/02/2017 17:10	WG1016388
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	09/02/2017 17:10	WG1016388
Methyl tert-butyl ether	U		0.510	2.50	5	09/02/2017 17:10	WG1016388
Naphthalene	U		0.870	12.5	5	09/02/2017 17:10	WG1016388
n-Propylbenzene	U		0.810	2.50	5	09/02/2017 17:10	WG1016388
Styrene	U		0.585	2.50	5	09/02/2017 17:10	WG1016388
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	09/02/2017 17:10	WG1016388
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	09/02/2017 17:10	WG1016388
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	09/02/2017 17:10	WG1016388
Tetrachloroethene	U		0.995	2.50	5	09/02/2017 17:10	WG1016388
Toluene	151		2.06	2.50	5	09/02/2017 17:10	WG1016388
1,2,3-Trichlorobenzene	U		0.820	2.50	5	09/02/2017 17:10	WG1016388
1,2,4-Trichlorobenzene	U		1.78	2.50	5	09/02/2017 17:10	WG1016388
1,1,1-Trichloroethane	U		0.470	2.50	5	09/02/2017 17:10	WG1016388
1,1,2-Trichloroethane	U		0.930	2.50	5	09/02/2017 17:10	WG1016388
Trichloroethene	U		0.765	2.50	5	09/02/2017 17:10	WG1016388
Trichlorofluoromethane	U		0.650	12.5	5	09/02/2017 17:10	WG1016388
1,2,3-Trichloropropane	U		1.24	12.5	5	09/02/2017 17:10	WG1016388
1,2,4-Trimethylbenzene	U		0.615	2.50	5	09/02/2017 17:10	WG1016388
1,2,3-Trimethylbenzene	U		0.370	2.50	5	09/02/2017 17:10	WG1016388
1,3,5-Trimethylbenzene	U		0.620	2.50	5	09/02/2017 17:10	WG1016388
Vinyl acetate	U		3.22	25.0	5	09/02/2017 17:10	WG1016388
Vinyl chloride	U		0.590	2.50	5	09/02/2017 17:10	WG1016388
Xylenes, Total	U		1.58	7.50	5	09/02/2017 17:10	WG1016388
(S) Toluene-d8	102			80.0-120		09/02/2017 17:10	WG1016388
(S) Dibromofluoromethane	105			76.0-123		09/02/2017 17:10	WG1016388
(S) 4-Bromofluorobenzene	99.0			80.0-120		09/02/2017 17:10	WG1016388

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 08/31/17 15:45

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	631		31.6	100	1	09/03/2017 19:01	WG1016529
(S) a,a,a-Trifluorotoluene(FID)	98.6			77.0-122		09/03/2017 19:01	WG1016529

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	45.1	J	5.25	125	5	09/02/2017 17:30	WG1016388
Acrylonitrile	U		4.36	25.0	5	09/02/2017 17:30	WG1016388
Benzene	U		0.448	2.50	5	09/02/2017 17:30	WG1016388
Bromobenzene	U		0.665	2.50	5	09/02/2017 17:30	WG1016388
Bromodichloromethane	U		0.400	2.50	5	09/02/2017 17:30	WG1016388
Bromochloromethane	U		0.725	2.50	5	09/02/2017 17:30	WG1016388
Bromoform	U		0.930	2.50	5	09/02/2017 17:30	WG1016388
Bromomethane	U		0.785	12.5	5	09/02/2017 17:30	WG1016388
n-Butylbenzene	U		0.715	2.50	5	09/02/2017 17:30	WG1016388
sec-Butylbenzene	U		0.670	2.50	5	09/02/2017 17:30	WG1016388
tert-Butylbenzene	U		0.915	2.50	5	09/02/2017 17:30	WG1016388
Carbon disulfide	U		0.505	2.50	5	09/02/2017 17:30	WG1016388
Carbon tetrachloride	U		0.795	2.50	5	09/02/2017 17:30	WG1016388
Chlorobenzene	U		0.700	2.50	5	09/02/2017 17:30	WG1016388
Chlorodibromomethane	U		0.640	2.50	5	09/02/2017 17:30	WG1016388
Chloroethane	U		0.705	12.5	5	09/02/2017 17:30	WG1016388
Chloroform	U		0.430	2.50	5	09/02/2017 17:30	WG1016388
Chloromethane	U		0.765	6.25	5	09/02/2017 17:30	WG1016388
2-Chlorotoluene	U		0.555	2.50	5	09/02/2017 17:30	WG1016388
4-Chlorotoluene	U		0.486	2.50	5	09/02/2017 17:30	WG1016388
1,2-Dibromo-3-Chloropropane	U		1.62	12.5	5	09/02/2017 17:30	WG1016388
1,2-Dibromoethane	U		0.965	2.50	5	09/02/2017 17:30	WG1016388
Dibromomethane	U		0.585	2.50	5	09/02/2017 17:30	WG1016388
1,2-Dichlorobenzene	U		0.505	2.50	5	09/02/2017 17:30	WG1016388
1,3-Dichlorobenzene	U		0.650	2.50	5	09/02/2017 17:30	WG1016388
1,4-Dichlorobenzene	U		0.605	2.50	5	09/02/2017 17:30	WG1016388
Dichlorodifluoromethane	U		0.635	12.5	5	09/02/2017 17:30	WG1016388
1,1-Dichloroethane	U		0.570	2.50	5	09/02/2017 17:30	WG1016388
1,2-Dichloroethane	U		0.540	2.50	5	09/02/2017 17:30	WG1016388
1,1-Dichloroethene	U		0.940	2.50	5	09/02/2017 17:30	WG1016388
cis-1,2-Dichloroethene	2.86		0.466	2.50	5	09/02/2017 17:30	WG1016388
trans-1,2-Dichloroethene	U		0.760	2.50	5	09/02/2017 17:30	WG1016388
1,2-Dichloropropane	U		0.950	2.50	5	09/02/2017 17:30	WG1016388
1,1-Dichloropropene	U		0.640	2.50	5	09/02/2017 17:30	WG1016388
1,3-Dichloropropane	U		0.735	5.00	5	09/02/2017 17:30	WG1016388
cis-1,3-Dichloropropene	U		0.488	2.50	5	09/02/2017 17:30	WG1016388
trans-1,3-Dichloropropene	U		1.11	2.50	5	09/02/2017 17:30	WG1016388
trans-1,4-Dichloro-2-butene	U		1.28	25.0	5	09/02/2017 17:30	WG1016388
2,2-Dichloropropane	U		0.464	2.50	5	09/02/2017 17:30	WG1016388
Di-isopropyl ether	U		0.462	2.50	5	09/02/2017 17:30	WG1016388
Ethylbenzene	U		0.790	2.50	5	09/02/2017 17:30	WG1016388
Hexachloro-1,3-butadiene	U		0.785	5.00	5	09/02/2017 17:30	WG1016388
2-Hexanone	U		3.78	25.0	5	09/02/2017 17:30	WG1016388
n-Hexane	U		1.52	25.0	5	09/02/2017 17:30	WG1016388
Iodomethane	U		1.88	50.0	5	09/02/2017 17:30	WG1016388
Isopropylbenzene	U		0.630	2.50	5	09/02/2017 17:30	WG1016388
p-Isopropyltoluene	U		0.690	2.50	5	09/02/2017 17:30	WG1016388
2-Butanone (MEK)	9.66	J	6.40	25.0	5	09/02/2017 17:30	WG1016388



Collected date/time: 08/31/17 15:45

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		5.35	12.5	5	09/02/2017 17:30	WG1016388
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	09/02/2017 17:30	WG1016388
Methyl tert-butyl ether	U		0.510	2.50	5	09/02/2017 17:30	WG1016388
Naphthalene	U		0.870	12.5	5	09/02/2017 17:30	WG1016388
n-Propylbenzene	U		0.810	2.50	5	09/02/2017 17:30	WG1016388
Styrene	U		0.585	2.50	5	09/02/2017 17:30	WG1016388
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	09/02/2017 17:30	WG1016388
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	09/02/2017 17:30	WG1016388
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	09/02/2017 17:30	WG1016388
Tetrachloroethene	U		0.995	2.50	5	09/02/2017 17:30	WG1016388
Toluene	105		2.06	2.50	5	09/02/2017 17:30	WG1016388
1,2,3-Trichlorobenzene	U		0.820	2.50	5	09/02/2017 17:30	WG1016388
1,2,4-Trichlorobenzene	U		1.78	2.50	5	09/02/2017 17:30	WG1016388
1,1,1-Trichloroethane	U		0.470	2.50	5	09/02/2017 17:30	WG1016388
1,1,2-Trichloroethane	U		0.930	2.50	5	09/02/2017 17:30	WG1016388
Trichloroethene	U		0.765	2.50	5	09/02/2017 17:30	WG1016388
Trichlorofluoromethane	U		0.650	12.5	5	09/02/2017 17:30	WG1016388
1,2,3-Trichloropropane	U		1.24	12.5	5	09/02/2017 17:30	WG1016388
1,2,4-Trimethylbenzene	U		0.615	2.50	5	09/02/2017 17:30	WG1016388
1,2,3-Trimethylbenzene	U		0.370	2.50	5	09/02/2017 17:30	WG1016388
1,3,5-Trimethylbenzene	U		0.620	2.50	5	09/02/2017 17:30	WG1016388
Vinyl acetate	U		3.22	25.0	5	09/02/2017 17:30	WG1016388
Vinyl chloride	U		0.590	2.50	5	09/02/2017 17:30	WG1016388
Xylenes, Total	U		1.58	7.50	5	09/02/2017 17:30	WG1016388
(S) Toluene-d8	101			80.0-120		09/02/2017 17:30	WG1016388
(S) Dibromofluoromethane	103			76.0-123		09/02/2017 17:30	WG1016388
(S) 4-Bromofluorobenzene	102			80.0-120		09/02/2017 17:30	WG1016388

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3248029-1	09/08/17 09:23	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%		%
Total Solids		0.000300			

L933455-01 Original Sample (OS) • Duplicate (DUP)

(OS) L933455-01	09/08/17 09:23	(DUP) R3248029-3	09/08/17 09:23	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	%		%						%
Total Solids		85.0	83.9			1	1.31		5

Laboratory Control Sample (LCS)

(LCS) R3248029-2	09/08/17 09:23	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%		%	%	%	
Total Solids		50.0	50.0	100	85.0-115	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3247765-1 09/07/17 16:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000300	%	%	%

L933455-07 Original Sample (OS) • Duplicate (DUP)

(OS) L933455-07 09/07/17 16:54 • (DUP) R3247765-3 09/07/17 16:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	91.1	91.3	1	0.229	%	5

Laboratory Control Sample (LCS)

(LCS) R3247765-2 09/07/17 16:54

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft



Volatile Organic Compounds (GC) by Method NWTPHGX

[L933455-08.09](#)

Method Blank (MB)

(MB) R3247051-3 09/03/17 15:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	U		316	100

^(S) a,a-o-Trifluorotoluene(FID)	97.5			77.0-122
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247051-1 09/03/17 14:16 • (LCSD) R3247051-2 09/03/17 15:03

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	5700	5650	104	103	72.0-134			0.890	20

^(S) a,a,o-Trifluorotoluene(FID)				110	110	77.0-122				
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L933750-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933750-05 09/03/17 22:57 • (MS) R3247051-4 09/03/17 23:21 • (MSD) R3247051-5 09/03/17 23:44

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	45.0	6360	6300	115	114	1	23.0-159			0.810	20

^(S) a,a,o-Trifluorotoluene(FID)					108	109		77.0-122				
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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L933455-02.04](#)

Method Blank (MB)

(MB) R3247106-3 09/05/17 10:37	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	mg/kg		mg/kg	mg/kg
TPHG C6 - C12	U		0.0339	0.100
^(S) <i>o,o</i> -Trifluorotoluene(FID)	101			77.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247106-1 09/05/17 09:31 • (LCSD) R3247106-2 09/05/17 09:53	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	%	%	%			%	%
TPHG C6 - C12	5.50	5.49	5.13	99.8	93.2	70.0-133			6.81	20
^(S) <i>o,o</i> -Trifluorotoluene(FID)				101	102	77.0-120				

L933294-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933294-01 09/05/17 17:22 • (MS) R3247106-4 09/05/17 12:14 • (MSD) R3247106-5 09/05/17 12:36	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%
TPHG C6 - C12	5.50	20.0	114	136	68.7	84.3	25	10.0-146			17.2	30
^(S) <i>o,o</i> -Trifluorotoluene(FID)					102	102		77.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3247042-5 09/02/17 12:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
Carbon disulfide	U		0.101	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
2-Hexanone	U		0.757	5.00

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3247042-5 09/02/17 12:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
n-Hexane	U		0.305	5.00
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1-3-butadiene	U		0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Vinyl acetate	U		0.645	5.00
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	102			80.0-120
(S) Dibromofluoromethane	103			76.0-123
(S) 4-Bromofluorobenzene	102			80.0-120

1 Cp
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247042-1 09/02/17 10:26 • (LCSD) R3247042-2 09/02/17 10:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	25.0	27.0	26.7	108	107	76.0-122			0.990	20
Carbon disulfide	25.0	27.7	27.4	111	110	55.0-127			0.800	20
Acetone	125	158	190	126	152	10.0-160			18.4	23
Acrylonitrile	125	142	139	114	111	60.0-142			2.20	20
trans-1,4-Dichloro-2-butene	25.0	24.7	24.2	98.7	97.0	55.0-134			1.72	20
Benzene	25.0	27.0	26.8	108	107	69.0-123			0.510	20
Bromobenzene	25.0	24.1	23.5	96.4	94.0	79.0-120			2.53	20
Bromodichloromethane	25.0	26.6	26.3	106	105	76.0-120			1.12	20
2-Hexanone	125	142	140	114	112	58.0-147			1.46	20
Bromoform	25.0	24.6	24.2	98.5	96.9	67.0-132			1.64	20
Bromomethane	25.0	26.3	26.7	105	107	18.0-160			1.66	20
n-Hexane	25.0	28.8	28.3	115	113	56.0-124			1.77	20
Iodomethane	125	139	139	112	111	57.0-140			0.660	20
n-Butylbenzene	25.0	29.0	28.3	116	113	72.0-126			2.23	20
sec-Butylbenzene	25.0	26.3	25.8	105	103	74.0-121			1.98	20
tert-Butylbenzene	25.0	25.7	25.4	103	101	75.0-122			1.37	20
Carbon tetrachloride	25.0	26.6	26.7	106	107	63.0-122			0.290	20
Chlorobenzene	25.0	25.4	25.2	101	101	79.0-121			0.550	20
Chlorodibromomethane	25.0	26.2	25.8	105	103	75.0-125			1.51	20
Chloroethane	25.0	26.7	26.4	107	106	47.0-152			1.22	20
Chloroform	25.0	27.2	27.2	109	109	72.0-121			0.0100	20
Chloromethane	25.0	24.9	24.9	99.7	99.6	48.0-139			0.100	20
2-Chlorotoluene	25.0	25.2	24.8	101	99.1	74.0-122			1.91	20
4-Chlorotoluene	25.0	25.1	24.6	100	98.4	79.0-120			2.10	20
1,2-Dibromo-3-Chloropropane	25.0	26.1	25.6	104	102	64.0-127			1.81	20
1,2-Dibromoethane	25.0	25.4	25.2	102	101	77.0-123			0.790	20
Dibromomethane	25.0	26.3	26.6	105	106	78.0-120			0.850	20
1,2-Dichlorobenzene	25.0	26.1	25.9	105	104	80.0-120			0.900	20
1,3-Dichlorobenzene	25.0	25.6	25.1	102	100	72.0-123			2.09	20
1,4-Dichlorobenzene	25.0	24.7	24.5	98.7	98.0	77.0-120			0.740	20
Dichlorodifluoromethane	25.0	27.7	26.7	111	107	49.0-155			3.73	20
1,1-Dichloroethane	25.0	28.0	27.6	112	110	70.0-126			1.51	20
1,2-Dichloroethane	25.0	28.4	28.7	114	115	67.0-126			0.940	20
1,1-Dichloroethene	25.0	28.0	28.0	112	112	64.0-129			0.0800	20
Vinyl acetate	125	179	179	143	143	46.0-160			0.0200	20
cis-1,2-Dichloroethene	25.0	26.8	26.7	107	107	73.0-120			0.320	20
trans-1,2-Dichloroethene	25.0	27.1	27.0	108	108	71.0-121			0.100	20
1,2-Dichloropropane	25.0	27.8	27.2	111	109	75.0-125			2.07	20
1,1-Dichloropropene	25.0	27.9	27.8	111	111	71.0-129			0.110	20
1,3-Dichloropropane	25.0	25.3	25.3	101	101	80.0-121			0.190	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247042-1 09/02/17 10:26 • (LCSD) R3247042-2 09/02/17 10:46

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	25.0	28.8	28.7	115	115	79.0-123			0.550	20
trans-1,3-Dichloropropene	25.0	28.4	28.2	114	113	74.0-127			0.610	20
2,2-Dichloropropane	25.0	28.3	28.8	113	115	60.0-125			1.61	20
Di-isopropyl ether	25.0	26.9	26.9	108	108	59.0-133			0.110	20
Ethylbenzene	25.0	25.6	25.0	102	100	77.0-120			2.41	20
Hexachloro-1,3-butadiene	25.0	29.9	30.6	120	123	64.0-131			2.45	20
Isopropylbenzene	25.0	25.1	24.7	100	98.6	75.0-120			1.91	20
p-Isopropyltoluene	25.0	27.5	27.1	110	108	74.0-126			1.49	20
2-Butanone (MEK)	125	116	122	93.1	97.5	37.0-158			4.59	20
Methylene Chloride	25.0	26.6	26.5	106	106	66.0-121			0.500	20
4-Methyl-2-pentanone (MIBK)	125	138	135	110	108	59.0-143			2.28	20
Methyl tert-butyl ether	25.0	26.3	26.5	105	106	64.0-123			0.940	20
Naphthalene	25.0	28.3	28.6	113	114	62.0-128			0.750	20
n-Propylbenzene	25.0	26.3	25.6	105	102	79.0-120			2.76	20
Styrene	25.0	25.6	25.2	103	101	78.0-124			1.84	20
1,1,1,2-Tetrachloroethane	25.0	25.5	25.7	102	103	75.0-122			0.680	20
1,1,2,2-Tetrachloroethane	25.0	25.8	25.5	103	102	71.0-122			1.20	20
Tetrachloroethene	25.0	25.3	25.0	101	99.9	70.0-127			1.23	20
Toluene	25.0	25.3	24.7	101	98.9	77.0-120			2.21	20
1,1,2-Trichlorotrifluoroethane	25.0	28.6	28.3	115	113	61.0-136			1.30	20
1,2,3-Trichlorobenzene	25.0	31.6	32.6	126	130	61.0-133			3.01	20
1,2,4-Trichlorobenzene	25.0	31.0	31.7	124	127	69.0-129			2.18	20
1,1,1-Trichloroethane	25.0	27.9	27.9	112	112	68.0-122			0.0500	20
1,1,2-Trichloroethane	25.0	25.6	25.5	102	102	78.0-120			0.190	20
Trichloroethene	25.0	25.7	25.4	103	102	78.0-120			1.26	20
Trichlorofluoromethane	25.0	28.3	28.3	113	113	56.0-137			0.330	20
1,2,3-Trichloropropane	25.0	25.3	24.9	101	99.6	72.0-124			1.46	20
1,2,3-Trimethylbenzene	25.0	24.2	23.9	96.6	95.7	75.0-120			1.01	20
1,2,4-Trimethylbenzene	25.0	26.0	25.5	104	102	75.0-120			1.65	20
1,3,5-Trimethylbenzene	25.0	25.8	25.4	103	102	75.0-120			1.41	20
Vinyl chloride	25.0	26.5	26.5	106	106	64.0-133			0.0700	20
Xylenes, Total	75.0	77.1	76.6	103	102	77.0-120			0.650	20
(S) Toluene-d8				100	100	80.0-120				
(S) Dibromofluoromethane				104	105	76.0-123				
(S) 4-Bromofluorobenzene				101	98.8	80.0-120				

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Method Blank (MB)

(MB) R3246814-3 09/02/17 13:15

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R3246814-3 09/02/17 13:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	102			74.0-131
(S) 4-Bromofluorobenzene	100			64.0-132

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3246814-1 09/02/17 11:31 • (LCSD) R3246814-4 09/02/17 14:07

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.131	0.133	105	106	11.0-160			1.08	23
Acrylonitrile	0.125	0.109	0.109	87.2	87.2	61.0-143			0.0400	20
Benzene	0.0250	0.0257	0.0252	103	101	71.0-124			2.13	20
Bromobenzene	0.0250	0.0260	0.0255	104	102	78.0-120			1.88	20
Bromodichloromethane	0.0250	0.0239	0.0235	95.6	93.9	75.0-120			1.70	20
Bromochloromethane	0.0250	0.0246	0.0251	98.5	101	80.0-121			2.10	20
Bromoform	0.0250	0.0242	0.0232	96.8	92.9	65.0-133			4.20	20
Bromomethane	0.0250	0.0276	0.0245	110	98.1	26.0-160			11.8	20
n-Butylbenzene	0.0250	0.0312	0.0296	125	118	73.0-126			5.17	20
sec-Butylbenzene	0.0250	0.0304	0.0291	122	116	75.0-121		J4	4.45	20
tert-Butylbenzene	0.0250	0.0291	0.0282	116	113	74.0-122			3.02	20
Carbon disulfide	0.0250	0.0283	0.0266	113	106	53.0-130			6.03	20
Carbon tetrachloride	0.0250	0.0247	0.0239	98.7	95.6	66.0-123			3.19	20
Chlorobenzene	0.0250	0.0261	0.0258	105	103	79.0-121			1.21	20
Chlorodibromomethane	0.0250	0.0248	0.0247	99.2	98.8	74.0-128			0.490	20
Chloroethane	0.0250	0.0264	0.0269	106	108	51.0-147			1.73	20
Chloroform	0.0250	0.0254	0.0253	102	101	73.0-123			0.270	20
Chloromethane	0.0250	0.0240	0.0241	96.2	96.5	51.0-138			0.330	20
2-Chlorotoluene	0.0250	0.0280	0.0270	112	108	72.0-124			3.66	20
4-Chlorotoluene	0.0250	0.0270	0.0262	108	105	78.0-120			3.20	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0228	0.0228	91.1	91.0	65.0-126			0.130	20
1,2-Dibromoethane	0.0250	0.0237	0.0235	94.9	94.1	78.0-122			0.850	20
Dibromomethane	0.0250	0.0238	0.0241	95.0	96.5	79.0-120			1.61	20
1,2-Dichlorobenzene	0.0250	0.0266	0.0257	107	103	80.0-120			3.44	20
1,3-Dichlorobenzene	0.0250	0.0263	0.0255	105	102	72.0-123			3.30	20
1,4-Dichlorobenzene	0.0250	0.0269	0.0259	108	104	77.0-120			3.80	20
trans-1,4-Dichloro-2-butene	0.0250	0.0222	0.0215	88.9	86.2	68.0-126			3.12	20
Dichlorodifluoromethane	0.0250	0.0278	0.0270	111	108	49.0-155			3.10	20
1,1-Dichloroethane	0.0250	0.0261	0.0254	104	102	70.0-128			2.72	20
1,2-Dichloroethane	0.0250	0.0249	0.0253	99.6	101	69.0-128			1.69	20
1,1-Dichloroethene	0.0250	0.0277	0.0265	111	106	63.0-131			4.18	20
cis-1,2-Dichloroethene	0.0250	0.0250	0.0248	99.9	99.2	74.0-123			0.640	20
trans-1,2-Dichloroethene	0.0250	0.0258	0.0254	103	101	72.0-122			1.56	20
1,2-Dichloropropane	0.0250	0.0255	0.0249	102	99.8	75.0-126			2.05	20
1,1-Dichloropropene	0.0250	0.0262	0.0252	105	101	72.0-130			3.68	20
1,3-Dichloropropene	0.0250	0.0243	0.0247	97.3	98.8	80.0-121			1.52	20
cis-1,3-Dichloropropene	0.0250	0.0269	0.0263	108	105	80.0-125			2.24	20
trans-1,3-Dichloropropene	0.0250	0.0250	0.0247	100	98.9	75.0-129			1.10	20
2,2-Dichloropropane	0.0250	0.0249	0.0244	99.6	97.6	60.0-129			1.97	20
Di-isopropyl ether	0.0250	0.0244	0.0242	97.7	96.6	62.0-133			1.11	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3246814-1 09/02/17 11:31 • (LCSD) R3246814-4 09/02/17 14:07

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Ethylbenzene	0.0250	0.0262	0.0256	105	102	77.0-120			2.25	20
Hexachloro-1,3-butadiene	0.0250	0.0317	0.0315	127	126	68.0-128			0.740	20
2-Hexanone	0.125	0.120	0.120	95.7	96.0	61.0-143			0.230	20
n-Hexane	0.0250	0.0273	0.0267	109	107	57.0-125			2.27	20
Iodomethane	0.125	0.142	0.142	114	113	67.0-132			0.470	20
Isopropylbenzene	0.0250	0.0282	0.0270	113	108	75.0-120			4.57	20
p-Isopropyltoluene	0.0250	0.0312	0.0300	125	120	74.0-125			3.91	20
2-Butanone (MEK)	0.125	0.121	0.119	96.7	95.3	37.0-159			1.40	20
Methylene Chloride	0.0250	0.0257	0.0263	103	105	67.0-123			2.18	20
4-Methyl-2-pentanone (MIBK)	0.125	0.111	0.114	88.4	91.0	60.0-144			2.89	20
Methyl tert-butyl ether	0.0250	0.0243	0.0249	97.4	99.6	66.0-125			2.23	20
Naphthalene	0.0250	0.0232	0.0232	92.8	92.9	64.0-125			0.0900	20
n-Propylbenzene	0.0250	0.0302	0.0288	121	115	78.0-120			4.83	20
Styrene	0.0250	0.0274	0.0264	110	106	78.0-124	J4		3.63	20
1,1,1,2-Tetrachloroethane	0.0250	0.0251	0.0250	100	100	74.0-124			0.240	20
1,1,2,2-Tetrachloroethane	0.0250	0.0253	0.0250	101	100	73.0-120			1.27	20
Tetrachloroethene	0.0250	0.0262	0.0251	105	100	70.0-127			4.16	20
Toluene	0.0250	0.0252	0.0245	101	97.9	77.0-120			3.01	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0279	0.0273	112	109	64.0-135			2.24	20
1,2,3-Trichlorobenzene	0.0250	0.0247	0.0249	98.6	99.7	68.0-126			1.09	20
1,2,4-Trichlorobenzene	0.0250	0.0253	0.0248	101	99.4	70.0-127			1.86	20
1,1,1-Trichloroethane	0.0250	0.0258	0.0253	103	101	69.0-125			2.13	20
1,1,2-Trichloroethane	0.0250	0.0242	0.0243	96.9	97.2	78.0-120			0.260	20
Trichloroethene	0.0250	0.0252	0.0247	101	98.7	79.0-120			2.12	20
Trichlorofluoromethane	0.0250	0.0267	0.0257	107	103	59.0-136			3.86	20
1,2,3-Trichloropropane	0.0250	0.0254	0.0251	102	101	73.0-124			1.03	20
1,2,3-Trimethylbenzene	0.0250	0.0258	0.0252	103	101	76.0-120			2.38	20
1,2,4-Trimethylbenzene	0.0250	0.0280	0.0270	112	108	75.0-120			3.48	20
1,3,5-Trimethylbenzene	0.0250	0.0286	0.0278	115	111	75.0-120			3.09	20
Vinyl acetate	0.125	0.126	0.123	101	98.1	58.0-156			2.47	20
Vinyl chloride	0.0250	0.0269	0.0262	108	105	63.0-134			2.68	20
Xylenes, Total	0.0750	0.0781	0.0770	104	103	77.0-120			1.42	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										

Public Review Draft

1 Cp
2 Tc
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L933692-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

[L933455-01,02,03,04,05,06,07](#)

(OS) L933692-03 09/02/17 16:24 • (MS) R3246814-5 09/02/17 14:40 • (MSD) R3246814-6 09/02/17 15:06

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.150	U	0.0226	0.0269	15.0	17.9	1	10.0-160	J6	J3	17.4	36
Acrylonitrile	0.150	U	0.0234	0.0299	15.6	19.9	1	14.0-160	J6	J3	24.7	33
Benzene	0.0300	U	0.00230	0.00379	7.65	12.6	1	13.0-146	J6	J3 J6	49.1	27
Bromobenzene	0.0300	U	0.00196	0.00401	6.52	13.4	1	10.0-149	J6	J3	68.8	33
Bromodichloromethane	0.0300	U	0.00285	0.00447	9.48	14.9	1	15.0-142	J6	J3 J6	44.3	28
Bromochloromethane	0.0300	U	0.00294	0.00429	9.81	14.3	1	24.0-146	J6	J3 J6	37.2	27
Bromoform	0.0300	U	0.00298	0.00498	9.93	16.6	1	10.0-147	J6	J3	50.2	31
Bromomethane	0.0300	U	0.00203	0.00292	6.76	9.72	1	10.0-160	J6	J3 J6	36.0	32
n-Butylbenzene	0.0300	U	0.000967	0.00358	3.22	11.9	1	10.0-154	J6	J3	115	37
sec-Butylbenzene	0.0300	U	0.00117	0.00386	3.89	12.9	1	10.0-151	J6	J3	107	36
tert-Butylbenzene	0.0300	U	0.00155	0.00410	5.18	13.6	1	10.0-152	J6	J3	90.0	35
Carbon disulfide	0.0300	U	0.000676	0.00104	2.25	3.46	1	10.0-141	J6	J3 J6	42.3	30
Carbon tetrachloride	0.0300	U	0.00184	0.00355	6.14	11.8	1	13.0-140	J6	J3 J6	63.3	30
Chlorobenzene	0.0300	U	0.00189	0.00383	6.29	12.7	1	10.0-149	J6	J3	67.8	31
Chlorodibromomethane	0.0300	U	0.00291	0.00486	9.69	16.2	1	12.0-147	J6	J3	50.2	29
Chloroethane	0.0300	U	0.00209	0.00318	6.97	10.6	1	10.0-159	J6	J3	41.4	33
Chloroform	0.0300	U	0.00295	0.00483	9.82	16.1	1	18.0-148	J6	J3 J6	48.4	28
Chloromethane	0.0300	U	0.00143	0.00187	4.76	6.24	1	10.0-146	J6	J6	26.9	29
2-Chlorotoluene	0.0300	U	0.00151	0.00386	5.03	12.9	1	10.0-151	J6	J3	87.6	35
4-Chlorotoluene	0.0300	U	0.00138	0.00358	4.61	11.9	1	10.0-150	J6	J3	88.5	35
1,2-Dibromo-3-Chloropropane	0.0300	U	0.00382	0.00630	12.7	21.0	1	10.0-149	J6	J3	49.1	34
1,2-Dibromoethane	0.0300	U	0.00290	0.00469	9.66	15.6	1	14.0-145	J6	J3	47.0	28
Dibromomethane	0.0300	U	0.00319	0.00469	10.6	15.6	1	18.0-144	J6	J3 J6	38.2	27
1,2-Dichlorobenzene	0.0300	U	0.00186	0.00397	6.20	13.2	1	10.0-153	J6	J3	72.3	34
1,3-Dichlorobenzene	0.0300	U	0.00144	0.00347	4.79	11.6	1	10.0-150	J6	J3	82.7	35
1,4-Dichlorobenzene	0.0300	U	0.00160	0.00378	5.35	12.6	1	10.0-148	J6	J3	80.9	34
trans-1,4-Dichloro-2-butene	0.0300	U	0.00355	0.00597	11.8	19.9	1	10.0-160	J6	J3	50.9	40
Dichlorodifluoromethane	0.0300	U	ND	0.00180	0.0000	5.99	1	10.0-160	J6	J3 J6	200	30
1,1-Dichloroethane	0.0300	U	0.00280	0.00440	9.33	14.7	1	19.0-148	J6	J3 J6	44.4	28
1,2-Dichloroethane	0.0300	U	0.00319	0.00477	10.6	15.9	1	17.0-147	J6	J3 J6	39.8	27
1,1-Dichloroethene	0.0300	U	0.00171	0.00301	5.68	10.0	1	10.0-150	J6	J3	55.2	31
cis-1,2-Dichloroethene	0.0300	U	0.00257	0.00393	8.57	13.1	1	16.0-145	J6	J3 J6	41.7	28
trans-1,2-Dichloroethene	0.0300	U	0.00167	0.00281	5.57	9.35	1	11.0-142	J6	J3 J6	50.7	29
1,2-Dichloropropane	0.0300	U	0.00275	0.00446	9.15	14.8	1	17.0-148	J6	J3 J6	47.4	28
1,1-Dichloropropene	0.0300	U	0.00124	0.00279	4.11	9.30	1	10.0-150	J6	J3 J6	77.3	30
1,3-Dichloropropene	0.0300	U	0.00306	0.00487	10.2	16.2	1	16.0-148	J6	J3	45.6	27
cis-1,3-Dichloropropene	0.0300	U	0.00241	0.00396	8.04	13.2	1	13.0-150	J6	J3	48.4	28
trans-1,3-Dichloropropene	0.0300	U	0.00251	0.00416	8.36	13.8	1	10.0-152	J6	J3	49.4	29
2,2-Dichloropropene	0.0300	U	0.00256	0.00423	8.51	14.1	1	16.0-143	J6	J3 J6	49.3	30

Public Review Draft

1 Cp
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L933692-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933692-03 09/02/17 16:24 • (MS) R3246814-5 09/02/17 14:40 • (MSD) R3246814-6 09/02/17 15:06

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0300	U	0.00282	0.00477	9.40	15.9	1	16.0-149	J6	J3 J6	51.4	28
Ethylbenzene	0.0300	U	0.00146	0.00349	4.85	11.6	1	10.0-147	J6	J3	82.4	31
Hexachloro-1,3-butadiene	0.0300	U	0.00132	0.00392	4.39	13.1	1	10.0-154	J6	J3	99.3	40
2-Hexanone	0.150	U	0.0200	0.0302	13.3	20.1	1	12.0-158	J6	J3	40.4	30
n-Hexane	0.0300	U	0.000774	0.00194	2.58	6.46	1	10.0-140	J6	J3 J6	85.8	34
Iodomethane	0.150	U	0.0120	0.0179	7.99	11.9	1	10.0-157	J6	J3	39.5	34
Isopropylbenzene	0.0300	U	0.00134	0.00371	4.47	12.3	1	10.0-147	J6	J3	93.7	33
p-Isopropyltoluene	0.0300	U	0.00106	0.00381	3.54	12.7	1	10.0-156	J6	J3	113	37
2-Butanone (MEK)	0.150	U	0.0200	0.0279	13.3	18.6	1	10.0-160	J6	J3	32.9	33
Methylene Chloride	0.0300	U	0.00276	0.00402	9.19	13.4	1	16.0-139	J6	J3 J6	37.2	29
4-Methyl-2-pentanone (MIBK)	0.150	U	0.0206	0.0313	13.7	20.9	1	12.0-160	J6	J3	41.2	32
Methyl tert-butyl ether	0.0300	U	0.00339	0.00548	11.3	18.2	1	21.0-145	J6	J3 J6	47.0	29
Naphthalene	0.0300	U	0.00248	0.00418	8.27	13.9	1	10.0-153	J6	J3	50.9	36
n-Propylbenzene	0.0300	U	0.00120	0.00383	4.01	12.8	1	10.0-151	J6	J3	104	34
Styrene	0.0300	U	0.00150	0.00339	4.98	11.3	1	10.0-155	J6	J3	77.6	34
1,1,1,2-Tetrachloroethane	0.0300	U	0.00274	0.00465	9.13	15.5	1	10.0-147	J6	J3	51.7	30
1,1,2,2-Tetrachloroethane	0.0300	U	0.00375	0.00617	12.5	20.5	1	10.0-155	J6	J3	48.8	31
Tetrachloroethene	0.0300	U	0.000876	0.00262	2.92	8.72	1	10.0-144	J6	J3 J6	99.7	32
Toluene	0.0300	U	0.00185	0.00352	6.17	11.7	1	10.0-144	J6	J3	62.2	28
1,1,2-Trichlorotrifluoroethane	0.0300	U	0.00102	0.00338	3.41	11.3	1	10.0-153	J6	J3	107	33
1,2,3-Trichlorobenzene	0.0300	U	0.00161	0.00341	5.36	11.4	1	10.0-153	J6	J3	71.8	40
1,2,4-Trichlorobenzene	0.0300	U	0.00125	0.00318	4.18	10.6	1	10.0-156	J6	J3	86.8	40
1,1,1-Trichloroethane	0.0300	U	0.00244	0.00423	8.11	14.1	1	18.0-145	J6	J3 J6	53.9	29
1,1,2-Trichloroethane	0.0300	U	0.00323	0.00497	10.8	16.6	1	12.0-151	J6	J3	42.5	28
Trichloroethene	0.0300	U	0.00188	0.00429	6.25	14.3	1	11.0-148	J6	J3	78.2	29
Trichlorofluoromethane	0.0300	U	0.00148	0.00304	4.94	10.1	1	10.0-157	J6	J3	68.8	34
1,2,3-Trichloropropene	0.0300	U	0.00438	0.00681	14.6	22.7	1	10.0-154	J6	J3	43.5	32
1,2,3-Trimethylbenzene	0.0300	U	0.00161	0.00400	5.35	13.3	1	10.0-150	J6	J3	85.4	33
1,2,4-Trimethylbenzene	0.0300	U	0.00126	0.00370	4.20	12.3	1	10.0-151	J6	J3	98.3	34
1,3,5-Trimethylbenzene	0.0300	U	0.00121	0.00371	4.04	12.3	1	10.0-150	J6	J3	101	33
Vinyl acetate	0.150	U	0.0153	0.0216	10.2	14.4	1	10.0-160	J6	J3	33.7	40
Vinyl chloride	0.0300	U	0.00149	0.00225	4.98	7.50	1	10.0-150	J6	J3 J6	40.4	29
Xylenes, Total	0.0901	U	0.00435	0.0104	4.83	11.5	1	10.0-150	J6	J3	82.1	31
(S) Toluene-d8					95.7	96.3		80.0-120				
(S) Dibromofluoromethane					111	110		74.0-131				
(S) 4-Bromofluorobenzene					99.3	101		64.0-132				

Sample Narrative:
MS: Low recovery due to matrix interference.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

[L933455-01,02,03,04,05,06,07](#)

L933692-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L933692-03 09/02/17 16:24 • (MS) R3246814-5 09/02/17 14:40 • (MSD) R3246814-6 09/02/17 15:06

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%		%			%	%

MSD: Low recovery due to matrix interference.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

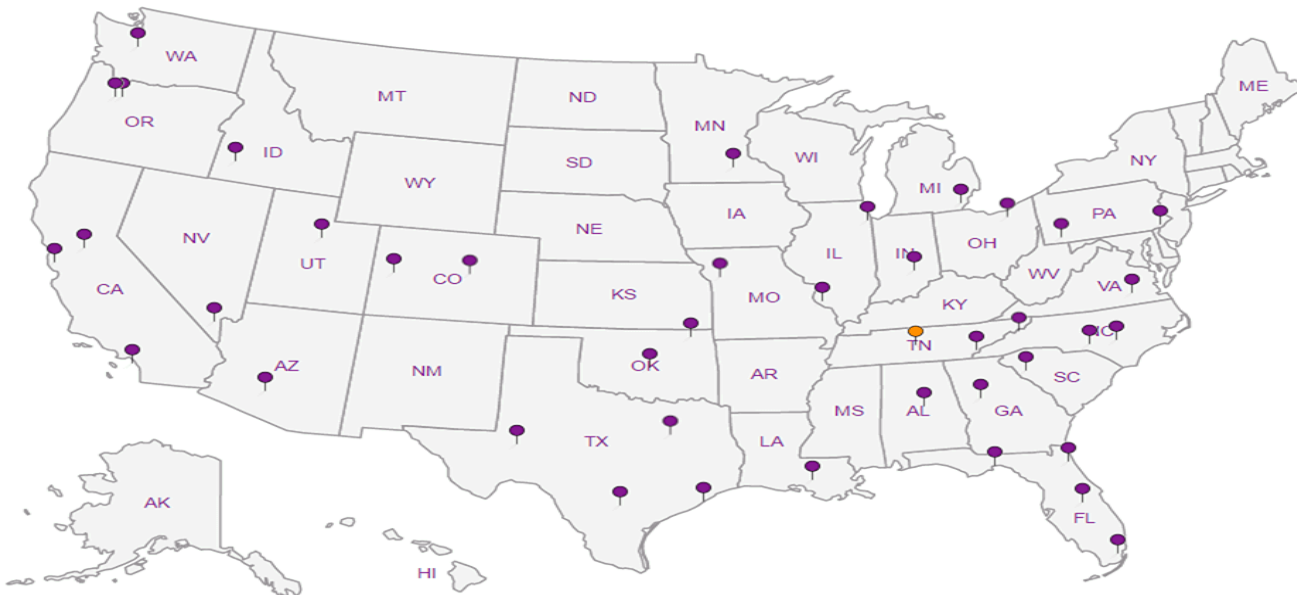
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Fees
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Report to:
Bill Haldeman

Email To: bhaldeman@pesenv.com

Project
Description: **American Linen Project**

City/State
Collected: **SEATTLE, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.002

Lab Project #
PESENVSWA-ALP

Collected by (print):
SHANNON MICKENAN

P.O. #

Collected by (signature):
[Signature]

Quote #

Immediately
Packed on Ice N Y X

Rush? (Lab MUST Be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Ints

NWTPHGX 2ozClr-NoPres

NWTPHGX 40mlAmb HCl

TS 4ozClr-NoPres

V8260C 40ml/NaHSO4/Syr/MeOH

V8260C 40mlAmb-HCl

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Ints	Analysis / Container / Preservative
B- MW-140-90	GRAB	SS	90	8/30/17	1740	4	X X X X X X
B- MW-137-25		SS	25	8/31/17	0950	5	X X X X X X
B- MW-140-100		SS	100		1045	4	X X X X X X
B- MW-137-45		SS	45		1140	5	X X X X X X
B- MW-140-130		SS	130		1240	4	X X X X X X
B- MW-140-140		SS	140		1415	4	X X X X X X
B- MW-137-75		SS	75		1525	5	X X X X X X
B- MW-137-76-W		GW	76		1530	3	X X X X X X
B- 905-60-W		GW	60		1545	3	X X X X X X

Remarks:

pH _____ Temp _____

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS _____ FedEx _____ Courier _____

Flow _____ Other _____

Relinquished by (Signature):
[Signature]

Date: 8/31/17

Time: 1045

Received by (Signature):
[Signature]

Trip Blank Received: Yes/No
HCL/MeOH TBR

Relinquished by (Signature):
[Signature]

Date:

Time:

Received by (Signature):
[Signature]

Temp: 21.0 °C
Bottles Received: 43

Relinquished by (Signature):

Date:

Time:

Received for lab by (Signature):
[Signature]

Date: 9-1-17 Time: 9:45

L# **L933455**
E076

Actnum: PESENVSWA
Template: T126584
Prelogin: P613271
TSR: 110 - Brian Ford
PB:

Shipped Via: **FedEx Ground**

Remarks: _____ Sample # (lab only)

12005 1st Avenue Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

PESENV
S.C.I.E.N.C.E.S

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC signed/Accurate: Y N
Bottles arrive Intact: Y N
Correct Bottles Used: Y N
Sufficient volume sent: Y N
IF Applicable
VOR Zero Headspace: Y N
Preservation Correct/Checked: Y N

Hold: _____
If preservation required by Log in: Date/Time
Condition: NCF / OK

September 21, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L933742
Samples Received: 09/02/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 1413.001.02.002
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-137-95 L933742-02	8	⁴Cn
B-216-20 L933742-03	10	⁵Sr
B-216-40 L933742-04	12	
B-216-50 L933742-05	14	⁶Qc
MW-137-115 L933742-06	16	
B-216-65 L933742-07	18	⁷Gl
B-216-55 L933742-08	20	⁸Al
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MW-137-85 L933742-01 Solid

Collected by Shannon McKernan
Collected date/time 09/01/17 08:20
Received date/time 09/02/17 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018662	1	09/01/17 08:20	09/10/17 03:47	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 08:20	09/07/17 01:06	JHH

2 Tc

3 Ss

MW-137-95 L933742-02 Solid

Collected by Shannon McKernan
Collected date/time 09/01/17 09:00
Received date/time 09/02/17 08:45

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018662	1	09/01/17 09:00	09/10/17 04:09	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 09:00	09/07/17 01:28	JHH

5 Sr

6 Qc

7 Gl

B-216-20 L933742-03 Solid

Collected by Shannon McKernan
Collected date/time 09/01/17 09:15
Received date/time 09/02/17 08:45

8 Al

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 09:15	09/07/17 01:49	JHH

9 Sc

B-216-40 L933742-04 Solid

Collected by Shannon McKernan
Collected date/time 09/01/17 10:10
Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 10:10	09/07/17 02:11	JHH

B-216-50 L933742-05 Solid

Collected by Shannon McKernan
Collected date/time 09/01/17 10:35
Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 10:35	09/07/17 02:33	JHH

MW-137-115 L933742-06 Solid

Collected by Shannon McKernan
Collected date/time 09/01/17 11:45
Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018662	1	09/01/17 11:45	09/10/17 04:32	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 11:45	09/07/17 02:55	JHH

B-216-65 L933742-07 Solid

Collected by Shannon McKernan
Collected date/time 09/01/17 11:45
Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 11:45	09/07/17 17:50	BMB



B-216-55 L933742-08 Solid

Collected by Shannon McKernan
 Collected date/time 09/01/17 12:15
 Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 12:15	09/07/17 03:17	JHH

1 Cp

2 Tc

3 Ss

B-216-85 L933742-09 Solid

Collected by Shannon McKernan
 Collected date/time 09/01/17 13:00
 Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017429	1	09/01/17 13:00	09/07/17 03:39	JHH

4 Cn

5 Sr

6 Qc

B-216-95 L933742-10 Solid

Collected by Shannon McKernan
 Collected date/time 09/01/17 13:30
 Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1018229	1	09/08/17 15:36	09/08/17 15:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017434	1	09/01/17 13:30	09/07/17 00:42	JHH

7 Gl

8 Al

9 Sc

TRIP BLANK-090117 L933742-11 GW

Collected by Shannon McKernan
 Collected date/time 09/01/17 00:00
 Received date/time 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1017271	1	09/06/17 14:03	09/06/17 14:03	BMB



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.4		1	09/08/2017 15:56	WG1018229

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0406	0.120	1	09/10/2017 03:47	WG1018662
(S) a,a,a-Trifluorotoluene(FID)	95.5			77.0-120		09/10/2017 03:47	WG1018662

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0120	0.0599	1	09/07/2017 01:06	WG1017429
Acrylonitrile	U		0.00215	0.0120	1	09/07/2017 01:06	WG1017429
Benzene	U		0.000324	0.00120	1	09/07/2017 01:06	WG1017429
Bromobenzene	U		0.000340	0.00120	1	09/07/2017 01:06	WG1017429
Bromodichloromethane	U		0.000304	0.00120	1	09/07/2017 01:06	WG1017429
Bromochloromethane	U		0.000467	0.00599	1	09/07/2017 01:06	WG1017429
Bromoform	U		0.000508	0.00120	1	09/07/2017 01:06	WG1017429
Bromomethane	U		0.00161	0.00599	1	09/07/2017 01:06	WG1017429
n-Butylbenzene	U		0.000309	0.00120	1	09/07/2017 01:06	WG1017429
sec-Butylbenzene	U		0.000241	0.00120	1	09/07/2017 01:06	WG1017429
tert-Butylbenzene	U		0.000247	0.00120	1	09/07/2017 01:06	WG1017429
Carbon disulfide	0.00141		0.000265	0.00120	1	09/07/2017 01:06	WG1017429
Carbon tetrachloride	U		0.000393	0.00120	1	09/07/2017 01:06	WG1017429
Chlorobenzene	U		0.000254	0.00120	1	09/07/2017 01:06	WG1017429
Chlorodibromomethane	U		0.000447	0.00120	1	09/07/2017 01:06	WG1017429
Chloroethane	U		0.00113	0.00599	1	09/07/2017 01:06	WG1017429
Chloroform	U		0.000274	0.00599	1	09/07/2017 01:06	WG1017429
Chloromethane	U		0.000449	0.00300	1	09/07/2017 01:06	WG1017429
2-Chlorotoluene	U		0.000361	0.00120	1	09/07/2017 01:06	WG1017429
4-Chlorotoluene	U		0.000288	0.00120	1	09/07/2017 01:06	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00599	1	09/07/2017 01:06	WG1017429
1,2-Dibromoethane	U		0.000411	0.00120	1	09/07/2017 01:06	WG1017429
Dibromomethane	U		0.000458	0.00120	1	09/07/2017 01:06	WG1017429
1,2-Dichlorobenzene	U		0.000366	0.00120	1	09/07/2017 01:06	WG1017429
1,3-Dichlorobenzene	U		0.000286	0.00120	1	09/07/2017 01:06	WG1017429
1,4-Dichlorobenzene	U		0.000271	0.00120	1	09/07/2017 01:06	WG1017429
Dichlorodifluoromethane	U		0.000855	0.00599	1	09/07/2017 01:06	WG1017429
1,1-Dichloroethane	U		0.000238	0.00120	1	09/07/2017 01:06	WG1017429
1,2-Dichloroethane	U		0.000318	0.00120	1	09/07/2017 01:06	WG1017429
1,1-Dichloroethene	U		0.000363	0.00120	1	09/07/2017 01:06	WG1017429
cis-1,2-Dichloroethene	U		0.000282	0.00120	1	09/07/2017 01:06	WG1017429
trans-1,2-Dichloroethene	U		0.000316	0.00120	1	09/07/2017 01:06	WG1017429
1,2-Dichloropropane	U		0.000429	0.00120	1	09/07/2017 01:06	WG1017429
1,1-Dichloropropene	U		0.000380	0.00120	1	09/07/2017 01:06	WG1017429
1,3-Dichloropropane	U		0.000248	0.00120	1	09/07/2017 01:06	WG1017429
cis-1,3-Dichloropropene	U		0.000314	0.00120	1	09/07/2017 01:06	WG1017429
trans-1,3-Dichloropropene	U		0.000320	0.00120	1	09/07/2017 01:06	WG1017429
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000932	0.00300	1	09/07/2017 01:06	WG1017429
2,2-Dichloropropane	U		0.000334	0.00120	1	09/07/2017 01:06	WG1017429
Di-isopropyl ether	U		0.000297	0.00120	1	09/07/2017 01:06	WG1017429
Ethylbenzene	U		0.000356	0.00120	1	09/07/2017 01:06	WG1017429
Hexachloro-1,3-butadiene	U		0.000410	0.00120	1	09/07/2017 01:06	WG1017429
2-Hexanone	U		0.00164	0.0120	1	09/07/2017 01:06	WG1017429
n-Hexane	0.00261	<u>J</u>	0.000348	0.0120	1	09/07/2017 01:06	WG1017429

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/01/17 08:20

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00303	0.0120	1	09/07/2017 01:06	WG1017429
Isopropylbenzene	U		0.000291	0.00120	1	09/07/2017 01:06	WG1017429
p-Isopropyltoluene	U		0.000244	0.00120	1	09/07/2017 01:06	WG1017429
2-Butanone (MEK)	U		0.00561	0.0120	1	09/07/2017 01:06	WG1017429
Methylene Chloride	U		0.00120	0.00599	1	09/07/2017 01:06	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00225	0.0120	1	09/07/2017 01:06	WG1017429
Methyl tert-butyl ether	U		0.000254	0.00120	1	09/07/2017 01:06	WG1017429
Naphthalene	U		0.00120	0.00599	1	09/07/2017 01:06	WG1017429
n-Propylbenzene	U		0.000247	0.00120	1	09/07/2017 01:06	WG1017429
Styrene	U		0.000280	0.00120	1	09/07/2017 01:06	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000316	0.00120	1	09/07/2017 01:06	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000437	0.00120	1	09/07/2017 01:06	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000437	0.00120	1	09/07/2017 01:06	WG1017429
Tetrachloroethene	U		0.000331	0.00120	1	09/07/2017 01:06	WG1017429
Toluene	U		0.000520	0.00599	1	09/07/2017 01:06	WG1017429
1,2,3-Trichlorobenzene	U		0.000367	0.00120	1	09/07/2017 01:06	WG1017429
1,2,4-Trichlorobenzene	U		0.000465	0.00120	1	09/07/2017 01:06	WG1017429
1,1,1-Trichloroethane	U		0.000343	0.00120	1	09/07/2017 01:06	WG1017429
1,1,2-Trichloroethane	U		0.000332	0.00120	1	09/07/2017 01:06	WG1017429
Trichloroethene	U		0.000334	0.00120	1	09/07/2017 01:06	WG1017429
Trichlorofluoromethane	U		0.000458	0.00599	1	09/07/2017 01:06	WG1017429
1,2,3-Trichloropropane	U		0.000888	0.00300	1	09/07/2017 01:06	WG1017429
1,2,4-Trimethylbenzene	U		0.000253	0.00120	1	09/07/2017 01:06	WG1017429
1,2,3-Trimethylbenzene	U		0.000344	0.00120	1	09/07/2017 01:06	WG1017429
1,3,5-Trimethylbenzene	U		0.000319	0.00120	1	09/07/2017 01:06	WG1017429
Vinyl acetate	U		0.00286	0.0120	1	09/07/2017 01:06	WG1017429
Vinyl chloride	U		0.000349	0.00120	1	09/07/2017 01:06	WG1017429
Xylenes, Total	U		0.000837	0.00360	1	09/07/2017 01:06	WG1017429
(S) Toluene-d8	97.7			80.0-120		09/07/2017 01:06	WG1017429
(S) Dibromofluoromethane	102			74.0-131		09/07/2017 01:06	WG1017429
(S) 4-Bromofluorobenzene	101			64.0-132		09/07/2017 01:06	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/01/17 09:00

L933742

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	09/08/2017 15:56	WG1018229

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0363	0.107	1	09/10/2017 04:09	WG1018662
(S) a,a,a-Trifluorotoluene(FID)	95.7			77.0-120		09/10/2017 04:09	WG1018662

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0107	0.0535	1	09/07/2017 01:28	WG1017429
Acrylonitrile	U		0.00192	0.0107	1	09/07/2017 01:28	WG1017429
Benzene	U		0.000289	0.00107	1	09/07/2017 01:28	WG1017429
Bromobenzene	U		0.000304	0.00107	1	09/07/2017 01:28	WG1017429
Bromodichloromethane	U		0.000272	0.00107	1	09/07/2017 01:28	WG1017429
Bromochloromethane	U		0.000418	0.00535	1	09/07/2017 01:28	WG1017429
Bromoform	U		0.000454	0.00107	1	09/07/2017 01:28	WG1017429
Bromomethane	U		0.00143	0.00535	1	09/07/2017 01:28	WG1017429
n-Butylbenzene	U		0.000276	0.00107	1	09/07/2017 01:28	WG1017429
sec-Butylbenzene	U		0.000215	0.00107	1	09/07/2017 01:28	WG1017429
tert-Butylbenzene	U		0.000221	0.00107	1	09/07/2017 01:28	WG1017429
Carbon disulfide	0.000537	J	0.000237	0.00107	1	09/07/2017 01:28	WG1017429
Carbon tetrachloride	U		0.000351	0.00107	1	09/07/2017 01:28	WG1017429
Chlorobenzene	U		0.000227	0.00107	1	09/07/2017 01:28	WG1017429
Chlorodibromomethane	U		0.000399	0.00107	1	09/07/2017 01:28	WG1017429
Chloroethane	U		0.00101	0.00535	1	09/07/2017 01:28	WG1017429
Chloroform	U		0.000245	0.00535	1	09/07/2017 01:28	WG1017429
Chloromethane	U		0.000402	0.00268	1	09/07/2017 01:28	WG1017429
2-Chlorotoluene	U		0.000322	0.00107	1	09/07/2017 01:28	WG1017429
4-Chlorotoluene	U		0.000257	0.00107	1	09/07/2017 01:28	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00535	1	09/07/2017 01:28	WG1017429
1,2-Dibromoethane	U		0.000367	0.00107	1	09/07/2017 01:28	WG1017429
Dibromomethane	U		0.000409	0.00107	1	09/07/2017 01:28	WG1017429
1,2-Dichlorobenzene	U		0.000327	0.00107	1	09/07/2017 01:28	WG1017429
1,3-Dichlorobenzene	U		0.000256	0.00107	1	09/07/2017 01:28	WG1017429
1,4-Dichlorobenzene	U		0.000242	0.00107	1	09/07/2017 01:28	WG1017429
Dichlorodifluoromethane	U		0.000764	0.00535	1	09/07/2017 01:28	WG1017429
1,1-Dichloroethane	U		0.000213	0.00107	1	09/07/2017 01:28	WG1017429
1,2-Dichloroethane	U		0.000284	0.00107	1	09/07/2017 01:28	WG1017429
1,1-Dichloroethene	U		0.000324	0.00107	1	09/07/2017 01:28	WG1017429
cis-1,2-Dichloroethene	U		0.000252	0.00107	1	09/07/2017 01:28	WG1017429
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	09/07/2017 01:28	WG1017429
1,2-Dichloropropane	U		0.000383	0.00107	1	09/07/2017 01:28	WG1017429
1,1-Dichloropropene	U		0.000339	0.00107	1	09/07/2017 01:28	WG1017429
1,3-Dichloropropane	U		0.000222	0.00107	1	09/07/2017 01:28	WG1017429
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	09/07/2017 01:28	WG1017429
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	09/07/2017 01:28	WG1017429
trans-1,4-Dichloro-2-butene	U	JO	0.000833	0.00268	1	09/07/2017 01:28	WG1017429
2,2-Dichloropropane	U		0.000299	0.00107	1	09/07/2017 01:28	WG1017429
Di-isopropyl ether	U		0.000266	0.00107	1	09/07/2017 01:28	WG1017429
Ethylbenzene	U		0.000318	0.00107	1	09/07/2017 01:28	WG1017429
Hexachloro-1,3-butadiene	U		0.000366	0.00107	1	09/07/2017 01:28	WG1017429
2-Hexanone	U		0.00147	0.0107	1	09/07/2017 01:28	WG1017429
n-Hexane	0.00340	J	0.000311	0.0107	1	09/07/2017 01:28	WG1017429

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/01/17 09:00

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00271	0.0107	1	09/07/2017 01:28	WG1017429
Isopropylbenzene	U		0.000260	0.00107	1	09/07/2017 01:28	WG1017429
p-Isopropyltoluene	U		0.000218	0.00107	1	09/07/2017 01:28	WG1017429
2-Butanone (MEK)	U		0.00501	0.0107	1	09/07/2017 01:28	WG1017429
Methylene Chloride	U		0.00107	0.00535	1	09/07/2017 01:28	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	09/07/2017 01:28	WG1017429
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/07/2017 01:28	WG1017429
Naphthalene	U		0.00107	0.00535	1	09/07/2017 01:28	WG1017429
n-Propylbenzene	U		0.000221	0.00107	1	09/07/2017 01:28	WG1017429
Styrene	U		0.000251	0.00107	1	09/07/2017 01:28	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	09/07/2017 01:28	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	09/07/2017 01:28	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	09/07/2017 01:28	WG1017429
Tetrachloroethene	U		0.000296	0.00107	1	09/07/2017 01:28	WG1017429
Toluene	U		0.000465	0.00535	1	09/07/2017 01:28	WG1017429
1,2,3-Trichlorobenzene	U		0.000328	0.00107	1	09/07/2017 01:28	WG1017429
1,2,4-Trichlorobenzene	U		0.000416	0.00107	1	09/07/2017 01:28	WG1017429
1,1,1-Trichloroethane	U		0.000306	0.00107	1	09/07/2017 01:28	WG1017429
1,1,2-Trichloroethane	U		0.000297	0.00107	1	09/07/2017 01:28	WG1017429
Trichloroethene	U		0.000299	0.00107	1	09/07/2017 01:28	WG1017429
Trichlorofluoromethane	U		0.000409	0.00535	1	09/07/2017 01:28	WG1017429
1,2,3-Trichloropropane	U		0.000794	0.00268	1	09/07/2017 01:28	WG1017429
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	09/07/2017 01:28	WG1017429
1,2,3-Trimethylbenzene	U		0.000307	0.00107	1	09/07/2017 01:28	WG1017429
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	09/07/2017 01:28	WG1017429
Vinyl acetate	U		0.00256	0.0107	1	09/07/2017 01:28	WG1017429
Vinyl chloride	U		0.000312	0.00107	1	09/07/2017 01:28	WG1017429
Xylenes, Total	U		0.000747	0.00321	1	09/07/2017 01:28	WG1017429
(S) Toluene-d8	99.7			80.0-120		09/07/2017 01:28	WG1017429
(S) Dibromofluoromethane	102			74.0-131		09/07/2017 01:28	WG1017429
(S) 4-Bromofluorobenzene	100			64.0-132		09/07/2017 01:28	WG1017429

- 1
Cp
- 2
Tc
- 3
Ss
- 4
Cn
- 5
Sr
- 6
Qc
- 7
Gl
- 8
Al
- 9
Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.8		1	09/08/2017 15:56	WG1018229

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0108	0.0539	1	09/07/2017 01:49	WG1017429
Acrylonitrile	U		0.00193	0.0108	1	09/07/2017 01:49	WG1017429
Benzene	U		0.000291	0.00108	1	09/07/2017 01:49	WG1017429
Bromobenzene	U		0.000306	0.00108	1	09/07/2017 01:49	WG1017429
Bromodichloromethane	U		0.000274	0.00108	1	09/07/2017 01:49	WG1017429
Bromochloromethane	U		0.000420	0.00539	1	09/07/2017 01:49	WG1017429
Bromoform	U		0.000457	0.00108	1	09/07/2017 01:49	WG1017429
Bromomethane	U		0.00144	0.00539	1	09/07/2017 01:49	WG1017429
n-Butylbenzene	U		0.000278	0.00108	1	09/07/2017 01:49	WG1017429
sec-Butylbenzene	U		0.000216	0.00108	1	09/07/2017 01:49	WG1017429
tert-Butylbenzene	U		0.000222	0.00108	1	09/07/2017 01:49	WG1017429
Carbon disulfide	0.000700	J	0.000238	0.00108	1	09/07/2017 01:49	WG1017429
Carbon tetrachloride	U		0.000353	0.00108	1	09/07/2017 01:49	WG1017429
Chlorobenzene	U		0.000228	0.00108	1	09/07/2017 01:49	WG1017429
Chlorodibromomethane	U		0.000402	0.00108	1	09/07/2017 01:49	WG1017429
Chloroethane	U		0.00102	0.00539	1	09/07/2017 01:49	WG1017429
Chloroform	U		0.000247	0.00539	1	09/07/2017 01:49	WG1017429
Chloromethane	U		0.000404	0.00269	1	09/07/2017 01:49	WG1017429
2-Chlorotoluene	U		0.000324	0.00108	1	09/07/2017 01:49	WG1017429
4-Chlorotoluene	U		0.000259	0.00108	1	09/07/2017 01:49	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00539	1	09/07/2017 01:49	WG1017429
1,2-Dibromoethane	U		0.000369	0.00108	1	09/07/2017 01:49	WG1017429
Dibromomethane	U		0.000411	0.00108	1	09/07/2017 01:49	WG1017429
1,2-Dichlorobenzene	U		0.000329	0.00108	1	09/07/2017 01:49	WG1017429
1,3-Dichlorobenzene	U		0.000257	0.00108	1	09/07/2017 01:49	WG1017429
1,4-Dichlorobenzene	U		0.000243	0.00108	1	09/07/2017 01:49	WG1017429
Dichlorodifluoromethane	U		0.000768	0.00539	1	09/07/2017 01:49	WG1017429
1,1-Dichloroethane	U		0.000214	0.00108	1	09/07/2017 01:49	WG1017429
1,2-Dichloroethane	U		0.000285	0.00108	1	09/07/2017 01:49	WG1017429
1,1-Dichloroethene	U		0.000326	0.00108	1	09/07/2017 01:49	WG1017429
cis-1,2-Dichloroethene	U		0.000253	0.00108	1	09/07/2017 01:49	WG1017429
trans-1,2-Dichloroethene	U		0.000284	0.00108	1	09/07/2017 01:49	WG1017429
1,2-Dichloropropane	U		0.000386	0.00108	1	09/07/2017 01:49	WG1017429
1,1-Dichloropropene	U		0.000341	0.00108	1	09/07/2017 01:49	WG1017429
1,3-Dichloropropane	U		0.000223	0.00108	1	09/07/2017 01:49	WG1017429
cis-1,3-Dichloropropene	U		0.000282	0.00108	1	09/07/2017 01:49	WG1017429
trans-1,3-Dichloropropene	U		0.000288	0.00108	1	09/07/2017 01:49	WG1017429
trans-1,4-Dichloro-2-butene	U	JO	0.000838	0.00269	1	09/07/2017 01:49	WG1017429
2,2-Dichloropropane	U		0.000301	0.00108	1	09/07/2017 01:49	WG1017429
Di-isopropyl ether	U		0.000267	0.00108	1	09/07/2017 01:49	WG1017429
Ethylbenzene	U		0.000320	0.00108	1	09/07/2017 01:49	WG1017429
Hexachloro-1,3-butadiene	U		0.000368	0.00108	1	09/07/2017 01:49	WG1017429
2-Hexanone	U		0.00148	0.0108	1	09/07/2017 01:49	WG1017429
n-Hexane	0.000460	J	0.000312	0.0108	1	09/07/2017 01:49	WG1017429
Iodomethane	U		0.00273	0.0108	1	09/07/2017 01:49	WG1017429
Isopropylbenzene	U		0.000262	0.00108	1	09/07/2017 01:49	WG1017429
p-Isopropyltoluene	U		0.000220	0.00108	1	09/07/2017 01:49	WG1017429
2-Butanone (MEK)	U		0.00504	0.0108	1	09/07/2017 01:49	WG1017429
Methylene Chloride	U		0.00108	0.00539	1	09/07/2017 01:49	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0108	1	09/07/2017 01:49	WG1017429

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 09/01/17 09:15

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00108	1	09/07/2017 01:49	WG1017429
Naphthalene	U		0.00108	0.00539	1	09/07/2017 01:49	WG1017429
n-Propylbenzene	U		0.000222	0.00108	1	09/07/2017 01:49	WG1017429
Styrene	U		0.000252	0.00108	1	09/07/2017 01:49	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000284	0.00108	1	09/07/2017 01:49	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000393	0.00108	1	09/07/2017 01:49	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000393	0.00108	1	09/07/2017 01:49	WG1017429
Tetrachloroethene	0.00134		0.000297	0.00108	1	09/07/2017 01:49	WG1017429
Toluene	U		0.000467	0.00539	1	09/07/2017 01:49	WG1017429
1,2,3-Trichlorobenzene	U		0.000330	0.00108	1	09/07/2017 01:49	WG1017429
1,2,4-Trichlorobenzene	U		0.000418	0.00108	1	09/07/2017 01:49	WG1017429
1,1,1-Trichloroethane	U		0.000308	0.00108	1	09/07/2017 01:49	WG1017429
1,1,2-Trichloroethane	U		0.000298	0.00108	1	09/07/2017 01:49	WG1017429
Trichloroethene	U		0.000301	0.00108	1	09/07/2017 01:49	WG1017429
Trichlorofluoromethane	U		0.000411	0.00539	1	09/07/2017 01:49	WG1017429
1,2,3-Trichloropropane	U		0.000798	0.00269	1	09/07/2017 01:49	WG1017429
1,2,4-Trimethylbenzene	U		0.000227	0.00108	1	09/07/2017 01:49	WG1017429
1,2,3-Trimethylbenzene	U		0.000309	0.00108	1	09/07/2017 01:49	WG1017429
1,3,5-Trimethylbenzene	U		0.000287	0.00108	1	09/07/2017 01:49	WG1017429
Vinyl acetate	U		0.00257	0.0108	1	09/07/2017 01:49	WG1017429
Vinyl chloride	U		0.000313	0.00108	1	09/07/2017 01:49	WG1017429
Xylenes, Total	U		0.000752	0.00323	1	09/07/2017 01:49	WG1017429
(S) Toluene-d8	99.8			80.0-120		09/07/2017 01:49	WG1017429
(S) Dibromofluoromethane	101			74.0-131		09/07/2017 01:49	WG1017429
(S) 4-Bromofluorobenzene	99.4			64.0-132		09/07/2017 01:49	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	09/08/2017 15:56	WG1018229

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0269	J	0.0108	0.0542	1	09/07/2017 02:11	WG1017429
Acrylonitrile	U		0.00194	0.0108	1	09/07/2017 02:11	WG1017429
Benzene	U		0.000293	0.00108	1	09/07/2017 02:11	WG1017429
Bromobenzene	U		0.000308	0.00108	1	09/07/2017 02:11	WG1017429
Bromodichloromethane	U		0.000276	0.00108	1	09/07/2017 02:11	WG1017429
Bromochloromethane	U		0.000423	0.00542	1	09/07/2017 02:11	WG1017429
Bromoform	U		0.000460	0.00108	1	09/07/2017 02:11	WG1017429
Bromomethane	U		0.00145	0.00542	1	09/07/2017 02:11	WG1017429
n-Butylbenzene	U		0.000280	0.00108	1	09/07/2017 02:11	WG1017429
sec-Butylbenzene	U		0.000218	0.00108	1	09/07/2017 02:11	WG1017429
tert-Butylbenzene	U		0.000223	0.00108	1	09/07/2017 02:11	WG1017429
Carbon disulfide	0.000272	J	0.000240	0.00108	1	09/07/2017 02:11	WG1017429
Carbon tetrachloride	U		0.000356	0.00108	1	09/07/2017 02:11	WG1017429
Chlorobenzene	U		0.000230	0.00108	1	09/07/2017 02:11	WG1017429
Chlorodibromomethane	U		0.000405	0.00108	1	09/07/2017 02:11	WG1017429
Chloroethane	U		0.00103	0.00542	1	09/07/2017 02:11	WG1017429
Chloroform	U		0.000248	0.00542	1	09/07/2017 02:11	WG1017429
Chloromethane	U		0.000407	0.00271	1	09/07/2017 02:11	WG1017429
2-Chlorotoluene	U		0.000327	0.00108	1	09/07/2017 02:11	WG1017429
4-Chlorotoluene	U		0.000260	0.00108	1	09/07/2017 02:11	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00542	1	09/07/2017 02:11	WG1017429
1,2-Dibromoethane	U		0.000372	0.00108	1	09/07/2017 02:11	WG1017429
Dibromomethane	U		0.000414	0.00108	1	09/07/2017 02:11	WG1017429
1,2-Dichlorobenzene	U		0.000331	0.00108	1	09/07/2017 02:11	WG1017429
1,3-Dichlorobenzene	U		0.000259	0.00108	1	09/07/2017 02:11	WG1017429
1,4-Dichlorobenzene	U		0.000245	0.00108	1	09/07/2017 02:11	WG1017429
Dichlorodifluoromethane	U		0.000773	0.00542	1	09/07/2017 02:11	WG1017429
1,1-Dichloroethane	U		0.000216	0.00108	1	09/07/2017 02:11	WG1017429
1,2-Dichloroethane	U		0.000287	0.00108	1	09/07/2017 02:11	WG1017429
1,1-Dichloroethene	U		0.000329	0.00108	1	09/07/2017 02:11	WG1017429
cis-1,2-Dichloroethene	U		0.000255	0.00108	1	09/07/2017 02:11	WG1017429
trans-1,2-Dichloroethene	U		0.000286	0.00108	1	09/07/2017 02:11	WG1017429
1,2-Dichloropropane	U		0.000388	0.00108	1	09/07/2017 02:11	WG1017429
1,1-Dichloropropene	U		0.000344	0.00108	1	09/07/2017 02:11	WG1017429
1,3-Dichloropropane	U		0.000225	0.00108	1	09/07/2017 02:11	WG1017429
cis-1,3-Dichloropropene	U		0.000284	0.00108	1	09/07/2017 02:11	WG1017429
trans-1,3-Dichloropropene	U		0.000290	0.00108	1	09/07/2017 02:11	WG1017429
trans-1,4-Dichloro-2-butene	U	JO	0.000844	0.00271	1	09/07/2017 02:11	WG1017429
2,2-Dichloropropane	U		0.000303	0.00108	1	09/07/2017 02:11	WG1017429
Di-isopropyl ether	U		0.000269	0.00108	1	09/07/2017 02:11	WG1017429
Ethylbenzene	U		0.000322	0.00108	1	09/07/2017 02:11	WG1017429
Hexachloro-1,3-butadiene	U		0.000371	0.00108	1	09/07/2017 02:11	WG1017429
2-Hexanone	U		0.00149	0.0108	1	09/07/2017 02:11	WG1017429
n-Hexane	0.000659	J	0.000315	0.0108	1	09/07/2017 02:11	WG1017429
Iodomethane	U		0.00274	0.0108	1	09/07/2017 02:11	WG1017429
Isopropylbenzene	U		0.000264	0.00108	1	09/07/2017 02:11	WG1017429
p-Isopropyltoluene	U		0.000221	0.00108	1	09/07/2017 02:11	WG1017429
2-Butanone (MEK)	0.00569	J	0.00508	0.0108	1	09/07/2017 02:11	WG1017429
Methylene Chloride	U		0.00108	0.00542	1	09/07/2017 02:11	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0108	1	09/07/2017 02:11	WG1017429

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 09/01/17 10:10

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00108	1	09/07/2017 02:11	WG1017429
Naphthalene	U		0.00108	0.00542	1	09/07/2017 02:11	WG1017429
n-Propylbenzene	U		0.000223	0.00108	1	09/07/2017 02:11	WG1017429
Styrene	U		0.000254	0.00108	1	09/07/2017 02:11	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000286	0.00108	1	09/07/2017 02:11	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000396	0.00108	1	09/07/2017 02:11	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00108	1	09/07/2017 02:11	WG1017429
Tetrachloroethene	U		0.000299	0.00108	1	09/07/2017 02:11	WG1017429
Toluene	U		0.000471	0.00542	1	09/07/2017 02:11	WG1017429
1,2,3-Trichlorobenzene	U		0.000332	0.00108	1	09/07/2017 02:11	WG1017429
1,2,4-Trichlorobenzene	U		0.000421	0.00108	1	09/07/2017 02:11	WG1017429
1,1,1-Trichloroethane	U		0.000310	0.00108	1	09/07/2017 02:11	WG1017429
1,1,2-Trichloroethane	U		0.000300	0.00108	1	09/07/2017 02:11	WG1017429
Trichloroethene	U		0.000303	0.00108	1	09/07/2017 02:11	WG1017429
Trichlorofluoromethane	U		0.000414	0.00542	1	09/07/2017 02:11	WG1017429
1,2,3-Trichloropropane	U		0.000804	0.00271	1	09/07/2017 02:11	WG1017429
1,2,4-Trimethylbenzene	U		0.000229	0.00108	1	09/07/2017 02:11	WG1017429
1,2,3-Trimethylbenzene	U		0.000311	0.00108	1	09/07/2017 02:11	WG1017429
1,3,5-Trimethylbenzene	U		0.000289	0.00108	1	09/07/2017 02:11	WG1017429
Vinyl acetate	U		0.00259	0.0108	1	09/07/2017 02:11	WG1017429
Vinyl chloride	U		0.000316	0.00108	1	09/07/2017 02:11	WG1017429
Xylenes, Total	U		0.000757	0.00325	1	09/07/2017 02:11	WG1017429
(S) Toluene-d8	98.0			80.0-120		09/07/2017 02:11	WG1017429
(S) Dibromofluoromethane	103			74.0-131		09/07/2017 02:11	WG1017429
(S) 4-Bromofluorobenzene	101			64.0-132		09/07/2017 02:11	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.5		1	09/08/2017 15:56	WG1018229

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0108	0.0540	1	09/07/2017 02:33	WG1017429
Acrylonitrile	U		0.00193	0.0108	1	09/07/2017 02:33	WG1017429
Benzene	U		0.000292	0.00108	1	09/07/2017 02:33	WG1017429
Bromobenzene	U		0.000307	0.00108	1	09/07/2017 02:33	WG1017429
Bromodichloromethane	U		0.000275	0.00108	1	09/07/2017 02:33	WG1017429
Bromochloromethane	U		0.000422	0.00540	1	09/07/2017 02:33	WG1017429
Bromoform	U		0.000458	0.00108	1	09/07/2017 02:33	WG1017429
Bromomethane	U		0.00145	0.00540	1	09/07/2017 02:33	WG1017429
n-Butylbenzene	U		0.000279	0.00108	1	09/07/2017 02:33	WG1017429
sec-Butylbenzene	U		0.000217	0.00108	1	09/07/2017 02:33	WG1017429
tert-Butylbenzene	U		0.000223	0.00108	1	09/07/2017 02:33	WG1017429
Carbon disulfide	0.000310	J	0.000239	0.00108	1	09/07/2017 02:33	WG1017429
Carbon tetrachloride	U		0.000355	0.00108	1	09/07/2017 02:33	WG1017429
Chlorobenzene	U		0.000229	0.00108	1	09/07/2017 02:33	WG1017429
Chlorodibromomethane	U		0.000403	0.00108	1	09/07/2017 02:33	WG1017429
Chloroethane	U		0.00102	0.00540	1	09/07/2017 02:33	WG1017429
Chloroform	U		0.000248	0.00540	1	09/07/2017 02:33	WG1017429
Chloromethane	U		0.000405	0.00270	1	09/07/2017 02:33	WG1017429
2-Chlorotoluene	U		0.000325	0.00108	1	09/07/2017 02:33	WG1017429
4-Chlorotoluene	U		0.000259	0.00108	1	09/07/2017 02:33	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00540	1	09/07/2017 02:33	WG1017429
1,2-Dibromoethane	U		0.000371	0.00108	1	09/07/2017 02:33	WG1017429
Dibromomethane	U		0.000413	0.00108	1	09/07/2017 02:33	WG1017429
1,2-Dichlorobenzene	U		0.000330	0.00108	1	09/07/2017 02:33	WG1017429
1,3-Dichlorobenzene	U		0.000258	0.00108	1	09/07/2017 02:33	WG1017429
1,4-Dichlorobenzene	U		0.000244	0.00108	1	09/07/2017 02:33	WG1017429
Dichlorodifluoromethane	U		0.000771	0.00540	1	09/07/2017 02:33	WG1017429
1,1-Dichloroethane	U		0.000215	0.00108	1	09/07/2017 02:33	WG1017429
1,2-Dichloroethane	U		0.000286	0.00108	1	09/07/2017 02:33	WG1017429
1,1-Dichloroethene	U		0.000328	0.00108	1	09/07/2017 02:33	WG1017429
cis-1,2-Dichloroethene	U		0.000254	0.00108	1	09/07/2017 02:33	WG1017429
trans-1,2-Dichloroethene	U		0.000285	0.00108	1	09/07/2017 02:33	WG1017429
1,2-Dichloropropane	U		0.000387	0.00108	1	09/07/2017 02:33	WG1017429
1,1-Dichloropropene	U		0.000343	0.00108	1	09/07/2017 02:33	WG1017429
1,3-Dichloropropane	U		0.000224	0.00108	1	09/07/2017 02:33	WG1017429
cis-1,3-Dichloropropene	U		0.000283	0.00108	1	09/07/2017 02:33	WG1017429
trans-1,3-Dichloropropene	U		0.000289	0.00108	1	09/07/2017 02:33	WG1017429
trans-1,4-Dichloro-2-butene	U	JO	0.000841	0.00270	1	09/07/2017 02:33	WG1017429
2,2-Dichloropropane	U		0.000302	0.00108	1	09/07/2017 02:33	WG1017429
Di-isopropyl ether	U		0.000268	0.00108	1	09/07/2017 02:33	WG1017429
Ethylbenzene	U		0.000321	0.00108	1	09/07/2017 02:33	WG1017429
Hexachloro-1,3-butadiene	U		0.000370	0.00108	1	09/07/2017 02:33	WG1017429
2-Hexanone	U		0.00148	0.0108	1	09/07/2017 02:33	WG1017429
n-Hexane	0.000708	J	0.000313	0.0108	1	09/07/2017 02:33	WG1017429
Iodomethane	U		0.00273	0.0108	1	09/07/2017 02:33	WG1017429
Isopropylbenzene	U		0.000263	0.00108	1	09/07/2017 02:33	WG1017429
p-Isopropyltoluene	U		0.000221	0.00108	1	09/07/2017 02:33	WG1017429
2-Butanone (MEK)	U		0.00506	0.0108	1	09/07/2017 02:33	WG1017429
Methylene Chloride	U		0.00108	0.00540	1	09/07/2017 02:33	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00203	0.0108	1	09/07/2017 02:33	WG1017429

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 09/01/17 10:35

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000229	0.00108	1	09/07/2017 02:33	WG1017429
Naphthalene	U		0.00108	0.00540	1	09/07/2017 02:33	WG1017429
n-Propylbenzene	U		0.000223	0.00108	1	09/07/2017 02:33	WG1017429
Styrene	U		0.000253	0.00108	1	09/07/2017 02:33	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000285	0.00108	1	09/07/2017 02:33	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000395	0.00108	1	09/07/2017 02:33	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000395	0.00108	1	09/07/2017 02:33	WG1017429
Tetrachloroethene	U		0.000298	0.00108	1	09/07/2017 02:33	WG1017429
Toluene	U		0.000469	0.00540	1	09/07/2017 02:33	WG1017429
1,2,3-Trichlorobenzene	U		0.000331	0.00108	1	09/07/2017 02:33	WG1017429
1,2,4-Trichlorobenzene	U		0.000419	0.00108	1	09/07/2017 02:33	WG1017429
1,1,1-Trichloroethane	U		0.000309	0.00108	1	09/07/2017 02:33	WG1017429
1,1,2-Trichloroethane	U		0.000299	0.00108	1	09/07/2017 02:33	WG1017429
Trichloroethene	U		0.000302	0.00108	1	09/07/2017 02:33	WG1017429
Trichlorofluoromethane	U		0.000413	0.00540	1	09/07/2017 02:33	WG1017429
1,2,3-Trichloropropane	U		0.000801	0.00270	1	09/07/2017 02:33	WG1017429
1,2,4-Trimethylbenzene	U		0.000228	0.00108	1	09/07/2017 02:33	WG1017429
1,2,3-Trimethylbenzene	U		0.000310	0.00108	1	09/07/2017 02:33	WG1017429
1,3,5-Trimethylbenzene	U		0.000288	0.00108	1	09/07/2017 02:33	WG1017429
Vinyl acetate	U		0.00258	0.0108	1	09/07/2017 02:33	WG1017429
Vinyl chloride	U		0.000315	0.00108	1	09/07/2017 02:33	WG1017429
Xylenes, Total	U		0.000754	0.00324	1	09/07/2017 02:33	WG1017429
(S) Toluene-d8	98.7			80.0-120		09/07/2017 02:33	WG1017429
(S) Dibromofluoromethane	105			74.0-131		09/07/2017 02:33	WG1017429
(S) 4-Bromofluorobenzene	99.4			64.0-132		09/07/2017 02:33	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/01/17 11:45

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	81.7		1	09/08/2017 15:56	WG1018229

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0415	0.122	1	09/10/2017 04:32	WG1018662
(S) a,a,a-Trifluorotoluene(FID)	95.5			77.0-120		09/10/2017 04:32	WG1018662

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0122	0.0612	1	09/07/2017 02:55	WG1017429
Acrylonitrile	U		0.00219	0.0122	1	09/07/2017 02:55	WG1017429
Benzene	U		0.000330	0.00122	1	09/07/2017 02:55	WG1017429
Bromobenzene	U		0.000347	0.00122	1	09/07/2017 02:55	WG1017429
Bromodichloromethane	U		0.000311	0.00122	1	09/07/2017 02:55	WG1017429
Bromochloromethane	U		0.000477	0.00612	1	09/07/2017 02:55	WG1017429
Bromoform	U		0.000519	0.00122	1	09/07/2017 02:55	WG1017429
Bromomethane	U		0.00164	0.00612	1	09/07/2017 02:55	WG1017429
n-Butylbenzene	U		0.000316	0.00122	1	09/07/2017 02:55	WG1017429
sec-Butylbenzene	U		0.000246	0.00122	1	09/07/2017 02:55	WG1017429
tert-Butylbenzene	U		0.000252	0.00122	1	09/07/2017 02:55	WG1017429
Carbon disulfide	U		0.000270	0.00122	1	09/07/2017 02:55	WG1017429
Carbon tetrachloride	U		0.000401	0.00122	1	09/07/2017 02:55	WG1017429
Chlorobenzene	U		0.000259	0.00122	1	09/07/2017 02:55	WG1017429
Chlorodibromomethane	U		0.000456	0.00122	1	09/07/2017 02:55	WG1017429
Chloroethane	U		0.00116	0.00612	1	09/07/2017 02:55	WG1017429
Chloroform	U		0.000280	0.00612	1	09/07/2017 02:55	WG1017429
Chloromethane	U		0.000459	0.00306	1	09/07/2017 02:55	WG1017429
2-Chlorotoluene	U		0.000368	0.00122	1	09/07/2017 02:55	WG1017429
4-Chlorotoluene	U		0.000294	0.00122	1	09/07/2017 02:55	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00128	0.00612	1	09/07/2017 02:55	WG1017429
1,2-Dibromoethane	U		0.000420	0.00122	1	09/07/2017 02:55	WG1017429
Dibromomethane	U		0.000467	0.00122	1	09/07/2017 02:55	WG1017429
1,2-Dichlorobenzene	U		0.000373	0.00122	1	09/07/2017 02:55	WG1017429
1,3-Dichlorobenzene	U		0.000292	0.00122	1	09/07/2017 02:55	WG1017429
1,4-Dichlorobenzene	U		0.000276	0.00122	1	09/07/2017 02:55	WG1017429
Dichlorodifluoromethane	U		0.000872	0.00612	1	09/07/2017 02:55	WG1017429
1,1-Dichloroethane	U		0.000243	0.00122	1	09/07/2017 02:55	WG1017429
1,2-Dichloroethane	U		0.000324	0.00122	1	09/07/2017 02:55	WG1017429
1,1-Dichloroethene	U		0.000371	0.00122	1	09/07/2017 02:55	WG1017429
cis-1,2-Dichloroethene	U		0.000287	0.00122	1	09/07/2017 02:55	WG1017429
trans-1,2-Dichloroethene	U		0.000323	0.00122	1	09/07/2017 02:55	WG1017429
1,2-Dichloropropane	U		0.000438	0.00122	1	09/07/2017 02:55	WG1017429
1,1-Dichloropropene	U		0.000388	0.00122	1	09/07/2017 02:55	WG1017429
1,3-Dichloropropane	U		0.000253	0.00122	1	09/07/2017 02:55	WG1017429
cis-1,3-Dichloropropene	U		0.000321	0.00122	1	09/07/2017 02:55	WG1017429
trans-1,3-Dichloropropene	U		0.000327	0.00122	1	09/07/2017 02:55	WG1017429
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000952	0.00306	1	09/07/2017 02:55	WG1017429
2,2-Dichloropropane	U		0.000341	0.00122	1	09/07/2017 02:55	WG1017429
Di-isopropyl ether	U		0.000303	0.00122	1	09/07/2017 02:55	WG1017429
Ethylbenzene	U		0.000363	0.00122	1	09/07/2017 02:55	WG1017429
Hexachloro-1,3-butadiene	U		0.000418	0.00122	1	09/07/2017 02:55	WG1017429
2-Hexanone	U		0.00168	0.0122	1	09/07/2017 02:55	WG1017429
n-Hexane	U		0.000355	0.0122	1	09/07/2017 02:55	WG1017429

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/01/17 11:45

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00310	0.0122	1	09/07/2017 02:55	WG1017429
Isopropylbenzene	U		0.000297	0.00122	1	09/07/2017 02:55	WG1017429
p-Isopropyltoluene	U		0.000250	0.00122	1	09/07/2017 02:55	WG1017429
2-Butanone (MEK)	U		0.00573	0.0122	1	09/07/2017 02:55	WG1017429
Methylene Chloride	U		0.00122	0.00612	1	09/07/2017 02:55	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00230	0.0122	1	09/07/2017 02:55	WG1017429
Methyl tert-butyl ether	U		0.000259	0.00122	1	09/07/2017 02:55	WG1017429
Naphthalene	U		0.00122	0.00612	1	09/07/2017 02:55	WG1017429
n-Propylbenzene	U		0.000252	0.00122	1	09/07/2017 02:55	WG1017429
Styrene	U		0.000286	0.00122	1	09/07/2017 02:55	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000323	0.00122	1	09/07/2017 02:55	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000447	0.00122	1	09/07/2017 02:55	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000447	0.00122	1	09/07/2017 02:55	WG1017429
Tetrachloroethene	U		0.000338	0.00122	1	09/07/2017 02:55	WG1017429
Toluene	U		0.000531	0.00612	1	09/07/2017 02:55	WG1017429
1,2,3-Trichlorobenzene	U		0.000374	0.00122	1	09/07/2017 02:55	WG1017429
1,2,4-Trichlorobenzene	U		0.000475	0.00122	1	09/07/2017 02:55	WG1017429
1,1,1-Trichloroethane	U		0.000350	0.00122	1	09/07/2017 02:55	WG1017429
1,1,2-Trichloroethane	U		0.000339	0.00122	1	09/07/2017 02:55	WG1017429
Trichloroethene	U		0.000341	0.00122	1	09/07/2017 02:55	WG1017429
Trichlorofluoromethane	U		0.000467	0.00612	1	09/07/2017 02:55	WG1017429
1,2,3-Trichloropropane	U		0.000907	0.00306	1	09/07/2017 02:55	WG1017429
1,2,4-Trimethylbenzene	U		0.000258	0.00122	1	09/07/2017 02:55	WG1017429
1,2,3-Trimethylbenzene	U		0.000351	0.00122	1	09/07/2017 02:55	WG1017429
1,3,5-Trimethylbenzene	U		0.000325	0.00122	1	09/07/2017 02:55	WG1017429
Vinyl acetate	U		0.00292	0.0122	1	09/07/2017 02:55	WG1017429
Vinyl chloride	U		0.000356	0.00122	1	09/07/2017 02:55	WG1017429
Xylenes, Total	U		0.000854	0.00367	1	09/07/2017 02:55	WG1017429
(S) Toluene-d8	101			80.0-120		09/07/2017 02:55	WG1017429
(S) Dibromofluoromethane	103			74.0-131		09/07/2017 02:55	WG1017429
(S) 4-Bromofluorobenzene	99.9			64.0-132		09/07/2017 02:55	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.3		1	09/08/2017 15:56	WG1018229

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0145	J	0.0120	0.0600	1	09/07/2017 17:50	WG1017429
Acrylonitrile	U		0.00215	0.0120	1	09/07/2017 17:50	WG1017429
Benzene	U		0.000324	0.00120	1	09/07/2017 17:50	WG1017429
Bromobenzene	U		0.000341	0.00120	1	09/07/2017 17:50	WG1017429
Bromodichloromethane	U		0.000305	0.00120	1	09/07/2017 17:50	WG1017429
Bromochloromethane	U		0.000468	0.00600	1	09/07/2017 17:50	WG1017429
Bromoform	U		0.000509	0.00120	1	09/07/2017 17:50	WG1017429
Bromomethane	U		0.00161	0.00600	1	09/07/2017 17:50	WG1017429
n-Butylbenzene	U		0.000310	0.00120	1	09/07/2017 17:50	WG1017429
sec-Butylbenzene	U		0.000241	0.00120	1	09/07/2017 17:50	WG1017429
tert-Butylbenzene	U		0.000247	0.00120	1	09/07/2017 17:50	WG1017429
Carbon disulfide	0.000664	J	0.000265	0.00120	1	09/07/2017 17:50	WG1017429
Carbon tetrachloride	U		0.000394	0.00120	1	09/07/2017 17:50	WG1017429
Chlorobenzene	U		0.000254	0.00120	1	09/07/2017 17:50	WG1017429
Chlorodibromomethane	U		0.000448	0.00120	1	09/07/2017 17:50	WG1017429
Chloroethane	U		0.00114	0.00600	1	09/07/2017 17:50	WG1017429
Chloroform	U		0.000275	0.00600	1	09/07/2017 17:50	WG1017429
Chloromethane	U		0.000450	0.00300	1	09/07/2017 17:50	WG1017429
2-Chlorotoluene	U		0.000361	0.00120	1	09/07/2017 17:50	WG1017429
4-Chlorotoluene	U		0.000288	0.00120	1	09/07/2017 17:50	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00600	1	09/07/2017 17:50	WG1017429
1,2-Dibromoethane	U		0.000412	0.00120	1	09/07/2017 17:50	WG1017429
Dibromomethane	U		0.000459	0.00120	1	09/07/2017 17:50	WG1017429
1,2-Dichlorobenzene	U		0.000366	0.00120	1	09/07/2017 17:50	WG1017429
1,3-Dichlorobenzene	U		0.000287	0.00120	1	09/07/2017 17:50	WG1017429
1,4-Dichlorobenzene	U		0.000271	0.00120	1	09/07/2017 17:50	WG1017429
Dichlorodifluoromethane	U		0.000856	0.00600	1	09/07/2017 17:50	WG1017429
1,1-Dichloroethane	U		0.000239	0.00120	1	09/07/2017 17:50	WG1017429
1,2-Dichloroethane	U		0.000318	0.00120	1	09/07/2017 17:50	WG1017429
1,1-Dichloroethene	U		0.000364	0.00120	1	09/07/2017 17:50	WG1017429
cis-1,2-Dichloroethene	U		0.000282	0.00120	1	09/07/2017 17:50	WG1017429
trans-1,2-Dichloroethene	U		0.000317	0.00120	1	09/07/2017 17:50	WG1017429
1,2-Dichloropropane	U		0.000430	0.00120	1	09/07/2017 17:50	WG1017429
1,1-Dichloropropene	U		0.000381	0.00120	1	09/07/2017 17:50	WG1017429
1,3-Dichloropropane	U		0.000248	0.00120	1	09/07/2017 17:50	WG1017429
cis-1,3-Dichloropropene	U		0.000315	0.00120	1	09/07/2017 17:50	WG1017429
trans-1,3-Dichloropropene	U		0.000321	0.00120	1	09/07/2017 17:50	WG1017429
trans-1,4-Dichloro-2-butene	U		0.000934	0.00300	1	09/07/2017 17:50	WG1017429
2,2-Dichloropropane	U		0.000335	0.00120	1	09/07/2017 17:50	WG1017429
Di-isopropyl ether	U		0.000298	0.00120	1	09/07/2017 17:50	WG1017429
Ethylbenzene	U		0.000357	0.00120	1	09/07/2017 17:50	WG1017429
Hexachloro-1,3-butadiene	U		0.000411	0.00120	1	09/07/2017 17:50	WG1017429
2-Hexanone	U		0.00164	0.0120	1	09/07/2017 17:50	WG1017429
n-Hexane	0.00129	J	0.000348	0.0120	1	09/07/2017 17:50	WG1017429
Iodomethane	U		0.00304	0.0120	1	09/07/2017 17:50	WG1017429
Isopropylbenzene	U		0.000292	0.00120	1	09/07/2017 17:50	WG1017429
p-Isopropyltoluene	U		0.000245	0.00120	1	09/07/2017 17:50	WG1017429
2-Butanone (MEK)	U		0.00562	0.0120	1	09/07/2017 17:50	WG1017429
Methylene Chloride	U		0.00120	0.00600	1	09/07/2017 17:50	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00226	0.0120	1	09/07/2017 17:50	WG1017429

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/01/17 11:45

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000254	0.00120	1	09/07/2017 17:50	WG1017429
Naphthalene	U		0.00120	0.00600	1	09/07/2017 17:50	WG1017429
n-Propylbenzene	U		0.000247	0.00120	1	09/07/2017 17:50	WG1017429
Styrene	U		0.000281	0.00120	1	09/07/2017 17:50	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000317	0.00120	1	09/07/2017 17:50	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000438	0.00120	1	09/07/2017 17:50	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000438	0.00120	1	09/07/2017 17:50	WG1017429
Tetrachloroethene	U		0.000331	0.00120	1	09/07/2017 17:50	WG1017429
Toluene	U		0.000521	0.00600	1	09/07/2017 17:50	WG1017429
1,2,3-Trichlorobenzene	U		0.000367	0.00120	1	09/07/2017 17:50	WG1017429
1,2,4-Trichlorobenzene	U		0.000466	0.00120	1	09/07/2017 17:50	WG1017429
1,1,1-Trichloroethane	U		0.000343	0.00120	1	09/07/2017 17:50	WG1017429
1,1,2-Trichloroethane	U		0.000333	0.00120	1	09/07/2017 17:50	WG1017429
Trichloroethene	U		0.000335	0.00120	1	09/07/2017 17:50	WG1017429
Trichlorofluoromethane	U		0.000459	0.00600	1	09/07/2017 17:50	WG1017429
1,2,3-Trichloropropane	U		0.000890	0.00300	1	09/07/2017 17:50	WG1017429
1,2,4-Trimethylbenzene	U		0.000253	0.00120	1	09/07/2017 17:50	WG1017429
1,2,3-Trimethylbenzene	U		0.000345	0.00120	1	09/07/2017 17:50	WG1017429
1,3,5-Trimethylbenzene	U		0.000319	0.00120	1	09/07/2017 17:50	WG1017429
Vinyl acetate	U		0.00287	0.0120	1	09/07/2017 17:50	WG1017429
Vinyl chloride	U		0.000349	0.00120	1	09/07/2017 17:50	WG1017429
Xylenes, Total	U		0.000838	0.00360	1	09/07/2017 17:50	WG1017429
(S) Toluene-d8	95.7			80.0-120		09/07/2017 17:50	WG1017429
(S) Dibromofluoromethane	113			74.0-131		09/07/2017 17:50	WG1017429
(S) 4-Bromofluorobenzene	103			64.0-132		09/07/2017 17:50	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.8		1	09/08/2017 15:56	WG1018229

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0386	J	0.0113	0.0563	1	09/07/2017 03:17	WG1017429
Acrylonitrile	U		0.00202	0.0113	1	09/07/2017 03:17	WG1017429
Benzene	0.0221		0.000304	0.00113	1	09/07/2017 03:17	WG1017429
Bromobenzene	U		0.000320	0.00113	1	09/07/2017 03:17	WG1017429
Bromodichloromethane	U		0.000286	0.00113	1	09/07/2017 03:17	WG1017429
Bromochloromethane	U		0.000439	0.00563	1	09/07/2017 03:17	WG1017429
Bromoform	U		0.000477	0.00113	1	09/07/2017 03:17	WG1017429
Bromomethane	U		0.00151	0.00563	1	09/07/2017 03:17	WG1017429
n-Butylbenzene	0.00318		0.000290	0.00113	1	09/07/2017 03:17	WG1017429
sec-Butylbenzene	0.000274	J	0.000226	0.00113	1	09/07/2017 03:17	WG1017429
tert-Butylbenzene	U		0.000232	0.00113	1	09/07/2017 03:17	WG1017429
Carbon disulfide	0.00288		0.000249	0.00113	1	09/07/2017 03:17	WG1017429
Carbon tetrachloride	U		0.000369	0.00113	1	09/07/2017 03:17	WG1017429
Chlorobenzene	U		0.000239	0.00113	1	09/07/2017 03:17	WG1017429
Chlorodibromomethane	U		0.000420	0.00113	1	09/07/2017 03:17	WG1017429
Chloroethane	U		0.00107	0.00563	1	09/07/2017 03:17	WG1017429
Chloroform	U		0.000258	0.00563	1	09/07/2017 03:17	WG1017429
Chloromethane	U		0.000422	0.00281	1	09/07/2017 03:17	WG1017429
2-Chlorotoluene	U		0.000339	0.00113	1	09/07/2017 03:17	WG1017429
4-Chlorotoluene	U		0.000270	0.00113	1	09/07/2017 03:17	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00563	1	09/07/2017 03:17	WG1017429
1,2-Dibromoethane	U		0.000386	0.00113	1	09/07/2017 03:17	WG1017429
Dibromomethane	U		0.000430	0.00113	1	09/07/2017 03:17	WG1017429
1,2-Dichlorobenzene	U		0.000343	0.00113	1	09/07/2017 03:17	WG1017429
1,3-Dichlorobenzene	U		0.000269	0.00113	1	09/07/2017 03:17	WG1017429
1,4-Dichlorobenzene	U		0.000254	0.00113	1	09/07/2017 03:17	WG1017429
Dichlorodifluoromethane	U		0.000803	0.00563	1	09/07/2017 03:17	WG1017429
1,1-Dichloroethane	U		0.000224	0.00113	1	09/07/2017 03:17	WG1017429
1,2-Dichloroethane	U		0.000298	0.00113	1	09/07/2017 03:17	WG1017429
1,1-Dichloroethene	0.000509	J	0.000341	0.00113	1	09/07/2017 03:17	WG1017429
cis-1,2-Dichloroethene	0.182		0.000265	0.00113	1	09/07/2017 03:17	WG1017429
trans-1,2-Dichloroethene	0.00356		0.000297	0.00113	1	09/07/2017 03:17	WG1017429
1,2-Dichloropropane	U		0.000403	0.00113	1	09/07/2017 03:17	WG1017429
1,1-Dichloropropene	U		0.000357	0.00113	1	09/07/2017 03:17	WG1017429
1,3-Dichloropropane	U		0.000233	0.00113	1	09/07/2017 03:17	WG1017429
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	09/07/2017 03:17	WG1017429
trans-1,3-Dichloropropene	U		0.000301	0.00113	1	09/07/2017 03:17	WG1017429
trans-1,4-Dichloro-2-butene	U	JO	0.000876	0.00281	1	09/07/2017 03:17	WG1017429
2,2-Dichloropropane	U		0.000314	0.00113	1	09/07/2017 03:17	WG1017429
Di-isopropyl ether	U		0.000279	0.00113	1	09/07/2017 03:17	WG1017429
Ethylbenzene	0.00876		0.000334	0.00113	1	09/07/2017 03:17	WG1017429
Hexachloro-1,3-butadiene	U		0.000385	0.00113	1	09/07/2017 03:17	WG1017429
2-Hexanone	0.00727	J	0.00154	0.0113	1	09/07/2017 03:17	WG1017429
n-Hexane	0.0368		0.000327	0.0113	1	09/07/2017 03:17	WG1017429
Iodomethane	U		0.00285	0.0113	1	09/07/2017 03:17	WG1017429
Isopropylbenzene	0.000650	J	0.000274	0.00113	1	09/07/2017 03:17	WG1017429
p-Isopropyltoluene	U		0.000230	0.00113	1	09/07/2017 03:17	WG1017429
2-Butanone (MEK)	0.0293		0.00527	0.0113	1	09/07/2017 03:17	WG1017429
Methylene Chloride	U		0.00113	0.00563	1	09/07/2017 03:17	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	09/07/2017 03:17	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/01/17 12:15

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	09/07/2017 03:17	WG1017429
Naphthalene	0.00226	J	0.00113	0.00563	1	09/07/2017 03:17	WG1017429
n-Propylbenzene	0.00407		0.000232	0.00113	1	09/07/2017 03:17	WG1017429
Styrene	0.000676	J	0.000263	0.00113	1	09/07/2017 03:17	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000297	0.00113	1	09/07/2017 03:17	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	09/07/2017 03:17	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00113	1	09/07/2017 03:17	WG1017429
Tetrachloroethene	0.0139		0.000311	0.00113	1	09/07/2017 03:17	WG1017429
Toluene	0.0228		0.000489	0.00563	1	09/07/2017 03:17	WG1017429
1,2,3-Trichlorobenzene	U		0.000345	0.00113	1	09/07/2017 03:17	WG1017429
1,2,4-Trichlorobenzene	U		0.000437	0.00113	1	09/07/2017 03:17	WG1017429
1,1,1-Trichloroethane	U		0.000322	0.00113	1	09/07/2017 03:17	WG1017429
1,1,2-Trichloroethane	U		0.000312	0.00113	1	09/07/2017 03:17	WG1017429
Trichloroethene	0.00182		0.000314	0.00113	1	09/07/2017 03:17	WG1017429
Trichlorofluoromethane	U		0.000430	0.00563	1	09/07/2017 03:17	WG1017429
1,2,3-Trichloropropane	U		0.000834	0.00281	1	09/07/2017 03:17	WG1017429
1,2,4-Trimethylbenzene	0.00330		0.000238	0.00113	1	09/07/2017 03:17	WG1017429
1,2,3-Trimethylbenzene	0.00117		0.000323	0.00113	1	09/07/2017 03:17	WG1017429
1,3,5-Trimethylbenzene	0.000732	J	0.000299	0.00113	1	09/07/2017 03:17	WG1017429
Vinyl acetate	U		0.00269	0.0113	1	09/07/2017 03:17	WG1017429
Vinyl chloride	0.00113		0.000328	0.00113	1	09/07/2017 03:17	WG1017429
Xylenes, Total	0.0189		0.000786	0.00338	1	09/07/2017 03:17	WG1017429
(S) Toluene-d8	92.5			80.0-120		09/07/2017 03:17	WG1017429
(S) Dibromofluoromethane	102			74.0-131		09/07/2017 03:17	WG1017429
(S) 4-Bromofluorobenzene	99.7			64.0-132		09/07/2017 03:17	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	09/08/2017 15:56	WG1018229

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0220	J	0.0121	0.0603	1	09/07/2017 03:39	WG1017429
Acrylonitrile	U		0.00216	0.0121	1	09/07/2017 03:39	WG1017429
Benzene	0.000541	J	0.000326	0.00121	1	09/07/2017 03:39	WG1017429
Bromobenzene	U		0.000343	0.00121	1	09/07/2017 03:39	WG1017429
Bromodichloromethane	U		0.000306	0.00121	1	09/07/2017 03:39	WG1017429
Bromochloromethane	U		0.000470	0.00603	1	09/07/2017 03:39	WG1017429
Bromoform	U		0.000511	0.00121	1	09/07/2017 03:39	WG1017429
Bromomethane	U		0.00162	0.00603	1	09/07/2017 03:39	WG1017429
n-Butylbenzene	U		0.000311	0.00121	1	09/07/2017 03:39	WG1017429
sec-Butylbenzene	U		0.000242	0.00121	1	09/07/2017 03:39	WG1017429
tert-Butylbenzene	U		0.000248	0.00121	1	09/07/2017 03:39	WG1017429
Carbon disulfide	0.00382		0.000267	0.00121	1	09/07/2017 03:39	WG1017429
Carbon tetrachloride	U		0.000396	0.00121	1	09/07/2017 03:39	WG1017429
Chlorobenzene	U		0.000256	0.00121	1	09/07/2017 03:39	WG1017429
Chlorodibromomethane	U		0.000450	0.00121	1	09/07/2017 03:39	WG1017429
Chloroethane	U		0.00114	0.00603	1	09/07/2017 03:39	WG1017429
Chloroform	U		0.000276	0.00603	1	09/07/2017 03:39	WG1017429
Chloromethane	U		0.000452	0.00302	1	09/07/2017 03:39	WG1017429
2-Chlorotoluene	U		0.000363	0.00121	1	09/07/2017 03:39	WG1017429
4-Chlorotoluene	U		0.000289	0.00121	1	09/07/2017 03:39	WG1017429
1,2-Dibromo-3-Chloropropane	U		0.00127	0.00603	1	09/07/2017 03:39	WG1017429
1,2-Dibromoethane	U		0.000414	0.00121	1	09/07/2017 03:39	WG1017429
Dibromomethane	U		0.000461	0.00121	1	09/07/2017 03:39	WG1017429
1,2-Dichlorobenzene	U		0.000368	0.00121	1	09/07/2017 03:39	WG1017429
1,3-Dichlorobenzene	U		0.000288	0.00121	1	09/07/2017 03:39	WG1017429
1,4-Dichlorobenzene	U		0.000273	0.00121	1	09/07/2017 03:39	WG1017429
Dichlorodifluoromethane	U		0.000860	0.00603	1	09/07/2017 03:39	WG1017429
1,1-Dichloroethane	U		0.000240	0.00121	1	09/07/2017 03:39	WG1017429
1,2-Dichloroethane	U		0.000320	0.00121	1	09/07/2017 03:39	WG1017429
1,1-Dichloroethene	U		0.000365	0.00121	1	09/07/2017 03:39	WG1017429
cis-1,2-Dichloroethene	0.000289	J	0.000283	0.00121	1	09/07/2017 03:39	WG1017429
trans-1,2-Dichloroethene	U		0.000318	0.00121	1	09/07/2017 03:39	WG1017429
1,2-Dichloropropane	U		0.000432	0.00121	1	09/07/2017 03:39	WG1017429
1,1-Dichloropropene	U		0.000382	0.00121	1	09/07/2017 03:39	WG1017429
1,3-Dichloropropane	U		0.000250	0.00121	1	09/07/2017 03:39	WG1017429
cis-1,3-Dichloropropene	U		0.000316	0.00121	1	09/07/2017 03:39	WG1017429
trans-1,3-Dichloropropene	U		0.000322	0.00121	1	09/07/2017 03:39	WG1017429
trans-1,4-Dichloro-2-butene	U	JO	0.000938	0.00302	1	09/07/2017 03:39	WG1017429
2,2-Dichloropropane	U		0.000336	0.00121	1	09/07/2017 03:39	WG1017429
Di-isopropyl ether	U		0.000299	0.00121	1	09/07/2017 03:39	WG1017429
Ethylbenzene	U		0.000358	0.00121	1	09/07/2017 03:39	WG1017429
Hexachloro-1,3-butadiene	U		0.000412	0.00121	1	09/07/2017 03:39	WG1017429
2-Hexanone	U		0.00165	0.0121	1	09/07/2017 03:39	WG1017429
n-Hexane	0.00652	J	0.000350	0.0121	1	09/07/2017 03:39	WG1017429
Iodomethane	U		0.00305	0.0121	1	09/07/2017 03:39	WG1017429
Isopropylbenzene	U		0.000293	0.00121	1	09/07/2017 03:39	WG1017429
p-Isopropyltoluene	U		0.000246	0.00121	1	09/07/2017 03:39	WG1017429
2-Butanone (MEK)	0.0107	J	0.00564	0.0121	1	09/07/2017 03:39	WG1017429
Methylene Chloride	U		0.00121	0.00603	1	09/07/2017 03:39	WG1017429
4-Methyl-2-pentanone (MIBK)	U		0.00227	0.0121	1	09/07/2017 03:39	WG1017429

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/01/17 13:00

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000256	0.00121	1	09/07/2017 03:39	WG1017429
Naphthalene	U		0.00121	0.00603	1	09/07/2017 03:39	WG1017429
n-Propylbenzene	U		0.000248	0.00121	1	09/07/2017 03:39	WG1017429
Styrene	U		0.000282	0.00121	1	09/07/2017 03:39	WG1017429
1,1,1,2-Tetrachloroethane	U		0.000318	0.00121	1	09/07/2017 03:39	WG1017429
1,1,2,2-Tetrachloroethane	U		0.000440	0.00121	1	09/07/2017 03:39	WG1017429
1,1,2-Trichlorotrifluoroethane	U		0.000440	0.00121	1	09/07/2017 03:39	WG1017429
Tetrachloroethene	U		0.000333	0.00121	1	09/07/2017 03:39	WG1017429
Toluene	0.000655	J	0.000523	0.00603	1	09/07/2017 03:39	WG1017429
1,2,3-Trichlorobenzene	U		0.000369	0.00121	1	09/07/2017 03:39	WG1017429
1,2,4-Trichlorobenzene	U		0.000468	0.00121	1	09/07/2017 03:39	WG1017429
1,1,1-Trichloroethane	U		0.000345	0.00121	1	09/07/2017 03:39	WG1017429
1,1,2-Trichloroethane	U		0.000334	0.00121	1	09/07/2017 03:39	WG1017429
Trichloroethene	U		0.000336	0.00121	1	09/07/2017 03:39	WG1017429
Trichlorofluoromethane	U		0.000461	0.00603	1	09/07/2017 03:39	WG1017429
1,2,3-Trichloropropane	U		0.000894	0.00302	1	09/07/2017 03:39	WG1017429
1,2,4-Trimethylbenzene	U		0.000254	0.00121	1	09/07/2017 03:39	WG1017429
1,2,3-Trimethylbenzene	U		0.000346	0.00121	1	09/07/2017 03:39	WG1017429
1,3,5-Trimethylbenzene	U		0.000321	0.00121	1	09/07/2017 03:39	WG1017429
Vinyl acetate	U		0.00288	0.0121	1	09/07/2017 03:39	WG1017429
Vinyl chloride	U		0.000351	0.00121	1	09/07/2017 03:39	WG1017429
Xylenes, Total	U		0.000842	0.00362	1	09/07/2017 03:39	WG1017429
(S) Toluene-d8	98.7			80.0-120		09/07/2017 03:39	WG1017429
(S) Dibromofluoromethane	103			74.0-131		09/07/2017 03:39	WG1017429
(S) 4-Bromofluorobenzene	100			64.0-132		09/07/2017 03:39	WG1017429

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	09/08/2017 15:56	WG1018229

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO J3	0.0114	0.0568	1	09/07/2017 00:42	WG1017434
Acrylonitrile	U	JO	0.00203	0.0114	1	09/07/2017 00:42	WG1017434
Benzene	U		0.000307	0.00114	1	09/07/2017 00:42	WG1017434
Bromobenzene	U		0.000323	0.00114	1	09/07/2017 00:42	WG1017434
Bromodichloromethane	U		0.000289	0.00114	1	09/07/2017 00:42	WG1017434
Bromochloromethane	U		0.000443	0.00568	1	09/07/2017 00:42	WG1017434
Bromoform	U		0.000482	0.00114	1	09/07/2017 00:42	WG1017434
Bromomethane	U		0.00152	0.00568	1	09/07/2017 00:42	WG1017434
n-Butylbenzene	U		0.000293	0.00114	1	09/07/2017 00:42	WG1017434
sec-Butylbenzene	U		0.000228	0.00114	1	09/07/2017 00:42	WG1017434
tert-Butylbenzene	U		0.000234	0.00114	1	09/07/2017 00:42	WG1017434
Carbon disulfide	U		0.000251	0.00114	1	09/07/2017 00:42	WG1017434
Carbon tetrachloride	U		0.000373	0.00114	1	09/07/2017 00:42	WG1017434
Chlorobenzene	U		0.000241	0.00114	1	09/07/2017 00:42	WG1017434
Chlorodibromomethane	U		0.000424	0.00114	1	09/07/2017 00:42	WG1017434
Chloroethane	U		0.00107	0.00568	1	09/07/2017 00:42	WG1017434
Chloroform	U		0.000260	0.00568	1	09/07/2017 00:42	WG1017434
Chloromethane	U	JO	0.000426	0.00284	1	09/07/2017 00:42	WG1017434
2-Chlorotoluene	U		0.000342	0.00114	1	09/07/2017 00:42	WG1017434
4-Chlorotoluene	U		0.000273	0.00114	1	09/07/2017 00:42	WG1017434
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00568	1	09/07/2017 00:42	WG1017434
1,2-Dibromoethane	U		0.000390	0.00114	1	09/07/2017 00:42	WG1017434
Dibromomethane	U		0.000434	0.00114	1	09/07/2017 00:42	WG1017434
1,2-Dichlorobenzene	U		0.000347	0.00114	1	09/07/2017 00:42	WG1017434
1,3-Dichlorobenzene	U		0.000272	0.00114	1	09/07/2017 00:42	WG1017434
1,4-Dichlorobenzene	U		0.000257	0.00114	1	09/07/2017 00:42	WG1017434
Dichlorodifluoromethane	U	JO	0.000810	0.00568	1	09/07/2017 00:42	WG1017434
1,1-Dichloroethane	U		0.000226	0.00114	1	09/07/2017 00:42	WG1017434
1,2-Dichloroethane	U		0.000301	0.00114	1	09/07/2017 00:42	WG1017434
1,1-Dichloroethene	U		0.000344	0.00114	1	09/07/2017 00:42	WG1017434
cis-1,2-Dichloroethene	U		0.000267	0.00114	1	09/07/2017 00:42	WG1017434
trans-1,2-Dichloroethene	U		0.000300	0.00114	1	09/07/2017 00:42	WG1017434
1,2-Dichloropropane	U		0.000407	0.00114	1	09/07/2017 00:42	WG1017434
1,1-Dichloropropene	U		0.000360	0.00114	1	09/07/2017 00:42	WG1017434
1,3-Dichloropropane	U		0.000235	0.00114	1	09/07/2017 00:42	WG1017434
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	09/07/2017 00:42	WG1017434
trans-1,3-Dichloropropene	U		0.000303	0.00114	1	09/07/2017 00:42	WG1017434
trans-1,4-Dichloro-2-butene	U		0.000884	0.00284	1	09/07/2017 00:42	WG1017434
2,2-Dichloropropane	U		0.000317	0.00114	1	09/07/2017 00:42	WG1017434
Di-isopropyl ether	U		0.000282	0.00114	1	09/07/2017 00:42	WG1017434
Ethylbenzene	U		0.000337	0.00114	1	09/07/2017 00:42	WG1017434
Hexachloro-1,3-butadiene	U		0.000389	0.00114	1	09/07/2017 00:42	WG1017434
2-Hexanone	U	JO	0.00156	0.0114	1	09/07/2017 00:42	WG1017434
n-Hexane	0.00113	J JO	0.000329	0.0114	1	09/07/2017 00:42	WG1017434
Iodomethane	U		0.00287	0.0114	1	09/07/2017 00:42	WG1017434
Isopropylbenzene	U		0.000276	0.00114	1	09/07/2017 00:42	WG1017434
p-Isopropyltoluene	U		0.000232	0.00114	1	09/07/2017 00:42	WG1017434
2-Butanone (MEK)	U	JO	0.00532	0.0114	1	09/07/2017 00:42	WG1017434
Methylene Chloride	U		0.00114	0.00568	1	09/07/2017 00:42	WG1017434
4-Methyl-2-pentanone (MIBK)	U	JO	0.00214	0.0114	1	09/07/2017 00:42	WG1017434

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/01/17 13:30

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	09/07/2017 00:42	WG1017434
Naphthalene	U		0.00114	0.00568	1	09/07/2017 00:42	WG1017434
n-Propylbenzene	U		0.000234	0.00114	1	09/07/2017 00:42	WG1017434
Styrene	U		0.000266	0.00114	1	09/07/2017 00:42	WG1017434
1,1,1,2-Tetrachloroethane	U		0.000300	0.00114	1	09/07/2017 00:42	WG1017434
1,1,2,2-Tetrachloroethane	U		0.000415	0.00114	1	09/07/2017 00:42	WG1017434
1,1,2-Trichlorotrifluoroethane	U		0.000415	0.00114	1	09/07/2017 00:42	WG1017434
Tetrachloroethene	U		0.000314	0.00114	1	09/07/2017 00:42	WG1017434
Toluene	U		0.000493	0.00568	1	09/07/2017 00:42	WG1017434
1,2,3-Trichlorobenzene	U		0.000348	0.00114	1	09/07/2017 00:42	WG1017434
1,2,4-Trichlorobenzene	U		0.000441	0.00114	1	09/07/2017 00:42	WG1017434
1,1,1-Trichloroethane	U		0.000325	0.00114	1	09/07/2017 00:42	WG1017434
1,1,2-Trichloroethane	U		0.000315	0.00114	1	09/07/2017 00:42	WG1017434
Trichloroethene	U		0.000317	0.00114	1	09/07/2017 00:42	WG1017434
Trichlorofluoromethane	U		0.000434	0.00568	1	09/07/2017 00:42	WG1017434
1,2,3-Trichloropropane	U		0.000842	0.00284	1	09/07/2017 00:42	WG1017434
1,2,4-Trimethylbenzene	U		0.000240	0.00114	1	09/07/2017 00:42	WG1017434
1,2,3-Trimethylbenzene	U		0.000326	0.00114	1	09/07/2017 00:42	WG1017434
1,3,5-Trimethylbenzene	U		0.000302	0.00114	1	09/07/2017 00:42	WG1017434
Vinyl acetate	U		0.00272	0.0114	1	09/07/2017 00:42	WG1017434
Vinyl chloride	U		0.000331	0.00114	1	09/07/2017 00:42	WG1017434
Xylenes, Total	U		0.000793	0.00341	1	09/07/2017 00:42	WG1017434
(S) Toluene-d8	107			80.0-120		09/07/2017 00:42	WG1017434
(S) Dibromofluoromethane	112			74.0-131		09/07/2017 00:42	WG1017434
(S) 4-Bromofluorobenzene	107			64.0-132		09/07/2017 00:42	WG1017434

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/01/17 00:00

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/06/2017 14:03	WG1017271
Acrylonitrile	U		0.873	5.00	1	09/06/2017 14:03	WG1017271
Benzene	U		0.0896	0.500	1	09/06/2017 14:03	WG1017271
Bromobenzene	U		0.133	0.500	1	09/06/2017 14:03	WG1017271
Bromodichloromethane	U		0.0800	0.500	1	09/06/2017 14:03	WG1017271
Bromochloromethane	U		0.145	0.500	1	09/06/2017 14:03	WG1017271
Bromoform	U		0.186	0.500	1	09/06/2017 14:03	WG1017271
Bromomethane	U		0.157	2.50	1	09/06/2017 14:03	WG1017271
n-Butylbenzene	U		0.143	0.500	1	09/06/2017 14:03	WG1017271
sec-Butylbenzene	U		0.134	0.500	1	09/06/2017 14:03	WG1017271
tert-Butylbenzene	U		0.183	0.500	1	09/06/2017 14:03	WG1017271
Carbon disulfide	U		0.101	0.500	1	09/06/2017 14:03	WG1017271
Carbon tetrachloride	U		0.159	0.500	1	09/06/2017 14:03	WG1017271
Chlorobenzene	U		0.140	0.500	1	09/06/2017 14:03	WG1017271
Chlorodibromomethane	U		0.128	0.500	1	09/06/2017 14:03	WG1017271
Chloroethane	U		0.141	2.50	1	09/06/2017 14:03	WG1017271
Chloroform	U		0.0860	0.500	1	09/06/2017 14:03	WG1017271
Chloromethane	U		0.153	1.25	1	09/06/2017 14:03	WG1017271
2-Chlorotoluene	U		0.111	0.500	1	09/06/2017 14:03	WG1017271
4-Chlorotoluene	U		0.0972	0.500	1	09/06/2017 14:03	WG1017271
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/06/2017 14:03	WG1017271
1,2-Dibromoethane	U		0.193	0.500	1	09/06/2017 14:03	WG1017271
Dibromomethane	U		0.117	0.500	1	09/06/2017 14:03	WG1017271
1,2-Dichlorobenzene	U		0.101	0.500	1	09/06/2017 14:03	WG1017271
1,3-Dichlorobenzene	U		0.130	0.500	1	09/06/2017 14:03	WG1017271
1,4-Dichlorobenzene	U		0.121	0.500	1	09/06/2017 14:03	WG1017271
Dichlorodifluoromethane	U		0.127	2.50	1	09/06/2017 14:03	WG1017271
1,1-Dichloroethane	U		0.114	0.500	1	09/06/2017 14:03	WG1017271
1,2-Dichloroethane	U		0.108	0.500	1	09/06/2017 14:03	WG1017271
1,1-Dichloroethene	U		0.188	0.500	1	09/06/2017 14:03	WG1017271
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/06/2017 14:03	WG1017271
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/06/2017 14:03	WG1017271
1,2-Dichloropropane	U		0.190	0.500	1	09/06/2017 14:03	WG1017271
1,1-Dichloropropene	U		0.128	0.500	1	09/06/2017 14:03	WG1017271
1,3-Dichloropropane	U		0.147	1.00	1	09/06/2017 14:03	WG1017271
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/06/2017 14:03	WG1017271
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/06/2017 14:03	WG1017271
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/06/2017 14:03	WG1017271
2,2-Dichloropropane	U		0.0929	0.500	1	09/06/2017 14:03	WG1017271
Di-isopropyl ether	U		0.0924	0.500	1	09/06/2017 14:03	WG1017271
Ethylbenzene	U		0.158	0.500	1	09/06/2017 14:03	WG1017271
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/06/2017 14:03	WG1017271
2-Hexanone	U		0.757	5.00	1	09/06/2017 14:03	WG1017271
n-Hexane	U		0.305	5.00	1	09/06/2017 14:03	WG1017271
Iodomethane	U		0.377	10.0	1	09/06/2017 14:03	WG1017271
Isopropylbenzene	U		0.126	0.500	1	09/06/2017 14:03	WG1017271
p-Isopropyltoluene	U		0.138	0.500	1	09/06/2017 14:03	WG1017271
2-Butanone (MEK)	U		1.28	5.00	1	09/06/2017 14:03	WG1017271
Methylene Chloride	U		1.07	2.50	1	09/06/2017 14:03	WG1017271
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/06/2017 14:03	WG1017271
Methyl tert-butyl ether	U		0.102	0.500	1	09/06/2017 14:03	WG1017271
Naphthalene	U		0.174	2.50	1	09/06/2017 14:03	WG1017271
n-Propylbenzene	U		0.162	0.500	1	09/06/2017 14:03	WG1017271
Styrene	U		0.117	0.500	1	09/06/2017 14:03	WG1017271
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/06/2017 14:03	WG1017271
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/06/2017 14:03	WG1017271

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/01/17 00:00

L933742

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/06/2017 14:03	WG1017271
Tetrachloroethene	U		0.199	0.500	1	09/06/2017 14:03	WG1017271
Toluene	U		0.412	0.500	1	09/06/2017 14:03	WG1017271
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/06/2017 14:03	WG1017271
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/06/2017 14:03	WG1017271
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/06/2017 14:03	WG1017271
1,1,2-Trichloroethane	U		0.186	0.500	1	09/06/2017 14:03	WG1017271
Trichloroethene	U		0.153	0.500	1	09/06/2017 14:03	WG1017271
Trichlorofluoromethane	U		0.130	2.50	1	09/06/2017 14:03	WG1017271
1,2,3-Trichloropropane	U		0.247	2.50	1	09/06/2017 14:03	WG1017271
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/06/2017 14:03	WG1017271
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/06/2017 14:03	WG1017271
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/06/2017 14:03	WG1017271
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	09/06/2017 14:03	WG1017271
Vinyl chloride	U		0.118	0.500	1	09/06/2017 14:03	WG1017271
Xylenes, Total	U		0.316	1.50	1	09/06/2017 14:03	WG1017271
(S) Toluene-d8	103			80.0-120		09/06/2017 14:03	WG1017271
(S) Dibromofluoromethane	105			76.0-123		09/06/2017 14:03	WG1017271
(S) 4-Bromofluorobenzene	105			80.0-120		09/06/2017 14:03	WG1017271

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

[L933742-01.02.03.04.05.06.07.08.09.10](#)

Method Blank (MB)

(MB) R3248045-1 09/08/17 15:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000600	%	%	%

L933742-01 Original Sample (OS) • Duplicate (DUP)

(OS) L933742-01 09/08/17 15:56 • (DUP) R3248045-3 09/08/17 15:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	83.4	84.2	1	0.915	%	5

Laboratory Control Sample (LCS)

(LCS) R3248045-2 09/08/17 15:56

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

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SDG:

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L933742-01.02.06](#)

Method Blank (MB)

(MB) R3248355-3 09/10/17 01:39		MB Result		MB Qualifier		MB MDL		MB RDL	
Analyte	mg/kg								
Gasoline Range Organics-NWTPH	U		0.0339		0.100				
^(S) a,a'-Trifluorotoluene(FID)	99.6				77.0-120				

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248355-1 09/10/17 00:33 • (LCSD) R3248355-2 09/10/17 00:55		Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
Analyte	mg/kg								%	%				%			%	%			
Gasoline Range Organics-NWTPH	5.50		5.75		5.70		105		104		70.0-133		0.960		20						
^(S) a,a'-Trifluorotoluene(FID)							105		104		77.0-120										

L934242-27 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L934242-27 09/10/17 10:18 • (MS) R3248355-4 09/10/17 10:40 • (MSD) R3248355-5 09/10/17 11:03		Spike Amount (dry)		Original Result (dry)		MS Result (dry)		MSD Result (dry)		MS Rec.		MSD Rec.		Dilution		Rec. Limits		MS Qualifier		MSD Qualifier		RPD		RPD Limits	
Analyte	mg/kg									%	%			%			%	%							
Gasoline Range Organics-NWTPH	6.72		U		0.387		1.50		5.76		22.4		1		10.0-146		<u>J6</u>		<u>J3</u>		118		30		
^(S) a,a'-Trifluorotoluene(FID)									94.4		91.4				77.0-120										

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3247243-2_09/06/17 13:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
2-Chlorotoluene	U		0.111	0.500
Chloroform	U		0.0860	0.500
4-Chlorotoluene	U		0.0972	0.500
Chloromethane	U		0.153	1.25
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,1-Dichloropropane	U		0.128	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
1,3-Dichloropropane	U		0.147	1.00
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
cis-1,3-Dichloropropane	U		0.0976	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00

Public Review Draft

1 Cp
2 Tc
3 Ss
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7 Gl
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Method Blank (MB)

(MB) R3247243-2 09/06/17 13:43

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
trans-1,3-Dichloropropene	U		0.222	0.500
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Methylene Chloride	U		1.07	2.50
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	5.00
Toluene	U		0.412	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	102			80.0-120
(S) Dibromofluoromethane	105			76.0-123
(S) 4-Bromofluorobenzene	103			80.0-120

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Laboratory Control Sample (LCS)

(LCS) R3247243-1 09/06/17 12:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	142	114	10.0-160	
Acrylonitrile	125	136	109	60.0-142	
Bromobenzene	25.0	25.1	100	79.0-120	
Bromochloromethane	25.0	26.8	107	76.0-122	
n-Butylbenzene	25.0	27.3	109	72.0-126	
sec-Butylbenzene	25.0	26.0	104	74.0-121	
tert-Butylbenzene	25.0	25.4	101	75.0-122	
Carbon disulfide	25.0	26.0	104	55.0-127	
2-Chlorotoluene	25.0	25.7	103	74.0-122	
4-Chlorotoluene	25.0	25.4	102	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	24.7	98.9	64.0-127	
1,2-Dibromoethane	25.0	25.4	102	77.0-123	
Dibromomethane	25.0	26.1	105	78.0-120	
cis-1,2-Dichloroethene	25.0	25.7	103	73.0-120	
1,1-Dichloropropane	25.0	26.7	107	71.0-129	
1,3-Dichloropropane	25.0	25.4	101	80.0-121	
Benzene	25.0	26.1	105	69.0-123	
trans-1,4-Dichloro-2-butene	25.0	20.8	83.2	55.0-134	
2,2-Dichloropropane	25.0	25.6	103	60.0-125	
Bromodichloromethane	25.0	26.0	104	76.0-120	
Di-isopropyl ether	25.0	26.5	106	59.0-133	
Bromoform	25.0	26.3	105	67.0-132	
Hexachloro-1,3-butadiene	25.0	26.6	106	64.0-131	
2-Hexanone	125	138	111	58.0-147	
Bromomethane	25.0	25.4	102	18.0-160	
n-Hexane	25.0	27.2	109	56.0-124	
Iodomethane	125	131	105	57.0-140	
Isopropylbenzene	25.0	25.1	100	75.0-120	
p-Isopropyltoluene	25.0	26.7	107	74.0-126	
2-Butanone (MEK)	125	116	92.9	37.0-158	
Carbon tetrachloride	25.0	25.1	101	63.0-122	
4-Methyl-2-pentanone (MIBK)	125	133	106	59.0-143	
Chlorobenzene	25.0	24.4	97.7	79.0-121	
Chlorodibromomethane	25.0	25.6	102	75.0-125	
Chloroethane	25.0	26.3	105	47.0-152	
n-Propylbenzene	25.0	26.2	105	79.0-120	
Chloroform	25.0	26.5	106	72.0-121	
Styrene	25.0	26.8	107	78.0-124	
1,1,1,2-Tetrachloroethane	25.0	24.3	97.1	75.0-122	
Chloromethane	25.0	23.0	92.1	48.0-139	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
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Laboratory Control Sample (LCS)

(LCS) R3247243-1 09/06/17 12:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
1,1,2-Trichlorotrifluoroethane	25.0	26.5	106	61.0-136	
1,2,3-Trichlorobenzene	25.0	26.0	104	61.0-133	
1,2,4-Trichlorobenzene	25.0	25.7	103	69.0-129	
1,2-Dichlorobenzene	25.0	25.6	102	80.0-120	
1,3-Dichlorobenzene	25.0	25.4	101	72.0-123	
1,4-Dichlorobenzene	25.0	24.9	99.4	77.0-120	
Dichlorodifluoromethane	25.0	23.1	92.2	49.0-155	
1,2,3-Trichloropropane	25.0	26.2	105	72.0-124	
1,1-Dichloroethane	25.0	27.3	109	70.0-126	
1,2,4-Trimethylbenzene	25.0	26.1	104	75.0-120	
1,2,3-Trimethylbenzene	25.0	23.9	95.7	75.0-120	
1,2-Dichloroethane	25.0	28.4	114	67.0-126	
1,1-Dichloroethane	25.0	26.3	105	64.0-129	
1,3,5-Trimethylbenzene	25.0	25.7	103	75.0-120	
Vinyl acetate	125	172	138	46.0-160	
trans-1,2-Dichloroethane	25.0	26.2	105	71.0-121	
1,2-Dichloropropane	25.0	27.1	109	75.0-125	
cis-1,3-Dichloropropene	25.0	28.3	113	79.0-123	
trans-1,3-Dichloropropene	25.0	28.1	113	74.0-127	
Ethylbenzene	25.0	24.0	96.0	77.0-120	
Methylene Chloride	25.0	26.1	104	66.0-121	
Methyl tert-butyl ether	25.0	25.8	103	64.0-123	
Naphthalene	25.0	23.9	95.8	62.0-128	
1,1,2,2-Tetrachloroethane	25.0	27.3	109	71.0-122	
Tetrachloroethene	25.0	23.1	92.5	70.0-127	
Toluene	25.0	24.0	95.9	77.0-120	
1,1,1-Trichloroethane	25.0	26.1	104	68.0-122	
1,1,2-Trichloroethane	25.0	25.5	102	78.0-120	
Trichloroethene	25.0	24.5	98.2	78.0-120	
Trichlorofluoromethane	25.0	27.0	108	56.0-137	
Vinyl chloride	25.0	25.5	102	64.0-133	
Xylenes, Total	75.0	72.2	96.3	77.0-120	
(S) Toluene-d8			99.9	80.0-120	
(S) Dibromofluoromethane			107	76.0-123	
(S) 4-Bromofluorobenzene			103	80.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L933742-01.02.03.04.05.06.07.08.09](#)

Method Blank (MB)

(MB) R3247436-4 09/06/17 19:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
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ACCOUNT:

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L933742-01.02.03.04.05.06.07.08.09](#)

Method Blank (MB)

(MB) R3247436-4 09/06/17 19:25

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000297	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	108		80.0-120	
(S) Dibromofluoromethane	96.7		74.0-131	
(S) 4-Bromofluorobenzene	103		64.0-132	

Public Review Draft

1 Cp
2 Tc
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L933742-01.02.03.04.05.06.07.08.09](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247436-1 09/06/17 17:57 • (LCSD) R3247436-2 09/06/17 18:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0693	0.0668	55.5	53.4	11.0-160			3.71	23
Acrylonitrile	0.125	0.142	0.138	113	111	61.0-143			2.61	20
Benzene	0.0250	0.0282	0.0268	113	107	71.0-124			5.12	20
Bromobenzene	0.0250	0.0248	0.0240	99.3	96.1	78.0-120			3.29	20
Bromodichloromethane	0.0250	0.0233	0.0228	93.3	91.2	75.0-120			2.30	20
Bromoform	0.0250	0.0241	0.0238	96.3	95.1	65.0-133			1.19	20
Bromochloromethane	0.0250	0.0264	0.0257	106	103	80.0-121			2.53	20
Bromomethane	0.0250	0.0223	0.0214	89.0	85.4	26.0-160			4.13	20
n-Butylbenzene	0.0250	0.0269	0.0257	108	103	73.0-126			4.30	20
sec-Butylbenzene	0.0250	0.0286	0.0270	114	108	75.0-121			5.87	20
tert-Butylbenzene	0.0250	0.0278	0.0264	111	105	74.0-122			5.34	20
Carbon disulfide	0.0250	0.0244	0.0235	97.7	94.0	53.0-130			3.92	20
Carbon tetrachloride	0.0250	0.0234	0.0225	93.8	90.1	66.0-123			4.04	20
Chlorobenzene	0.0250	0.0282	0.0271	113	108	79.0-121			3.81	20
Chlorodibromomethane	0.0250	0.0249	0.0241	99.5	96.5	74.0-128			3.13	20
Chloroethane	0.0250	0.0226	0.0213	90.5	85.1	51.0-147			6.17	20
Chloroform	0.0250	0.0259	0.0247	104	98.8	73.0-123			4.71	20
Chloromethane	0.0250	0.0271	0.0255	108	102	51.0-138			6.09	20
2-Chlorotoluene	0.0250	0.0263	0.0249	105	99.7	72.0-124			5.38	20
4-Chlorotoluene	0.0250	0.0260	0.0247	104	98.8	78.0-120			5.27	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0232	0.0240	92.9	96.1	65.0-126			3.37	20
1,2-Dibromoethane	0.0250	0.0265	0.0262	106	105	78.0-122			1.21	20
Dibromomethane	0.0250	0.0240	0.0237	96.2	94.7	79.0-120			1.55	20
1,2-Dichlorobenzene	0.0250	0.0270	0.0261	108	104	80.0-120			3.58	20
1,3-Dichlorobenzene	0.0250	0.0271	0.0263	108	105	72.0-123			3.18	20
1,4-Dichlorobenzene	0.0250	0.0253	0.0244	101	97.4	77.0-120			3.69	20
Dichlorodifluoromethane	0.0250	0.0184	0.0175	73.5	70.2	49.0-155			4.62	20
trans-1,4-Dichloro-2-butene	0.0250	0.0193	0.0180	77.3	72.2	68.0-126			6.86	20
1,1-Dichloroethane	0.0250	0.0277	0.0264	111	106	70.0-128			4.58	20
1,2-Dichloroethane	0.0250	0.0205	0.0196	82.0	78.3	69.0-128			4.64	20
1,1-Dichloroethene	0.0250	0.0257	0.0241	103	96.4	63.0-131			6.49	20
cis-1,2-Dichloroethene	0.0250	0.0269	0.0258	108	103	74.0-123			4.17	20
trans-1,2-Dichloroethene	0.0250	0.0282	0.0270	113	108	72.0-122			4.37	20
1,2-Dichloropropane	0.0250	0.0287	0.0280	115	112	75.0-126			2.46	20
1,1-Dichloropropene	0.0250	0.0267	0.0250	107	99.9	72.0-130			6.65	20
1,3-Dichloropropene	0.0250	0.0266	0.0258	106	103	80.0-121			3.23	20
cis-1,3-Dichloropropene	0.0250	0.0260	0.0248	104	99.4	80.0-125			4.71	20
trans-1,3-Dichloropropene	0.0250	0.0240	0.0233	96.0	93.3	75.0-129			2.89	20
2,2-Dichloropropane	0.0250	0.0266	0.0248	106	99.3	60.0-129			6.95	20
Diisopropyl ether	0.0250	0.0300	0.0290	120	116	62.0-133			3.54	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3247436-1 09/06/17 17:57 • (LCSD) R3247436-2 09/06/17 18:19

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0292	0.0277	117	111	77.0-120			5.27	20
Hexachloro-1,3-butadiene	0.0250	0.0281	0.0264	112	106	68.0-128			6.12	20
2-Hexanone	0.125	0.110	0.108	88.0	86.4	61.0-143			1.91	20
Isopropylbenzene	0.0250	0.0275	0.0262	110	105	75.0-120			4.82	20
n-Hexane	0.0250	0.0302	0.0283	121	113	57.0-125			6.43	20
Iodomethane	0.125	0.129	0.124	103	99.0	67.0-132			4.42	20
p-Isopropyltoluene	0.0250	0.0281	0.0264	112	106	74.0-125			6.00	20
2-Butanone (MEK)	0.125	0.0947	0.0917	75.7	73.3	37.0-159			3.23	20
Methylene Chloride	0.0250	0.0266	0.0255	106	102	67.0-123			4.18	20
4-Methyl-2-pentanone (MIBK)	0.125	0.127	0.126	102	101	60.0-144			1.22	20
Methyl tert-butyl ether	0.0250	0.0239	0.0231	95.7	92.3	66.0-125			3.65	20
Naphthalene	0.0250	0.0217	0.0230	86.7	91.8	64.0-125			5.77	20
n-Propylbenzene	0.0250	0.0279	0.0266	112	106	78.0-120			4.97	20
Styrene	0.0250	0.0293	0.0277	117	111	78.0-124			5.67	20
1,1,1,2-Tetrachloroethane	0.0250	0.0275	0.0261	110	104	74.0-124			5.20	20
1,1,2,2-Tetrachloroethane	0.0250	0.0269	0.0268	108	107	73.0-120			0.410	20
Tetrachloroethene	0.0250	0.0307	0.0292	123	117	70.0-127			5.17	20
Toluene	0.0250	0.0285	0.0273	114	109	77.0-120			4.34	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0256	0.0242	102	96.7	64.0-135			5.65	20
1,2,3-Trichlorobenzene	0.0250	0.0224	0.0237	89.7	94.8	68.0-126			5.46	20
1,2,4-Trichlorobenzene	0.0250	0.0245	0.0238	97.9	95.1	70.0-127			2.89	20
1,1,1-Trichloroethane	0.0250	0.0262	0.0251	105	101	69.0-125			4.01	20
1,1,2-Trichloroethane	0.0250	0.0265	0.0259	106	104	78.0-120			2.18	20
Trichloroethene	0.0250	0.0268	0.0260	107	104	79.0-120			2.90	20
Trichlorofluoromethane	0.0250	0.0219	0.0213	87.5	85.3	59.0-136			2.50	20
1,2,3-Trichloropropane	0.0250	0.0232	0.0229	92.7	91.7	73.0-124			1.18	20
1,2,3-Trimethylbenzene	0.0250	0.0242	0.0233	97.0	93.1	76.0-120			4.06	20
1,2,4-Trimethylbenzene	0.0250	0.0259	0.0246	104	98.3	75.0-120			5.38	20
1,3,5-Trimethylbenzene	0.0250	0.0269	0.0256	108	102	75.0-120			5.09	20
Vinyl chloride	0.0250	0.0251	0.0237	100	94.9	63.0-134			5.40	20
Xylenes, Total	0.0750	0.0888	0.0841	118	112	77.0-120			5.44	20
Vinyl acetate	0.125	0.139	0.133	111	106	58.0-156			4.29	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										
	98.1			98.1	98.6	64.0-132				

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Method Blank (MB)

(MB) R3248365-3 09/06/17 23:06

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,2-Dichloropropene	U		0.000358	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
2,2-Dichloropropene	U		0.000279	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R3248365-3 09/06/17 23:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Naphthalene	U		0.00100	0.00500
Methyl tert-butyl ether	U		0.000212	0.00100
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	118			80.0-120
(S) Dibromofluoromethane	106			74.0-131
(S) 4-Bromofluorobenzene	107			64.0-132

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248365-1 09/06/17 22:07 • (LCSD) R3248365-2 09/06/17 22:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0690	0.0523	55.2	41.8	11.0-160		U3	27.6	23
Benzene	0.0250	0.0229	0.0231	91.4	92.2	71.0-124			0.890	20
Acrylonitrile	0.125	0.0940	0.0855	75.2	68.4	61.0-143			9.42	20
Bromodichloromethane	0.0250	0.0255	0.0251	102	100	75.0-120			1.43	20
Bromobenzene	0.0250	0.0241	0.0246	96.6	98.6	78.0-120			2.06	20
Bromoform	0.0250	0.0258	0.0250	103	100	65.0-133			3.29	20
Bromochloromethane	0.0250	0.0260	0.0251	104	101	80.0-121			3.51	20
Bromomethane	0.0250	0.0202	0.0202	80.8	80.6	26.0-160			0.170	20
n-Butylbenzene	0.0250	0.0240	0.0247	95.9	98.7	73.0-126			2.84	20
sec-Butylbenzene	0.0250	0.0253	0.0256	101	102	75.0-121			1.10	20
Carbon tetrachloride	0.0250	0.0213	0.0213	85.3	85.2	66.0-123			0.100	20
tert-Butylbenzene	0.0250	0.0244	0.0248	97.6	99.3	74.0-122			1.77	20
Carbon disulfide	0.0250	0.0230	0.0230	92.0	92.0	53.0-130			0.0700	20
Chlorobenzene	0.0250	0.0258	0.0266	103	106	79.0-121			3.06	20
Chlorodibromomethane	0.0250	0.0255	0.0253	102	101	74.0-128			0.550	20
Chloroethane	0.0250	0.0214	0.0211	85.7	84.2	51.0-147			1.73	20
Chloroform	0.0250	0.0237	0.0237	95.0	94.7	73.0-123			0.260	20
Chloromethane	0.0250	0.0171	0.0171	68.3	68.6	51.0-138			0.390	20
2-Chlorotoluene	0.0250	0.0247	0.0252	99.0	101	72.0-124			1.75	20
4-Chlorotoluene	0.0250	0.0240	0.0246	96.2	98.4	78.0-120			2.31	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0237	0.0221	94.8	88.5	65.0-126			6.93	20
1,2-Dibromoethane	0.0250	0.0279	0.0269	112	108	78.0-122			3.79	20
1,2-Dichlorobenzene	0.0250	0.0243	0.0244	97.3	97.6	80.0-120			0.340	20
1,3-Dichlorobenzene	0.0250	0.0242	0.0246	97.0	98.4	72.0-123			1.45	20
Dibromomethane	0.0250	0.0227	0.0219	91.0	87.4	79.0-120			3.96	20
1,4-Dichlorobenzene	0.0250	0.0242	0.0246	96.6	98.2	77.0-120			1.65	20
Dichlorodifluoromethane	0.0250	0.0170	0.0164	67.8	65.6	49.0-155			3.33	20
trans-1,4-Dichloro-2-butene	0.0250	0.0235	0.0211	93.9	84.5	68.0-126			10.6	20
1,1-Dichloroethane	0.0250	0.0235	0.0238	94.2	95.4	70.0-128			1.24	20
1,2-Dichloroethane	0.0250	0.0248	0.0240	99.3	96.0	69.0-128			3.43	20
1,1-Dichloroethene	0.0250	0.0229	0.0230	91.7	92.2	63.0-131			0.530	20
cis-1,2-Dichloroethene	0.0250	0.0238	0.0238	95.2	95.3	74.0-123			0.100	20
trans-1,2-Dichloroethene	0.0250	0.0245	0.0243	97.9	97.4	72.0-122			0.560	20
1,2-Dichloropropane	0.0250	0.0239	0.0234	95.8	93.5	75.0-126			2.38	20
1,1-Dichloropropene	0.0250	0.0233	0.0232	93.1	92.9	72.0-130			0.230	20
cis-1,3-Dichloropropene	0.0250	0.0287	0.0291	115	116	80.0-125			1.24	20
1,3-Dichloropropane	0.0250	0.0258	0.0251	103	100	80.0-121			2.52	20
trans-1,3-Dichloropropene	0.0250	0.0276	0.0277	110	111	75.0-129			0.390	20
2,2-Dichloropropane	0.0250	0.0195	0.0196	77.8	78.4	60.0-129			0.680	20
Di-isopropyl ether	0.0250	0.0204	0.0197	81.7	79.0	62.0-133			3.34	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248365-1 09/06/17 22:07 • (LCSD) R3248365-2 09/06/17 22:27

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0255	0.0261	102	104	77.0-120			2.31	20
Hexachloro-1,3-butadiene	0.0250	0.0266	0.0274	106	110	68.0-128			2.96	20
2-Hexanone	0.125	0.0993	0.0880	79.4	70.4	61.0-143			12.1	20
n-Hexane	0.0250	0.0199	0.0196	79.6	78.6	57.0-125			1.35	20
Iodomethane	0.125	0.123	0.121	98.6	97.1	67.0-132			1.52	20
2-Butanone (MEK)	0.125	0.0805	0.0677	64.4	54.2	37.0-159			17.2	20
Isopropylbenzene	0.0250	0.0243	0.0248	97.4	99.0	75.0-120			1.66	20
Methylene Chloride	0.0250	0.0224	0.0221	89.4	88.6	67.0-123			0.920	20
p-Isopropyltoluene	0.0250	0.0262	0.0265	105	106	74.0-125			1.33	20
4-Methyl-2-pentanone (MIBK)	0.125	0.104	0.0951	82.9	76.1	60.0-144			8.56	20
Methyl tert-butyl ether	0.0250	0.0207	0.0194	82.7	77.7	66.0-125			6.34	20
Naphthalene	0.0250	0.0251	0.0244	101	97.4	64.0-125			3.16	20
1,1,2-Tetrachloroethane	0.0250	0.0238	0.0220	95.4	88.0	73.0-120			8.06	20
n-Propylbenzene	0.0250	0.0250	0.0252	100	101	78.0-120			0.900	20
Tetrachloroethene	0.0250	0.0282	0.0291	113	116	70.0-127			3.05	20
Styrene	0.0250	0.0274	0.0277	110	111	78.0-124			1.12	20
1,1,1,2-Tetrachloroethane	0.0250	0.0234	0.0235	93.7	93.9	74.0-124			0.250	20
Toluene	0.0250	0.0248	0.0255	99.2	102	77.0-120			2.67	20
1,1,1-Trichloroethane	0.0250	0.0225	0.0223	90.2	89.4	69.0-125			0.900	20
1,1,2-Trichloroethane	0.0250	0.0253	0.0253	101	101	78.0-120			0.000	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0211	0.0211	84.5	84.2	64.0-135			0.350	20
1,2,3-Trichlorobenzene	0.0250	0.0266	0.0265	106	106	68.0-126			0.240	20
Trichloroethene	0.0250	0.0240	0.0240	96.0	95.9	79.0-120			0.130	20
1,2,4-Trichlorobenzene	0.0250	0.0241	0.0251	96.5	101	70.0-127			4.18	20
Trichlorofluoromethane	0.0250	0.0221	0.0217	88.6	86.7	59.0-136			2.17	20
1,2,3-Trichloropropane	0.0250	0.0237	0.0222	94.8	88.9	73.0-124			6.37	20
1,2,3-Trimethylbenzene	0.0250	0.0226	0.0227	90.3	90.8	76.0-120			0.580	20
1,2,4-Trimethylbenzene	0.0250	0.0242	0.0242	96.7	96.7	75.0-120			0.0200	20
Vinyl chloride	0.0250	0.0204	0.0206	81.5	82.4	63.0-134			1.07	20
1,3,5-Trimethylbenzene	0.0250	0.0250	0.0254	100	102	75.0-120			1.61	20
Xylenes, Total	0.0750	0.0764	0.0774	102	103	77.0-120			1.30	20
Vinyl acetate	0.125	0.119	0.112	95.5	89.2	58.0-156			6.79	20
(S) Toluene-d8				113	115	80.0-120				
(S) Dibromofluoromethane				102	103	74.0-131				
(S) 4-Bromofluorobenzene				104	104	64.0-132				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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PROJECT:

SDG:

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PAGE:

PES Environmental, Inc.- WA

1413.001.02.002

L933742

09/21/17 16:22

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L934152-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L934152-01 09/07/17 06:38 • (MS) R3248365-4 09/07/17 07:48 • (MSD) R3248365-5 09/07/17 08:08

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.154	ND	0.574	0.697	14.9	18.1	25	10.0-160			19.3	36
Benzene	0.0308	ND	0.271	0.329	35.2	42.7	25	13.0-146			19.3	27
Bromodichloromethane	0.0308	ND	0.280	0.330	36.3	42.9	25	15.0-142			16.5	28
Acrylonitrile	0.154	ND	1.08	1.36	27.9	35.3	25	14.0-160			23.2	33
Bromoform	0.0308	ND	0.271	0.319	35.2	41.4	25	10.0-147			16.2	31
Bromobenzene	0.0308	ND	0.277	0.331	36.0	43.0	25	10.0-149			17.7	33
Bromomethane	0.0308	ND	0.118	0.138	15.4	17.9	25	10.0-160			15.3	32
Bromochloromethane	0.0308	ND	0.299	0.368	38.8	47.7	25	24.0-146			20.8	27
Carbon tetrachloride	0.0308	ND	0.246	0.305	31.9	39.6	25	13.0-140			21.4	30
n-Butylbenzene	0.0308	ND	0.292	0.358	37.9	46.5	25	10.0-154			20.2	37
Chlorobenzene	0.0308	ND	0.296	0.350	38.5	45.4	25	10.0-149			16.5	31
sec-Butylbenzene	0.0308	ND	0.294	0.359	38.1	46.6	25	10.0-151			19.9	36
Chlorodibromomethane	0.0308	ND	0.271	0.331	35.2	42.9	25	12.0-147			19.8	29
tert-Butylbenzene	0.0308	ND	0.278	0.342	36.0	44.4	25	10.0-152			20.7	35
Carbon disulfide	0.0308	ND	0.267	0.331	34.7	43.0	25	10.0-141			21.2	30
Chloroethane	0.0308	ND	0.0578	0.0678	7.50	8.80	25	10.0-159	J6	J6	15.9	33
Chloroform	0.0308	ND	0.279	0.349	36.2	45.3	25	18.0-148			22.4	28
Chloromethane	0.0308	ND	0.225	0.272	29.2	35.3	25	10.0-146			18.8	29
2-Chlorotoluene	0.0308	ND	0.287	0.345	37.3	44.8	25	10.0-151			18.3	35
1,2-Dichlorobenzene	0.0308	ND	0.284	0.345	36.9	44.8	25	10.0-153			19.3	34
4-Chlorotoluene	0.0308	ND	0.277	0.333	35.9	43.2	25	10.0-150			18.5	35
1,2-Dibromo-3-Chloropropane	0.0308	ND	0.258	0.325	33.5	42.2	25	10.0-149			22.9	34
1,3-Dichlorobenzene	0.0308	ND	0.276	0.334	35.8	43.4	25	10.0-150			19.3	35
1,2-Dibromoethane	0.0308	ND	0.302	0.349	39.1	45.4	25	14.0-145			14.7	28
1,4-Dichlorobenzene	0.0308	ND	0.277	0.337	35.9	43.7	25	10.0-148			19.6	34
Dibromomethane	0.0308	ND	0.254	0.306	33.0	39.8	25	18.0-144			18.6	27
Dichlorodifluoromethane	0.0308	ND	0.252	0.286	32.7	37.2	25	10.0-160			12.8	30
1,1-Dichloroethane	0.0308	ND	0.281	0.347	36.4	45.0	25	19.0-148			20.9	28
1,2-Dichloroethane	0.0308	ND	0.288	0.347	37.4	45.1	25	17.0-147			18.6	27
trans-1,4-Dichloro-2-butene	0.0308	ND	0.234	0.267	30.4	34.7	25	10.0-160			13.3	40
1,1-Dichloroethene	0.0308	ND	0.302	0.378	39.2	49.0	25	10.0-150			22.2	31
cis-1,2-Dichloroethene	0.0308	ND	0.276	0.350	35.8	45.4	25	16.0-145			23.6	28
trans-1,2-Dichloroethene	0.0308	ND	0.276	0.355	35.8	46.1	25	11.0-142			25.2	29
1,2-Dichloropropane	0.0308	ND	0.274	0.315	35.5	40.9	25	17.0-148			14.0	28
cis-1,3-Dichloropropane	0.0308	ND	0.311	0.370	40.4	48.0	25	13.0-150			17.1	28
trans-1,3-Dichloropropane	0.0308	ND	0.299	0.347	38.8	45.0	25	10.0-152			14.9	29
1,1-Dichloropropene	0.0308	ND	0.264	0.335	34.3	43.5	25	10.0-150			23.7	30
1,3-Dichloropropene	0.0308	ND	0.289	0.329	37.6	42.7	25	16.0-148			12.8	27
Di-isopropyl ether	0.0308	ND	0.243	0.300	31.5	39.0	25	16.0-149			21.1	28

Public Review Draft

1 Cp
2 Tc
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L934152-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L934152-01 09/07/17 06:38 • (MS) R3248365-4 09/07/17 07:48 • (MSD) R3248365-5 09/07/17 08:08

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0308	ND	0.293	0.353	38.0	45.8	25	10.0-147			18.6	31
2,2-Dichloropropane	0.0308	ND	0.235	0.287	30.5	37.2	25	16.0-143			19.7	30
Hexachloro-1,3-butadiene	0.0308	ND	0.341	0.411	44.2	53.3	25	10.0-154			18.6	40
2-Hexanone	0.154	ND	0.940	1.11	24.4	28.8	25	12.0-158			16.5	30
2-Butanone (MEK)	0.154	ND	0.773	0.975	20.1	25.3	25	10.0-160			23.0	33
n-Hexane	0.0308	ND	0.218	0.267	28.3	34.7	25	10.0-140			20.2	34
Iodomethane	0.154	ND	1.52	1.88	39.5	48.9	25	10.0-157			21.1	34
Methylene Chloride	0.0308	ND	0.272	0.330	35.4	42.9	25	16.0-139			19.2	29
4-Methyl-2-pentanone (MIBK)	0.154	ND	1.05	1.27	27.3	33.1	25	12.0-160			19.1	32
Isopropylbenzene	0.0308	ND	0.277	0.340	36.0	44.1	25	10.0-147			20.4	33
Methyl tert-butyl ether	0.0308	ND	0.240	0.300	31.1	39.0	25	21.0-145			22.4	29
p-Isopropyltoluene	0.0308	ND	0.308	0.376	40.0	48.8	25	10.0-156			19.9	37
1,1,2,2-Tetrachloroethane	0.0308	ND	0.258	0.319	33.4	41.4	25	10.0-155			21.3	31
Naphthalene	0.0308	ND	0.306	0.376	39.7	48.8	25	10.0-153			20.6	36
Tetrachloroethene	0.0308	ND	0.314	0.366	39.6	46.3	25	10.0-144			15.1	32
n-Propylbenzene	0.0308	ND	0.286	0.351	37.1	45.5	25	10.0-151			20.4	34
Toluene	0.0308	ND	0.296	0.347	35.3	41.9	25	10.0-144			15.9	28
Styrene	0.0308	ND	0.310	0.375	40.3	48.7	25	10.0-155			19.0	34
1,1,1,2-Tetrachloroethane	0.0308	ND	0.268	0.323	34.8	41.9	25	10.0-147			18.3	30
1,1,1-Trichloroethane	0.0308	ND	0.262	0.331	34.0	42.9	25	18.0-145			23.2	29
1,1,2-Trichloroethane	0.0308	ND	0.273	0.328	35.4	42.6	25	12.0-151			18.5	28
Trichloroethene	0.0308	ND	0.268	0.322	34.8	41.7	25	11.0-148			18.2	29
1,1,2-Trichlorotrifluoroethane	0.0308	ND	0.285	0.346	36.9	44.9	25	10.0-153			19.4	33
Trichlorofluoromethane	0.0308	ND	0.175	0.186	22.8	24.1	25	10.0-157			5.66	34
1,2,3-Trichlorobenzene	0.0308	ND	0.332	0.408	43.1	52.9	25	10.0-153			20.4	40
1,2,4-Trichlorobenzene	0.0308	ND	0.310	0.380	40.2	49.4	25	10.0-156			20.5	40
1,2,3-Trichloropropene	0.0308	ND	0.255	0.314	33.1	40.8	25	10.0-154			20.7	32
Vinyl chloride	0.0308	ND	0.250	0.308	32.4	40.0	25	10.0-150			20.9	29
1,2,3-Trimethylbenzene	0.0308	ND	0.283	0.342	34.8	42.5	25	10.0-150			18.9	33
Xylenes, Total	0.0925	ND	0.939	1.09	38.0	44.7	25	10.0-150			15.2	31
1,2,4-Trimethylbenzene	0.0308	0.0426	0.331	0.391	37.4	45.3	25	10.0-151			16.8	34
1,3,5-Trimethylbenzene	0.0308	ND	0.303	0.360	37.9	45.3	25	10.0-150			17.2	33
Vinyl acetate	0.154	ND	1.26	1.54	32.7	40.0	25	10.0-160			20.1	40
(S) Toluene-d8					115	111		80.0-120				
(S) Dibromofluoromethane					104	110		74.0-131				
(S) 4-Bromofluorobenzene					106	107		64.0-132				

Sample Narrative:
OS: Stir bars received improperly prepped.

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

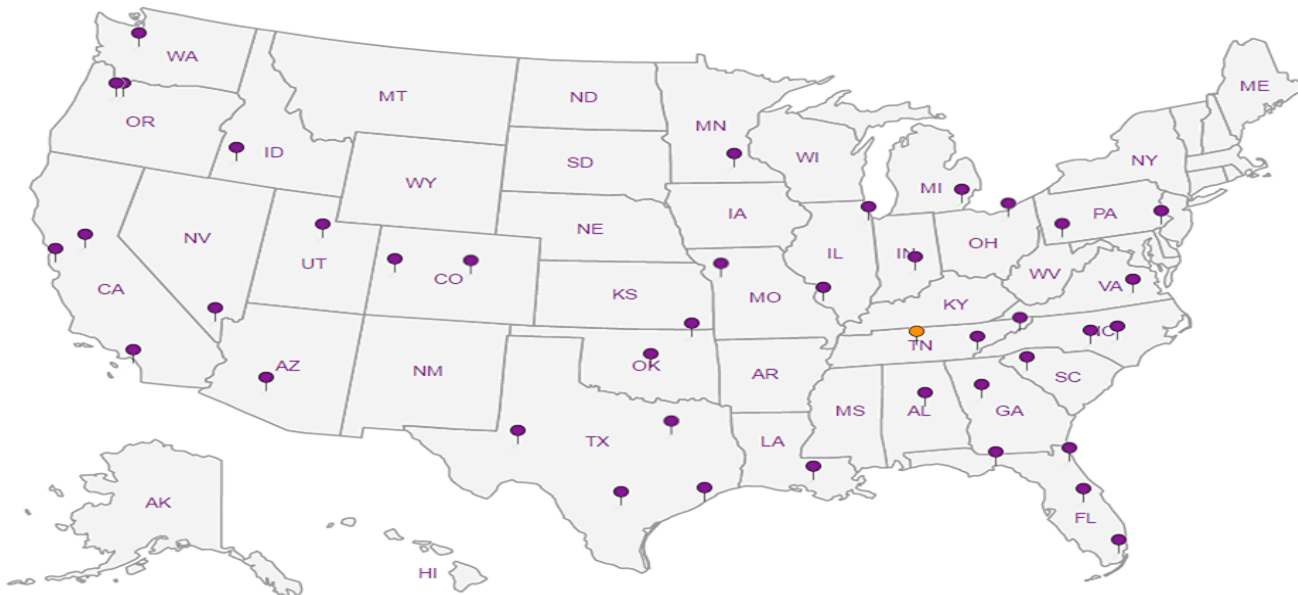
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeman

Email To: bhalde@pesenv.com

Project:
American Linen Project

City/State: **SEATTLE, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.602

Lab Project #
PESENVWA-ALP

Collected By (print):
SHANNON MCKERNAN

Site/Facility ID #
1413.001.02.602

P.O. #

Collected by (signature):

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on Ice N Y Z

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

NWTPHGX 2ozClr-NoPres

NWTPHGX 40mlAmb HCl

TS 4ozClr-NoPres

V8260C 40ml/NaHSO4/Syr/MeOH

V8260C 40mlAmb-HCl

Analysis / Container / Preservative

L# **933742**
C004

Account: **PESENVWA**
Template: **T126584**
Prelogin: **P613271**
TSR: **110 - Brian Ford**
PBI:

Shipped Via: **FedEx Ground**
Remarks

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	NWTPHGX 2ozClr-NoPres	NWTPHGX 40mlAmb HCl	TS 4ozClr-NoPres	V8260C 40ml/NaHSO4/Syr/MeOH	V8260C 40mlAmb-HCl
B- MW-137-85	GRAB	SS GWM	85	09/01/17	0820	5x	X	X	X	X	X
B- MW-137-95		SS	95		0900	5x	X	X	X	X	X
B- 216-20		SS	20		0915	4	X	X	X	X	X
B- 216-13		SS	13		0930	4	X	X	X	X	X
B- 216-40		SS	40		1010	4	X	X	X	X	X
B- MW-147-107-W		GWS	107		1130	4	X	X	X	X	X
B- 216-50		SS	50		1035	4	X	X	X	X	X
B- MW-137-115		SS GWM	115		1145	5x	X	X	X	X	X
B- 216-05		SS GWM	05		1145	4x	X	X	X	X	X
B- 216-55		SS	55		1215	4	X	X	X	X	X

Remarks:

Samplers returned via:
UPS FedEx Courier

pH _____ Temp _____
Flow _____ Other _____

Tracking # **7474 0921 0506**

Sample Receipt Checklist
DOC Seal Present/Intact:
DOC Signed/Accurate:
Bottles arrive intact:
Correct bottles used:
Sufficient volume:
IE Applicable:
VQA Zero Headpace:
Preservation Correct/Checked:

Reinquainted by: (Signature)
[Signature]

Date: **9/1/17** Time: **1500**

Received by: (Signature)
[Signature]

Temp: **20 max 58**
Bottles received: **58**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: _____ Time: _____

Received for lab by: (Signature)
[Signature]

Date: **9/2/17** Time: **0845**

Condition: **8-218** NCF:

PES Environmental, Inc.- WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Report to:
Bill Haldeman

Description: **American Linen Project**

Phone: 206-529-3980
 Fax: 206-529-3985

Collected by (print):
SHANNON MCKERNAN

Collected by (signature):


Immediately Packed on Ice: N Y

Client Project #

1413.001.02.602

Site/Facility ID #

1413.001.02.602

Rush? (Lab MUST Be Notified)

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

Billing Information:

Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Email To: bhalderman@pesenv.com

City/State Collected: **SEATTLE, WA**

Lab Project #

PESENVSWA-ALP

P.O. #

Quote #

No. of Cntrs

Time

Date

Depth

Matrix *

Comp/Grab

Sample ID

B-216-85

B-216-95

B-Trip Blank-090117

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

B-

Remarks:

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - WasteWater
 DW - Drinking Water
 OT - Other

Samples returned via:
 ___ UPS ___ FedEx ___ Courier

Relinquished by: (Signature)


Date: 9/17

Time: 1500

Relinquished by: (Signature)


Date:

Time:

Relinquished by: (Signature)


Date:

Time:

Tracking # 7474 0921 0364

Received by: (Signature)

Time:

Received by: (Signature)

Time:

Received for lab by (Signature)


Time:

Time:

Trip Blank Received: Yes No
 HCL / MeOH
 TBR

Temp: 20 ^oC

Bottles Received: 52

Date: 9/2/17

Time: 0845

Analysis / Container / Preservative

Pres Chk

Analysis / Container / Preservative

Analysis / Container / Preservative

Analysis / Container / Preservative

Analysis / Container / Preservative

Analysis / Container / Preservative

Analysis / Container / Preservative

Analysis / Container / Preservative

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Analysis / Container / Preservative

Analysis / Container / Preservative

Chain of Custody Page 2 of 2



13065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-9859
 Fax: 615-758-5859



L #

Table #

Accnum: PESENVSWA

Template: T126584

Prelogin: P613271

TSR: 110 - Brian Ford

PB:

Shipped Via: FedEX Ground

Remarks

Sample # (lab only)

Remarks

Sample # (lab only)

Remarks

Sample # (lab only)

Remarks

Sample # (lab only)

Remarks

Sample # (lab only)

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Sample # (lab only)

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Sample # (lab only)

Remarks

Sample # (lab only)

Remarks

Sample # (lab only)

Remarks

Sample # (lab only)

Remarks

Sample # (lab only)

Remarks

Sample Receipt Checklist
 COC Sign Present/Intact: NP
 COC Signed/Accurate: Y
 Bottles arrive intact: Y
 Correct bottles used: Y
 Sufficient volume sent: Y
 If Applicable
 VOA Zero Headspace: Y
 Preservation Correct/Checked: Y

If preservation required by Login: Date/Time

Hold:

Condition: NCF / OX

Andy Vann

**ESC Lab Sciences
Non-Conformance Form**

Login #:L933742	Client: PESENVSWA	Date:09/01/17	Evaluated by: Myra "Katie" Ingram
-----------------	-------------------	---------------	-----------------------------------

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	
Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
Improper temperature	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Couri
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
X Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments:

B-216-85 one SBB vial received broken

Client informed by:	Call	Email	Voice Mail	Date:	Time:
TSR Initials:bjf	Client Contact:				

Login Instructions:

Proceed with remaining sample volume

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September 12, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L934916
Samples Received: 09/02/2017
Project Number: 1413.001.02.002
Description: American Linen Supply
Site: 1413.001.02.002
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	¹Cp
Tc: Table of Contents	2	²Tc
Ss: Sample Summary	3	³Ss
Cn: Case Narrative	4	⁴Cn
Sr: Sample Results	5	⁵Sr
MW-137-107-W L934916-01	5	
Qc: Quality Control Summary	7	⁶Qc
Volatile Organic Compounds (GC) by Method NWTPHGX	7	⁵Sr
Volatile Organic Compounds (GC/MS) by Method 8260C	8	
Gl: Glossary of Terms	12	⁷Gl
Al: Accreditations & Locations	13	⁸Al
Sc: Sample Chain of Custody	14	⁹Sc



MW-137-107-W L934916-01 GW

Collected by: Shannon McKernan
 Collected date/time: 09/01/17 11:30
 Received date/time: 09/02/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1019041	1	09/11/17 21:47	09/11/17 21:47	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018559	1	09/09/17 16:21	09/09/17 16:21	BMB

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	09/11/2017 21:47	WG1019041
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-122		09/11/2017 21:47	WG1019041

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.74	J	1.05	25.0	1	09/09/2017 16:21	WG1018559
Acrylonitrile	U		0.873	5.00	1	09/09/2017 16:21	WG1018559
Benzene	U		0.0896	0.500	1	09/09/2017 16:21	WG1018559
Bromobenzene	U		0.133	0.500	1	09/09/2017 16:21	WG1018559
Bromodichloromethane	U		0.0800	0.500	1	09/09/2017 16:21	WG1018559
Bromochloromethane	U		0.145	0.500	1	09/09/2017 16:21	WG1018559
Bromoform	U		0.186	0.500	1	09/09/2017 16:21	WG1018559
Bromomethane	U		0.157	2.50	1	09/09/2017 16:21	WG1018559
n-Butylbenzene	U		0.143	0.500	1	09/09/2017 16:21	WG1018559
sec-Butylbenzene	U		0.134	0.500	1	09/09/2017 16:21	WG1018559
tert-Butylbenzene	U		0.183	0.500	1	09/09/2017 16:21	WG1018559
Carbon disulfide	U		0.101	0.500	1	09/09/2017 16:21	WG1018559
Carbon tetrachloride	U		0.159	0.500	1	09/09/2017 16:21	WG1018559
Chlorobenzene	U		0.140	0.500	1	09/09/2017 16:21	WG1018559
Chlorodibromomethane	U		0.128	0.500	1	09/09/2017 16:21	WG1018559
Chloroethane	U		0.141	2.50	1	09/09/2017 16:21	WG1018559
Chloroform	U		0.0860	0.500	1	09/09/2017 16:21	WG1018559
Chloromethane	U		0.153	1.25	1	09/09/2017 16:21	WG1018559
2-Chlorotoluene	U		0.111	0.500	1	09/09/2017 16:21	WG1018559
4-Chlorotoluene	U		0.0972	0.500	1	09/09/2017 16:21	WG1018559
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/09/2017 16:21	WG1018559
1,2-Dibromoethane	U		0.193	0.500	1	09/09/2017 16:21	WG1018559
Dibromomethane	U		0.117	0.500	1	09/09/2017 16:21	WG1018559
1,2-Dichlorobenzene	U		0.101	0.500	1	09/09/2017 16:21	WG1018559
1,3-Dichlorobenzene	U		0.130	0.500	1	09/09/2017 16:21	WG1018559
1,4-Dichlorobenzene	U		0.121	0.500	1	09/09/2017 16:21	WG1018559
Dichlorodifluoromethane	U		0.127	2.50	1	09/09/2017 16:21	WG1018559
1,1-Dichloroethane	U		0.114	0.500	1	09/09/2017 16:21	WG1018559
1,2-Dichloroethane	U		0.108	0.500	1	09/09/2017 16:21	WG1018559
1,1-Dichloroethene	U		0.188	0.500	1	09/09/2017 16:21	WG1018559
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/09/2017 16:21	WG1018559
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/09/2017 16:21	WG1018559
1,2-Dichloropropane	U		0.190	0.500	1	09/09/2017 16:21	WG1018559
1,1-Dichloropropene	U		0.128	0.500	1	09/09/2017 16:21	WG1018559
1,3-Dichloropropane	U		0.147	1.00	1	09/09/2017 16:21	WG1018559
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/09/2017 16:21	WG1018559
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/09/2017 16:21	WG1018559
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/09/2017 16:21	WG1018559
2,2-Dichloropropane	U		0.0929	0.500	1	09/09/2017 16:21	WG1018559
Di-isopropyl ether	U		0.0924	0.500	1	09/09/2017 16:21	WG1018559
Ethylbenzene	U		0.158	0.500	1	09/09/2017 16:21	WG1018559
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/09/2017 16:21	WG1018559
2-Hexanone	U		0.757	5.00	1	09/09/2017 16:21	WG1018559
n-Hexane	U		0.305	5.00	1	09/09/2017 16:21	WG1018559
Iodomethane	U		0.377	10.0	1	09/09/2017 16:21	WG1018559
Isopropylbenzene	U		0.126	0.500	1	09/09/2017 16:21	WG1018559
p-Isopropyltoluene	U		0.138	0.500	1	09/09/2017 16:21	WG1018559
2-Butanone (MEK)	1.58	J	1.28	5.00	1	09/09/2017 16:21	WG1018559

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/01/17 11:30

L934916

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	09/09/2017 16:21	WG1018559
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/09/2017 16:21	WG1018559
Methyl tert-butyl ether	U		0.102	0.500	1	09/09/2017 16:21	WG1018559
Naphthalene	U		0.174	2.50	1	09/09/2017 16:21	WG1018559
n-Propylbenzene	U		0.162	0.500	1	09/09/2017 16:21	WG1018559
Styrene	U		0.117	0.500	1	09/09/2017 16:21	WG1018559
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/09/2017 16:21	WG1018559
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/09/2017 16:21	WG1018559
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/09/2017 16:21	WG1018559
Tetrachloroethene	U		0.199	0.500	1	09/09/2017 16:21	WG1018559
Toluene	41.1		0.412	0.500	1	09/09/2017 16:21	WG1018559
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/09/2017 16:21	WG1018559
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/09/2017 16:21	WG1018559
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/09/2017 16:21	WG1018559
1,1,2-Trichloroethane	U		0.186	0.500	1	09/09/2017 16:21	WG1018559
Trichloroethene	U		0.153	0.500	1	09/09/2017 16:21	WG1018559
Trichlorofluoromethane	U		0.130	2.50	1	09/09/2017 16:21	WG1018559
1,2,3-Trichloropropane	U		0.247	2.50	1	09/09/2017 16:21	WG1018559
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/09/2017 16:21	WG1018559
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/09/2017 16:21	WG1018559
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/09/2017 16:21	WG1018559
Vinyl acetate	U		0.645	5.00	1	09/09/2017 16:21	WG1018559
Vinyl chloride	U		0.118	0.500	1	09/09/2017 16:21	WG1018559
Xylenes, Total	U		0.316	1.50	1	09/09/2017 16:21	WG1018559
(S) Toluene-d8	98.7			80.0-120		09/09/2017 16:21	WG1018559
(S) Dibromofluoromethane	103			76.0-123		09/09/2017 16:21	WG1018559
(S) 4-Bromofluorobenzene	107			80.0-120		09/09/2017 16:21	WG1018559

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L934916-01](#)

Method Blank (MB)

(MB) R3248641-3	09/11/17 20:41																		
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL															
Gasoline Range Organics-NWTPH	U		316 ug/l	100 ug/l															
^(S) a,a-o-Trifluorotoluene(FID)	98.6			77.0-122															

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248641-1	09/11/17 19:34	(LCSD) R3248641-2	09/11/17 19:56																
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits									
Gasoline Range Organics-NWTPH	5500 ug/l	5150 ug/l	5630 ug/l	93.7 %	102 %	72.0-134			8.80 %	20 %									
^(S) a,a,o-Trifluorotoluene(FID)				104	106	77.0-122													

L934883-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L934883-01	09/12/17 10:34	(MS) R3248641-4	09/12/17 10:56	(MSD) R3248641-5	09/12/17 11:19														
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits							
Gasoline Range Organics-NWTPH	5500 ug/l	U	4160 ug/l	4210 ug/l	75.7 %	76.6 %	1	23.0-159			1.28 %	20 %							
^(S) a,a,o-Trifluorotoluene(FID)					99.8	98.7		77.0-122											



Method Blank (MB)

(MB) R3248093-3 09/09/17 11:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.02.002

SDG:

L934916

DATE/TIME:

09/12/17 17:48

PAGE:

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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3248093-3 09/09/17 11:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	99.6			80.0-120
(S) Dibromofluoromethane	102			76.0-123
(S) 4-Bromofluorobenzene	107			80.0-120

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Public Review Draft

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.02.002

SDG:

L934916

DATE/TIME:

09/12/17 17:48

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248093-1 09/09/17 10:45 • (LCSD) R3248093-2 09/09/17 11:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	139	138	111	110	10.0-160			0.380	23
Acrylonitrile	125	148	146	119	116	60.0-142			1.79	20
Benzene	25.0	25.0	25.3	99.8	101	69.0-123			1.35	20
Bromobenzene	25.0	26.1	26.6	105	106	79.0-120			1.62	20
Bromodichloromethane	25.0	26.6	27.3	106	109	76.0-120			2.41	20
Bromochloromethane	25.0	24.8	25.7	99.4	103	76.0-122			3.23	20
Bromoform	25.0	28.0	27.5	112	110	67.0-132			2.06	20
Bromomethane	25.0	22.4	21.9	89.8	87.7	18.0-160			2.28	20
n-Butylbenzene	25.0	23.4	24.2	93.5	97.0	72.0-126			3.60	20
sec-Butylbenzene	25.0	25.4	26.0	102	104	74.0-121			2.32	20
tert-Butylbenzene	25.0	24.5	25.0	98.0	99.9	75.0-122			1.91	20
Carbon disulfide	25.0	23.6	24.1	94.5	96.4	55.0-127			1.99	20
Carbon tetrachloride	25.0	23.7	25.2	94.9	101	63.0-122			5.84	20
Chlorobenzene	25.0	23.3	23.3	93.4	93.4	79.0-121			0.0100	20
Chlorodibromomethane	25.0	25.2	25.0	101	100	75.0-125			0.610	20
Chloroethane	25.0	21.4	21.6	85.4	86.3	47.0-152			1.07	20
Chloroform	25.0	25.5	25.9	102	104	72.0-121			1.39	20
Chloromethane	25.0	22.1	23.1	88.5	92.5	48.0-139			4.42	20
2-Chlorotoluene	25.0	25.2	25.8	101	103	74.0-122			2.12	20
4-Chlorotoluene	25.0	25.6	26.0	102	104	79.0-120			1.50	20
1,2-Dibromo-3-Chloropropane	25.0	25.4	24.5	102	98.0	64.0-127			3.64	20
1,2-Dibromoethane	25.0	24.9	25.1	99.7	100	77.0-123			0.690	20
Dibromomethane	25.0	26.3	26.3	105	105	78.0-120			0.0300	20
1,2-Dichlorobenzene	25.0	24.3	24.7	97.3	98.7	80.0-120			1.43	20
1,3-Dichlorobenzene	25.0	24.5	25.0	98.1	100	72.0-123			2.06	20
1,4-Dichlorobenzene	25.0	23.7	23.9	94.7	95.6	77.0-120			0.940	20
Dichlorodifluoromethane	25.0	22.8	24.0	91.0	95.9	49.0-155			5.19	20
1,1-Dichloroethane	25.0	26.3	26.7	105	107	70.0-126			1.66	20
1,2-Dichloroethane	25.0	27.8	27.8	111	111	67.0-126			0.310	20
1,1-Dichloroethene	25.0	24.1	24.5	96.5	98.2	64.0-129			1.70	20
cis-1,2-Dichloroethene	25.0	24.7	25.0	98.7	100	73.0-120			1.49	20
trans-1,2-Dichloroethene	25.0	24.2	24.8	96.9	99.0	71.0-121			2.16	20
1,2-Dichloropropane	25.0	27.5	27.9	110	112	75.0-125			1.45	20
1,1-Dichloropropene	25.0	24.9	25.3	99.6	101	71.0-129			1.57	20
1,3-Dichloropropene	25.0	25.1	25.1	100	101	80.0-121			0.140	20
cis-1,3-Dichloropropene	25.0	26.7	27.0	107	108	79.0-123			1.02	20
trans-1,3-Dichloropropene	25.0	26.4	26.4	106	105	74.0-127			0.170	20
trans-1,4-Dichloro-2-butene	25.0	22.5	22.0	90.0	87.9	55.0-134			2.31	20
2,2-Dichloropropane	25.0	23.2	23.3	92.6	93.2	60.0-125			0.650	20
Diisopropyl ether	25.0	27.1	27.6	108	110	59.0-133			1.81	20

Public Review Draft

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PES Environmental, Inc.- WA

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1413.001.02.002

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L934916

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248093-1 09/09/17 10:45 • (LCSD) R3248093-2 09/09/17 11:06

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	22.1	22.7	88.5	90.6	77.0-120			2.39	20
Hexachloro-1,3-butadiene	25.0	20.4	22.3	81.7	89.3	64.0-131			8.87	20
2-Hexanone	125	139	137	112	109	58.0-147			1.89	20
n-Hexane	25.0	21.9	22.9	87.7	91.4	56.0-124			4.19	20
Iodomethane	125	119	122	95.3	97.3	57.0-140			2.01	20
Isopropylbenzene	25.0	25.1	25.5	100	102	75.0-120			1.49	20
p-Isopropyltoluene	25.0	25.4	26.0	102	104	74.0-126			2.53	20
2-Butanone (MEK)	125	138	136	110	109	37.0-158			0.950	20
Methylene Chloride	25.0	24.7	25.0	99.0	100	66.0-121			1.00	20
4-Methyl-2-pentanone (MIBK)	125	141	138	113	111	59.0-143			1.62	20
Methyl tert-butyl ether	25.0	25.9	26.2	104	105	64.0-123			1.35	20
Naphthalene	25.0	24.4	25.1	97.7	100	62.0-128			2.64	20
n-Propylbenzene	25.0	25.6	26.0	102	104	79.0-120			1.67	20
Styrene	25.0	27.7	28.1	111	112	78.0-124			1.43	20
1,1,1,2-Tetrachloroethane	25.0	23.9	23.9	95.5	95.7	75.0-122			0.220	20
1,1,2,2-Tetrachloroethane	25.0	28.1	27.8	112	111	71.0-122			1.04	20
1,1,2-Trichlorotrifluoroethane	25.0	23.2	23.9	92.9	95.6	61.0-136			2.85	20
Tetrachloroethene	25.0	22.2	22.5	88.8	89.9	70.0-127			1.19	20
Toluene	25.0	22.7	23.0	90.9	91.9	77.0-120			1.08	20
1,2,3-Trichlorobenzene	25.0	21.8	22.8	87.4	91.3	61.0-133			4.43	20
1,2,4-Trichlorobenzene	25.0	21.5	22.3	85.8	89.2	69.0-129			3.78	20
1,1,1-Trichloroethane	25.0	25.5	25.9	102	103	68.0-122			1.44	20
1,1,2-Trichloroethane	25.0	24.2	24.3	96.8	97.0	78.0-120			0.240	20
Trichloroethene	25.0	24.5	24.6	97.9	98.4	78.0-120			0.490	20
Trichlorofluoromethane	25.0	22.2	22.8	88.7	91.0	56.0-137			2.55	20
1,2,3-Trichloropropane	25.0	28.3	28.0	113	112	72.0-124			1.05	20
1,2,4-Trimethylbenzene	25.0	25.6	25.9	102	104	75.0-120			1.23	20
1,2,3-Trimethylbenzene	25.0	23.2	23.6	92.7	94.3	75.0-120			1.70	20
1,3,5-Trimethylbenzene	25.0	25.1	25.6	101	103	75.0-120			2.06	20
Vinyl acetate	125	127	120	101	96.2	46.0-160			5.22	20
Vinyl chloride	25.0	22.8	24.0	91.2	95.9	64.0-133			5.04	20
Xylenes, Total	75.0	68.2	69.3	90.9	92.4	77.0-120			1.60	20
(S) Toluene-d8				96.7	96.6	80.0-120				
(S) Dibromofluoromethane				102	101	76.0-123				
(S) 4-Bromofluorobenzene				105	106	80.0-120				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

1 Cp

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Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
---	---



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

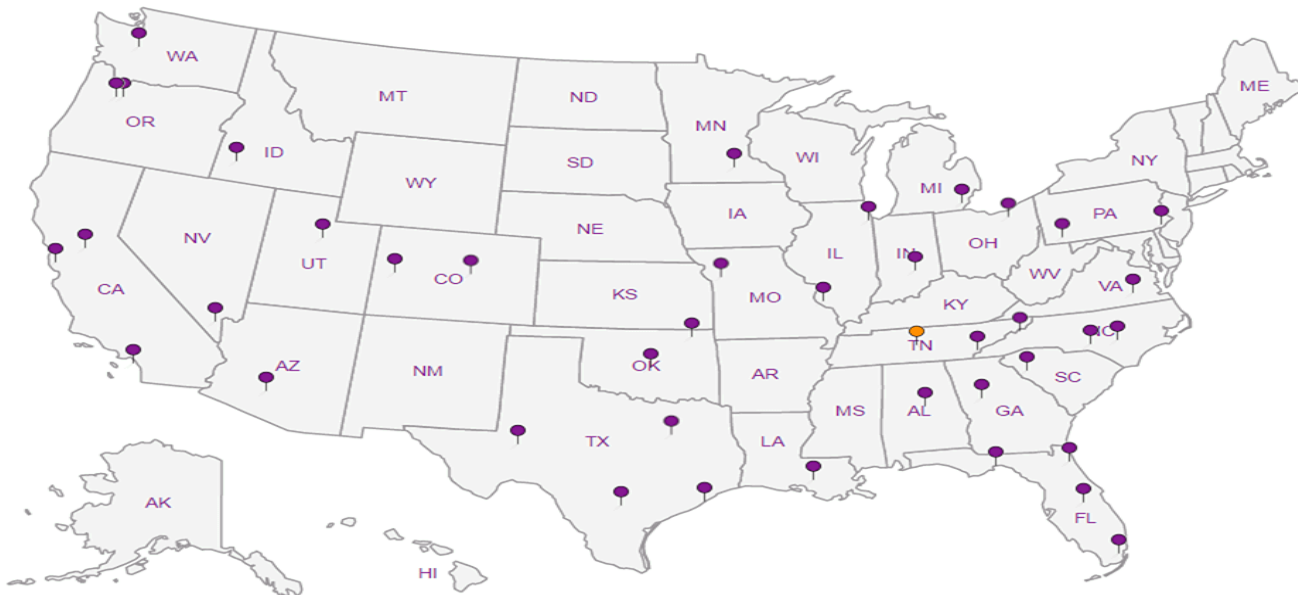
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



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9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeman

Email To: bhdaldeman@pesenv.com

Project:
Description: **American Linen Project**

City/State: **SEATTLE, WA**
Collected: **PESENV/WA-ALP**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413 001 02 602

Lab Project #
PESENV/WA-ALP

Collected by (print):
SHANNON MCKERMAN

Site/Facility ID #
1413 001 02 602

P.O. #

Collected by (signature):

Rush? (Lab MUST be notified)

Quote #

Immediately Packed on Ice: Yes No

Same Day Next Day Two Day Three Day

Date Results Needed

No. of Cans

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cans

Notes

Analysis / Container / Preservation

NWTPHGX 2ozClr-NoPres

NWTPHGX 40mlAmb HCl

TS 4ozClr-NoPres

V8260C 40ml/NaHSO4/Syr/MeOH

V8260C 40mlAmb-HCl

Chain of Custody Page 1 of 2

IESC
INTEGRITY ENVIRONMENTAL SERVICES COMPANY

12065 Lebrun Rd
Mount Rainier, WA 98148
Phone: 425-738-5555
Fax: 425-738-5555

LABORATORY #
PROJECT: **PESENVSWA**

Temperature: **1126584**
Prelogin: **P613271**
TSM: 110 - Brian Ford

Shipped Via: **FedEx Ground**

LAB: **033442**
Lot: **B141**
ID: **1939916**

9/8/17

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cans	Notes	Analysis / Container / Preservation
B- MW-157-85	GRAB	SS GW	45	09/01/17	0820	5X		
B- MW-137-95		SS	95		0900	5X		
B- 216-20		SS	20		0915	4		
B- 216-13		SS	13		0930	4		
B- 216-40		SS	40		1010	4		
B- MW-147-107-W		GN SS	107		1130	4		
B- E-216-50		SS	50		1035	4		
B- MW-137-115		SS GW	115		1145	5X		
B- 216-05		SS GW	05		1145	4X		
B- 216-55		SS	55		1215	4		

Remarks:

Samples returned via
UPS _____ FedEx _____ Courier _____

Tracking # **7474 0921 0306**

Trip Blank Received: Yes No

DO NOT WRITE IN THESE SPACES

COC Start/Preparer/Time/lot: _____

COC Signatory/Collector: _____

Printed after: _____

Corrected bottles used: _____

Substrate: volume/units: _____

If Applicable: _____

VOA/Perf. Handstamp: _____

Transmittal/Job Code/Collector/Time: _____

Requested by: (Signature)
[Signature]

Date: **9/1/17** Time: **1500**

Received by: (Signature)
[Signature]

Date: **9/2/17** Time: **0845**

Relinquished by: (Signature)

Date: _____ Time: _____

Received by: (Signature)
[Signature]

Date: **9/2/17** Time: **0845**

Condition: **8-218**

Andy Vann

From: Brian Ford
Sent: Friday, September 08, 2017 1:57 PM
To: Login; Sample Storage; Brian Ford
Subject: L933742 *PESENVSWA* log off hold

Please log off hold label 8-218. Log as R5 due 09/15.

MW-137-107-W for V8260LLC and NWTPHGX.

This sample was accidentally listed on the COC as MW-147-107-W. MW-137-107-W is the correct sample ID and the containers should be labeled correctly.

Thanks,

✉ **Brian Ford**

Technical Service Representative

ESC Lab Sciences-a subsidiary of Pace Analytical
12065 Lebanon Road | Mt. Juliet, TN 37122
615.773.9772 | Cell 931.510.2229
bford@esclabsciences.com | www.esclabsciences.com


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September 19, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L935150
Samples Received: 09/09/2017
Project Number: 1413.001.02.602
Description: American Linen Project
Site: 1413.001.02.602
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

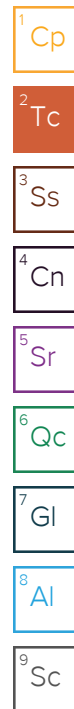


Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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B-214-15 L935150-01 Solid

Collected by Shannon McKernan
 Collected date/time 09/07/17 10:30
 Received date/time 09/09/17 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020007	1	09/14/17 11:43	09/14/17 11:54	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/07/17 10:30	09/17/17 14:13	JHH

2 Tc

3 Ss

B-214-25 L935150-02 Solid

Collected by Shannon McKernan
 Collected date/time 09/07/17 10:55
 Received date/time 09/09/17 08:45

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020007	1	09/14/17 11:43	09/14/17 11:54	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/07/17 10:55	09/17/17 14:54	JHH

5 Sr

6 Qc

B-214-35 L935150-03 Solid

Collected by Shannon McKernan
 Collected date/time 09/07/17 11:20
 Received date/time 09/09/17 08:45

7 Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020007	1	09/14/17 11:43	09/14/17 11:54	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/07/17 11:20	09/17/17 15:13	JHH

8 Al

9 Sc

B-214-45 L935150-04 Solid

Collected by Shannon McKernan
 Collected date/time 09/07/17 11:50
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020007	1	09/14/17 11:43	09/14/17 11:54	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/07/17 11:50	09/17/17 15:33	JHH

B-214-55 L935150-05 Solid

Collected by Shannon McKernan
 Collected date/time 09/07/17 14:00
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020007	1	09/14/17 11:43	09/14/17 11:54	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/07/17 14:00	09/17/17 15:53	JHH

B-212-15 L935150-06 Solid

Collected by Shannon McKernan
 Collected date/time 09/08/17 10:10
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020007	1	09/14/17 11:43	09/14/17 11:54	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018994	25	09/08/17 10:10	09/14/17 01:36	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/08/17 10:10	09/17/17 16:12	JHH

B-212-21 L935150-07 Solid

Collected by Shannon McKernan
 Collected date/time 09/08/17 10:25
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020007	1	09/14/17 11:43	09/14/17 11:54	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018994	25	09/08/17 10:25	09/14/17 01:58	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/08/17 10:25	09/17/17 16:32	JHH



B-212-35 L935150-08 Solid

Collected by Shannon McKernan
 Collected date/time 09/08/17 10:45
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020015	1	09/14/17 11:55	09/14/17 12:11	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018994	25	09/08/17 10:45	09/14/17 02:20	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/08/17 10:45	09/17/17 16:51	JHH

1 Cp

2 Tc

3 Ss

B-212-45 L935150-09 Solid

Collected by Shannon McKernan
 Collected date/time 09/08/17 11:15
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020015	1	09/14/17 11:55	09/14/17 12:11	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018994	25	09/08/17 11:15	09/14/17 02:43	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/08/17 11:15	09/17/17 17:11	JHH

4 Cn

5 Sr

6 Qc

B-212-55 L935150-10 Solid

Collected by Shannon McKernan
 Collected date/time 09/08/17 11:45
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020015	1	09/14/17 11:55	09/14/17 12:11	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1018994	25	09/08/17 11:45	09/12/17 19:46	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1018676	1	09/08/17 11:45	09/17/17 17:31	JHH

7 Gl

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.3		1	09/14/2017 11:54	WG1020007

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0107	0.0536	1	09/17/2017 14:13	WG1018676
Acrylonitrile	U		0.00192	0.0107	1	09/17/2017 14:13	WG1018676
Benzene	U		0.000290	0.00107	1	09/17/2017 14:13	WG1018676
Bromobenzene	U		0.000305	0.00107	1	09/17/2017 14:13	WG1018676
Bromodichloromethane	U		0.000272	0.00107	1	09/17/2017 14:13	WG1018676
Bromochloromethane	U		0.000418	0.00536	1	09/17/2017 14:13	WG1018676
Bromoform	U		0.000455	0.00107	1	09/17/2017 14:13	WG1018676
Bromomethane	U		0.00144	0.00536	1	09/17/2017 14:13	WG1018676
n-Butylbenzene	U		0.000277	0.00107	1	09/17/2017 14:13	WG1018676
sec-Butylbenzene	U		0.000216	0.00107	1	09/17/2017 14:13	WG1018676
tert-Butylbenzene	U		0.000221	0.00107	1	09/17/2017 14:13	WG1018676
Carbon disulfide	0.000244	<u>J</u>	0.000237	0.00107	1	09/17/2017 14:13	WG1018676
Carbon tetrachloride	U		0.000352	0.00107	1	09/17/2017 14:13	WG1018676
Chlorobenzene	U		0.000227	0.00107	1	09/17/2017 14:13	WG1018676
Chlorodibromomethane	U		0.000400	0.00107	1	09/17/2017 14:13	WG1018676
Chloroethane	U		0.00101	0.00536	1	09/17/2017 14:13	WG1018676
Chloroform	U		0.000246	0.00536	1	09/17/2017 14:13	WG1018676
Chloromethane	U		0.000402	0.00268	1	09/17/2017 14:13	WG1018676
2-Chlorotoluene	U		0.000323	0.00107	1	09/17/2017 14:13	WG1018676
4-Chlorotoluene	U		0.000257	0.00107	1	09/17/2017 14:13	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00536	1	09/17/2017 14:13	WG1018676
1,2-Dibromoethane	U		0.000368	0.00107	1	09/17/2017 14:13	WG1018676
Dibromomethane	U		0.000410	0.00107	1	09/17/2017 14:13	WG1018676
1,2-Dichlorobenzene	U		0.000327	0.00107	1	09/17/2017 14:13	WG1018676
1,3-Dichlorobenzene	U		0.000256	0.00107	1	09/17/2017 14:13	WG1018676
1,4-Dichlorobenzene	U		0.000242	0.00107	1	09/17/2017 14:13	WG1018676
Dichlorodifluoromethane	U		0.000765	0.00536	1	09/17/2017 14:13	WG1018676
1,1-Dichloroethane	U		0.000213	0.00107	1	09/17/2017 14:13	WG1018676
1,2-Dichloroethane	U		0.000284	0.00107	1	09/17/2017 14:13	WG1018676
1,1-Dichloroethene	U		0.000325	0.00107	1	09/17/2017 14:13	WG1018676
cis-1,2-Dichloroethene	U	<u>J4</u>	0.000252	0.00107	1	09/17/2017 14:13	WG1018676
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	09/17/2017 14:13	WG1018676
1,2-Dichloropropane	U		0.000384	0.00107	1	09/17/2017 14:13	WG1018676
1,1-Dichloropropene	U		0.000340	0.00107	1	09/17/2017 14:13	WG1018676
1,3-Dichloropropane	U		0.000222	0.00107	1	09/17/2017 14:13	WG1018676
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	09/17/2017 14:13	WG1018676
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	09/17/2017 14:13	WG1018676
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000834	0.00268	1	09/17/2017 14:13	WG1018676
2,2-Dichloropropane	U		0.000299	0.00107	1	09/17/2017 14:13	WG1018676
Di-isopropyl ether	U	<u>JO</u>	0.000266	0.00107	1	09/17/2017 14:13	WG1018676
Ethylbenzene	U		0.000318	0.00107	1	09/17/2017 14:13	WG1018676
Hexachloro-1,3-butadiene	U		0.000367	0.00107	1	09/17/2017 14:13	WG1018676
2-Hexanone	U		0.00147	0.0107	1	09/17/2017 14:13	WG1018676
n-Hexane	U		0.000311	0.0107	1	09/17/2017 14:13	WG1018676
Iodomethane	U		0.00271	0.0107	1	09/17/2017 14:13	WG1018676
Isopropylbenzene	U		0.000261	0.00107	1	09/17/2017 14:13	WG1018676
p-Isopropyltoluene	U		0.000219	0.00107	1	09/17/2017 14:13	WG1018676
2-Butanone (MEK)	U		0.00502	0.0107	1	09/17/2017 14:13	WG1018676
Methylene Chloride	U		0.00107	0.00536	1	09/17/2017 14:13	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0107	1	09/17/2017 14:13	WG1018676

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/07/17 10:30

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/17/2017 14:13	WG1018676
Naphthalene	U		0.00107	0.00536	1	09/17/2017 14:13	WG1018676
n-Propylbenzene	U		0.000221	0.00107	1	09/17/2017 14:13	WG1018676
Styrene	U		0.000251	0.00107	1	09/17/2017 14:13	WG1018676
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	09/17/2017 14:13	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	09/17/2017 14:13	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	09/17/2017 14:13	WG1018676
Tetrachloroethene	U		0.000296	0.00107	1	09/17/2017 14:13	WG1018676
Toluene	U		0.000465	0.00536	1	09/17/2017 14:13	WG1018676
1,2,3-Trichlorobenzene	U		0.000328	0.00107	1	09/17/2017 14:13	WG1018676
1,2,4-Trichlorobenzene	U		0.000416	0.00107	1	09/17/2017 14:13	WG1018676
1,1,1-Trichloroethane	U		0.000307	0.00107	1	09/17/2017 14:13	WG1018676
1,1,2-Trichloroethane	U		0.000297	0.00107	1	09/17/2017 14:13	WG1018676
Trichloroethene	U		0.000299	0.00107	1	09/17/2017 14:13	WG1018676
Trichlorofluoromethane	U		0.000410	0.00536	1	09/17/2017 14:13	WG1018676
1,2,3-Trichloropropane	U		0.000795	0.00268	1	09/17/2017 14:13	WG1018676
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	09/17/2017 14:13	WG1018676
1,2,3-Trimethylbenzene	U	J4	0.000308	0.00107	1	09/17/2017 14:13	WG1018676
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	09/17/2017 14:13	WG1018676
Vinyl acetate	U		0.00256	0.0107	1	09/17/2017 14:13	WG1018676
Vinyl chloride	U		0.000312	0.00107	1	09/17/2017 14:13	WG1018676
Xylenes, Total	U		0.000748	0.00322	1	09/17/2017 14:13	WG1018676
(S) Toluene-d8	101			80.0-120		09/17/2017 14:13	WG1018676
(S) Dibromofluoromethane	103			74.0-131		09/17/2017 14:13	WG1018676
(S) 4-Bromofluorobenzene	107			64.0-132		09/17/2017 14:13	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.6		1	09/14/2017 11:54	WG1020007

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0106	0.0528	1	09/17/2017 14:54	WG1018676
Acrylonitrile	U		0.00189	0.0106	1	09/17/2017 14:54	WG1018676
Benzene	U		0.000285	0.00106	1	09/17/2017 14:54	WG1018676
Bromobenzene	U		0.000300	0.00106	1	09/17/2017 14:54	WG1018676
Bromodichloromethane	U		0.000268	0.00106	1	09/17/2017 14:54	WG1018676
Bromochloromethane	U		0.000412	0.00528	1	09/17/2017 14:54	WG1018676
Bromoform	U		0.000448	0.00106	1	09/17/2017 14:54	WG1018676
Bromomethane	U		0.00142	0.00528	1	09/17/2017 14:54	WG1018676
n-Butylbenzene	U		0.000273	0.00106	1	09/17/2017 14:54	WG1018676
sec-Butylbenzene	U		0.000212	0.00106	1	09/17/2017 14:54	WG1018676
tert-Butylbenzene	U		0.000218	0.00106	1	09/17/2017 14:54	WG1018676
Carbon disulfide	U		0.000234	0.00106	1	09/17/2017 14:54	WG1018676
Carbon tetrachloride	U		0.000347	0.00106	1	09/17/2017 14:54	WG1018676
Chlorobenzene	U		0.000224	0.00106	1	09/17/2017 14:54	WG1018676
Chlorodibromomethane	U		0.000394	0.00106	1	09/17/2017 14:54	WG1018676
Chloroethane	U		0.00100	0.00528	1	09/17/2017 14:54	WG1018676
Chloroform	U		0.000242	0.00528	1	09/17/2017 14:54	WG1018676
Chloromethane	U		0.000396	0.00264	1	09/17/2017 14:54	WG1018676
2-Chlorotoluene	U		0.000318	0.00106	1	09/17/2017 14:54	WG1018676
4-Chlorotoluene	U		0.000254	0.00106	1	09/17/2017 14:54	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00111	0.00528	1	09/17/2017 14:54	WG1018676
1,2-Dibromoethane	U		0.000363	0.00106	1	09/17/2017 14:54	WG1018676
Dibromomethane	U		0.000404	0.00106	1	09/17/2017 14:54	WG1018676
1,2-Dichlorobenzene	U		0.000322	0.00106	1	09/17/2017 14:54	WG1018676
1,3-Dichlorobenzene	U		0.000253	0.00106	1	09/17/2017 14:54	WG1018676
1,4-Dichlorobenzene	U		0.000239	0.00106	1	09/17/2017 14:54	WG1018676
Dichlorodifluoromethane	U		0.000754	0.00528	1	09/17/2017 14:54	WG1018676
1,1-Dichloroethane	U		0.000210	0.00106	1	09/17/2017 14:54	WG1018676
1,2-Dichloroethane	U		0.000280	0.00106	1	09/17/2017 14:54	WG1018676
1,1-Dichloroethene	U		0.000320	0.00106	1	09/17/2017 14:54	WG1018676
cis-1,2-Dichloroethene	U	<u>J4</u>	0.000248	0.00106	1	09/17/2017 14:54	WG1018676
trans-1,2-Dichloroethene	U		0.000279	0.00106	1	09/17/2017 14:54	WG1018676
1,2-Dichloropropane	U		0.000378	0.00106	1	09/17/2017 14:54	WG1018676
1,1-Dichloropropene	U		0.000335	0.00106	1	09/17/2017 14:54	WG1018676
1,3-Dichloropropane	U		0.000219	0.00106	1	09/17/2017 14:54	WG1018676
cis-1,3-Dichloropropene	U		0.000277	0.00106	1	09/17/2017 14:54	WG1018676
trans-1,3-Dichloropropene	U		0.000282	0.00106	1	09/17/2017 14:54	WG1018676
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000822	0.00264	1	09/17/2017 14:54	WG1018676
2,2-Dichloropropane	U		0.000295	0.00106	1	09/17/2017 14:54	WG1018676
Di-isopropyl ether	U	<u>JO</u>	0.000262	0.00106	1	09/17/2017 14:54	WG1018676
Ethylbenzene	U		0.000314	0.00106	1	09/17/2017 14:54	WG1018676
Hexachloro-1,3-butadiene	U		0.000361	0.00106	1	09/17/2017 14:54	WG1018676
2-Hexanone	U		0.00145	0.0106	1	09/17/2017 14:54	WG1018676
n-Hexane	0.000623	<u>J</u>	0.000306	0.0106	1	09/17/2017 14:54	WG1018676
Iodomethane	U		0.00267	0.0106	1	09/17/2017 14:54	WG1018676
Isopropylbenzene	U		0.000257	0.00106	1	09/17/2017 14:54	WG1018676
p-Isopropyltoluene	U		0.000216	0.00106	1	09/17/2017 14:54	WG1018676
2-Butanone (MEK)	U		0.00495	0.0106	1	09/17/2017 14:54	WG1018676
Methylene Chloride	U		0.00106	0.00528	1	09/17/2017 14:54	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0106	1	09/17/2017 14:54	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/07/17 10:55

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000224	0.00106	1	09/17/2017 14:54	WG1018676
Naphthalene	U		0.00106	0.00528	1	09/17/2017 14:54	WG1018676
n-Propylbenzene	U		0.000218	0.00106	1	09/17/2017 14:54	WG1018676
Styrene	U		0.000247	0.00106	1	09/17/2017 14:54	WG1018676
1,1,1-Tetrachloroethane	U		0.000279	0.00106	1	09/17/2017 14:54	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000386	0.00106	1	09/17/2017 14:54	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000386	0.00106	1	09/17/2017 14:54	WG1018676
Tetrachloroethene	U		0.000292	0.00106	1	09/17/2017 14:54	WG1018676
Toluene	U		0.000459	0.00528	1	09/17/2017 14:54	WG1018676
1,2,3-Trichlorobenzene	U		0.000323	0.00106	1	09/17/2017 14:54	WG1018676
1,2,4-Trichlorobenzene	U		0.000410	0.00106	1	09/17/2017 14:54	WG1018676
1,1,1-Trichloroethane	U		0.000302	0.00106	1	09/17/2017 14:54	WG1018676
1,1,2-Trichloroethane	U		0.000293	0.00106	1	09/17/2017 14:54	WG1018676
Trichloroethene	U		0.000295	0.00106	1	09/17/2017 14:54	WG1018676
Trichlorofluoromethane	U		0.000404	0.00528	1	09/17/2017 14:54	WG1018676
1,2,3-Trichloropropane	U		0.000783	0.00264	1	09/17/2017 14:54	WG1018676
1,2,4-Trimethylbenzene	U		0.000223	0.00106	1	09/17/2017 14:54	WG1018676
1,2,3-Trimethylbenzene	U	<u>J4</u>	0.000303	0.00106	1	09/17/2017 14:54	WG1018676
1,3,5-Trimethylbenzene	U		0.000281	0.00106	1	09/17/2017 14:54	WG1018676
Vinyl acetate	U		0.00253	0.0106	1	09/17/2017 14:54	WG1018676
Vinyl chloride	U		0.000308	0.00106	1	09/17/2017 14:54	WG1018676
Xylenes, Total	U		0.000738	0.00317	1	09/17/2017 14:54	WG1018676
(S) Toluene-d8	101			80.0-120		09/17/2017 14:54	WG1018676
(S) Dibromofluoromethane	102			74.0-131		09/17/2017 14:54	WG1018676
(S) 4-Bromofluorobenzene	103			64.0-132		09/17/2017 14:54	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.1		1	09/14/2017 11:54	WG1020007

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0139	J JO	0.0109	0.0543	1	09/17/2017 15:13	WG1018676
Acrylonitrile	U		0.00194	0.0109	1	09/17/2017 15:13	WG1018676
Benzene	U		0.000293	0.00109	1	09/17/2017 15:13	WG1018676
Bromobenzene	U		0.000308	0.00109	1	09/17/2017 15:13	WG1018676
Bromodichloromethane	U		0.000276	0.00109	1	09/17/2017 15:13	WG1018676
Bromochloromethane	U		0.000423	0.00543	1	09/17/2017 15:13	WG1018676
Bromoform	U		0.000460	0.00109	1	09/17/2017 15:13	WG1018676
Bromomethane	U		0.00145	0.00543	1	09/17/2017 15:13	WG1018676
n-Butylbenzene	U		0.000280	0.00109	1	09/17/2017 15:13	WG1018676
sec-Butylbenzene	U		0.000218	0.00109	1	09/17/2017 15:13	WG1018676
tert-Butylbenzene	U		0.000224	0.00109	1	09/17/2017 15:13	WG1018676
Carbon disulfide	U		0.000240	0.00109	1	09/17/2017 15:13	WG1018676
Carbon tetrachloride	U		0.000356	0.00109	1	09/17/2017 15:13	WG1018676
Chlorobenzene	U		0.000230	0.00109	1	09/17/2017 15:13	WG1018676
Chlorodibromomethane	U		0.000405	0.00109	1	09/17/2017 15:13	WG1018676
Chloroethane	U		0.00103	0.00543	1	09/17/2017 15:13	WG1018676
Chloroform	U		0.000249	0.00543	1	09/17/2017 15:13	WG1018676
Chloromethane	U		0.000407	0.00271	1	09/17/2017 15:13	WG1018676
2-Chlorotoluene	U		0.000327	0.00109	1	09/17/2017 15:13	WG1018676
4-Chlorotoluene	U		0.000261	0.00109	1	09/17/2017 15:13	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00543	1	09/17/2017 15:13	WG1018676
1,2-Dibromoethane	U		0.000372	0.00109	1	09/17/2017 15:13	WG1018676
Dibromomethane	U		0.000415	0.00109	1	09/17/2017 15:13	WG1018676
1,2-Dichlorobenzene	U		0.000331	0.00109	1	09/17/2017 15:13	WG1018676
1,3-Dichlorobenzene	U		0.000260	0.00109	1	09/17/2017 15:13	WG1018676
1,4-Dichlorobenzene	U		0.000245	0.00109	1	09/17/2017 15:13	WG1018676
Dichlorodifluoromethane	U		0.000774	0.00543	1	09/17/2017 15:13	WG1018676
1,1-Dichloroethane	U		0.000216	0.00109	1	09/17/2017 15:13	WG1018676
1,2-Dichloroethane	U		0.000288	0.00109	1	09/17/2017 15:13	WG1018676
1,1-Dichloroethene	U		0.000329	0.00109	1	09/17/2017 15:13	WG1018676
cis-1,2-Dichloroethene	U		0.000255	0.00109	1	09/17/2017 15:13	WG1018676
trans-1,2-Dichloroethene	U		0.000287	0.00109	1	09/17/2017 15:13	WG1018676
1,2-Dichloropropane	U		0.000389	0.00109	1	09/17/2017 15:13	WG1018676
1,1-Dichloropropene	U		0.000344	0.00109	1	09/17/2017 15:13	WG1018676
1,3-Dichloropropane	U		0.000225	0.00109	1	09/17/2017 15:13	WG1018676
cis-1,3-Dichloropropene	U		0.000284	0.00109	1	09/17/2017 15:13	WG1018676
trans-1,3-Dichloropropene	U		0.000290	0.00109	1	09/17/2017 15:13	WG1018676
trans-1,4-Dichloro-2-butene	U	JO	0.000845	0.00271	1	09/17/2017 15:13	WG1018676
2,2-Dichloropropane	U		0.000303	0.00109	1	09/17/2017 15:13	WG1018676
Di-isopropyl ether	U	JO	0.000269	0.00109	1	09/17/2017 15:13	WG1018676
Ethylbenzene	U		0.000322	0.00109	1	09/17/2017 15:13	WG1018676
Hexachloro-1,3-butadiene	U		0.000371	0.00109	1	09/17/2017 15:13	WG1018676
2-Hexanone	U		0.00149	0.0109	1	09/17/2017 15:13	WG1018676
n-Hexane	U		0.000315	0.0109	1	09/17/2017 15:13	WG1018676
Iodomethane	U		0.00275	0.0109	1	09/17/2017 15:13	WG1018676
Isopropylbenzene	U		0.000264	0.00109	1	09/17/2017 15:13	WG1018676
p-Isopropyltoluene	U		0.000222	0.00109	1	09/17/2017 15:13	WG1018676
2-Butanone (MEK)	U		0.00508	0.0109	1	09/17/2017 15:13	WG1018676
Methylene Chloride	U		0.00109	0.00543	1	09/17/2017 15:13	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0109	1	09/17/2017 15:13	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/07/17 11:20

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00109	1	09/17/2017 15:13	WG1018676
Naphthalene	U		0.00109	0.00543	1	09/17/2017 15:13	WG1018676
n-Propylbenzene	U		0.000224	0.00109	1	09/17/2017 15:13	WG1018676
Styrene	U		0.000254	0.00109	1	09/17/2017 15:13	WG1018676
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	09/17/2017 15:13	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000396	0.00109	1	09/17/2017 15:13	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00109	1	09/17/2017 15:13	WG1018676
Tetrachloroethene	U		0.000300	0.00109	1	09/17/2017 15:13	WG1018676
Toluene	U		0.000471	0.00543	1	09/17/2017 15:13	WG1018676
1,2,3-Trichlorobenzene	U		0.000332	0.00109	1	09/17/2017 15:13	WG1018676
1,2,4-Trichlorobenzene	U		0.000421	0.00109	1	09/17/2017 15:13	WG1018676
1,1,1-Trichloroethane	U		0.000311	0.00109	1	09/17/2017 15:13	WG1018676
1,1,2-Trichloroethane	U		0.000301	0.00109	1	09/17/2017 15:13	WG1018676
Trichloroethene	U		0.000303	0.00109	1	09/17/2017 15:13	WG1018676
Trichlorofluoromethane	U		0.000415	0.00543	1	09/17/2017 15:13	WG1018676
1,2,3-Trichloropropane	U		0.000805	0.00271	1	09/17/2017 15:13	WG1018676
1,2,4-Trimethylbenzene	U		0.000229	0.00109	1	09/17/2017 15:13	WG1018676
1,2,3-Trimethylbenzene	U	J4	0.000312	0.00109	1	09/17/2017 15:13	WG1018676
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	09/17/2017 15:13	WG1018676
Vinyl acetate	U		0.00260	0.0109	1	09/17/2017 15:13	WG1018676
Vinyl chloride	U		0.000316	0.00109	1	09/17/2017 15:13	WG1018676
Xylenes, Total	U		0.000758	0.00326	1	09/17/2017 15:13	WG1018676
(S) Toluene-d8	103			80.0-120		09/17/2017 15:13	WG1018676
(S) Dibromofluoromethane	95.1			74.0-131		09/17/2017 15:13	WG1018676
(S) 4-Bromofluorobenzene	105			64.0-132		09/17/2017 15:13	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.0		1	09/14/2017 11:54	WG1020007

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0202	J JO	0.0106	0.0532	1	09/17/2017 15:33	WG1018676
Acrylonitrile	U		0.00191	0.0106	1	09/17/2017 15:33	WG1018676
Benzene	U		0.000287	0.00106	1	09/17/2017 15:33	WG1018676
Bromobenzene	U		0.000302	0.00106	1	09/17/2017 15:33	WG1018676
Bromodichloromethane	U		0.000270	0.00106	1	09/17/2017 15:33	WG1018676
Bromochloromethane	U		0.000415	0.00532	1	09/17/2017 15:33	WG1018676
Bromoform	U		0.000451	0.00106	1	09/17/2017 15:33	WG1018676
Bromomethane	U		0.00143	0.00532	1	09/17/2017 15:33	WG1018676
n-Butylbenzene	U		0.000275	0.00106	1	09/17/2017 15:33	WG1018676
sec-Butylbenzene	U		0.000214	0.00106	1	09/17/2017 15:33	WG1018676
tert-Butylbenzene	U		0.000219	0.00106	1	09/17/2017 15:33	WG1018676
Carbon disulfide	0.000703	J	0.000235	0.00106	1	09/17/2017 15:33	WG1018676
Carbon tetrachloride	U		0.000349	0.00106	1	09/17/2017 15:33	WG1018676
Chlorobenzene	U		0.000226	0.00106	1	09/17/2017 15:33	WG1018676
Chlorodibromomethane	U		0.000397	0.00106	1	09/17/2017 15:33	WG1018676
Chloroethane	U		0.00101	0.00532	1	09/17/2017 15:33	WG1018676
Chloroform	U		0.000244	0.00532	1	09/17/2017 15:33	WG1018676
Chloromethane	U		0.000399	0.00266	1	09/17/2017 15:33	WG1018676
2-Chlorotoluene	U		0.000320	0.00106	1	09/17/2017 15:33	WG1018676
4-Chlorotoluene	U		0.000255	0.00106	1	09/17/2017 15:33	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00532	1	09/17/2017 15:33	WG1018676
1,2-Dibromoethane	U		0.000365	0.00106	1	09/17/2017 15:33	WG1018676
Dibromomethane	U		0.000407	0.00106	1	09/17/2017 15:33	WG1018676
1,2-Dichlorobenzene	U		0.000325	0.00106	1	09/17/2017 15:33	WG1018676
1,3-Dichlorobenzene	U		0.000254	0.00106	1	09/17/2017 15:33	WG1018676
1,4-Dichlorobenzene	U		0.000241	0.00106	1	09/17/2017 15:33	WG1018676
Dichlorodifluoromethane	U		0.000759	0.00532	1	09/17/2017 15:33	WG1018676
1,1-Dichloroethane	U		0.000212	0.00106	1	09/17/2017 15:33	WG1018676
1,2-Dichloroethane	U		0.000282	0.00106	1	09/17/2017 15:33	WG1018676
1,1-Dichloroethene	U		0.000322	0.00106	1	09/17/2017 15:33	WG1018676
cis-1,2-Dichloroethene	U		0.000250	0.00106	1	09/17/2017 15:33	WG1018676
trans-1,2-Dichloroethene	U		0.000281	0.00106	1	09/17/2017 15:33	WG1018676
1,2-Dichloropropane	U		0.000381	0.00106	1	09/17/2017 15:33	WG1018676
1,1-Dichloropropene	U		0.000337	0.00106	1	09/17/2017 15:33	WG1018676
1,3-Dichloropropane	U		0.000220	0.00106	1	09/17/2017 15:33	WG1018676
cis-1,3-Dichloropropene	U		0.000279	0.00106	1	09/17/2017 15:33	WG1018676
trans-1,3-Dichloropropene	U		0.000284	0.00106	1	09/17/2017 15:33	WG1018676
trans-1,4-Dichloro-2-butene	U	JO	0.000828	0.00266	1	09/17/2017 15:33	WG1018676
2,2-Dichloropropane	U		0.000297	0.00106	1	09/17/2017 15:33	WG1018676
Di-isopropyl ether	U	JO	0.000264	0.00106	1	09/17/2017 15:33	WG1018676
Ethylbenzene	U		0.000316	0.00106	1	09/17/2017 15:33	WG1018676
Hexachloro-1,3-butadiene	U		0.000364	0.00106	1	09/17/2017 15:33	WG1018676
2-Hexanone	U		0.00146	0.0106	1	09/17/2017 15:33	WG1018676
n-Hexane	0.00110	J	0.000309	0.0106	1	09/17/2017 15:33	WG1018676
Iodomethane	U		0.00269	0.0106	1	09/17/2017 15:33	WG1018676
Isopropylbenzene	U		0.000259	0.00106	1	09/17/2017 15:33	WG1018676
p-Isopropyltoluene	U		0.000217	0.00106	1	09/17/2017 15:33	WG1018676
2-Butanone (MEK)	U		0.00498	0.0106	1	09/17/2017 15:33	WG1018676
Methylene Chloride	U		0.00106	0.00532	1	09/17/2017 15:33	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00200	0.0106	1	09/17/2017 15:33	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/07/17 11:50

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000226	0.00106	1	09/17/2017 15:33	WG1018676
Naphthalene	U		0.00106	0.00532	1	09/17/2017 15:33	WG1018676
n-Propylbenzene	U		0.000219	0.00106	1	09/17/2017 15:33	WG1018676
Styrene	U		0.000249	0.00106	1	09/17/2017 15:33	WG1018676
1,1,1,2-Tetrachloroethane	U		0.000281	0.00106	1	09/17/2017 15:33	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000388	0.00106	1	09/17/2017 15:33	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000388	0.00106	1	09/17/2017 15:33	WG1018676
Tetrachloroethene	U		0.000294	0.00106	1	09/17/2017 15:33	WG1018676
Toluene	U		0.000462	0.00532	1	09/17/2017 15:33	WG1018676
1,2,3-Trichlorobenzene	U		0.000326	0.00106	1	09/17/2017 15:33	WG1018676
1,2,4-Trichlorobenzene	U		0.000413	0.00106	1	09/17/2017 15:33	WG1018676
1,1,1-Trichloroethane	U		0.000304	0.00106	1	09/17/2017 15:33	WG1018676
1,1,2-Trichloroethane	U		0.000295	0.00106	1	09/17/2017 15:33	WG1018676
Trichloroethene	U		0.000297	0.00106	1	09/17/2017 15:33	WG1018676
Trichlorofluoromethane	U		0.000407	0.00532	1	09/17/2017 15:33	WG1018676
1,2,3-Trichloropropane	U		0.000789	0.00266	1	09/17/2017 15:33	WG1018676
1,2,4-Trimethylbenzene	U		0.000225	0.00106	1	09/17/2017 15:33	WG1018676
1,2,3-Trimethylbenzene	U	<u>J4</u>	0.000305	0.00106	1	09/17/2017 15:33	WG1018676
1,3,5-Trimethylbenzene	U		0.000283	0.00106	1	09/17/2017 15:33	WG1018676
Vinyl acetate	U		0.00254	0.0106	1	09/17/2017 15:33	WG1018676
Vinyl chloride	U		0.000310	0.00106	1	09/17/2017 15:33	WG1018676
Xylenes, Total	U		0.000743	0.00319	1	09/17/2017 15:33	WG1018676
(S) Toluene-d8	104			80.0-120		09/17/2017 15:33	WG1018676
(S) Dibromofluoromethane	98.6			74.0-131		09/17/2017 15:33	WG1018676
(S) 4-Bromofluorobenzene	104			64.0-132		09/17/2017 15:33	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/07/17 14:00

L935150

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.1		1	09/14/2017 11:54	WG1020007

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0224	J JO	0.0111	0.0555	1	09/17/2017 15:53	WG1018676
Acrylonitrile	U		0.00199	0.0111	1	09/17/2017 15:53	WG1018676
Benzene	0.000343	J	0.000300	0.00111	1	09/17/2017 15:53	WG1018676
Bromobenzene	U		0.000315	0.00111	1	09/17/2017 15:53	WG1018676
Bromodichloromethane	U		0.000282	0.00111	1	09/17/2017 15:53	WG1018676
Bromochloromethane	U		0.000433	0.00555	1	09/17/2017 15:53	WG1018676
Bromoform	U		0.000471	0.00111	1	09/17/2017 15:53	WG1018676
Bromomethane	U		0.00149	0.00555	1	09/17/2017 15:53	WG1018676
n-Butylbenzene	U		0.000286	0.00111	1	09/17/2017 15:53	WG1018676
sec-Butylbenzene	U		0.000223	0.00111	1	09/17/2017 15:53	WG1018676
tert-Butylbenzene	U		0.000229	0.00111	1	09/17/2017 15:53	WG1018676
Carbon disulfide	0.00159		0.000245	0.00111	1	09/17/2017 15:53	WG1018676
Carbon tetrachloride	U		0.000364	0.00111	1	09/17/2017 15:53	WG1018676
Chlorobenzene	U		0.000235	0.00111	1	09/17/2017 15:53	WG1018676
Chlorodibromomethane	U		0.000414	0.00111	1	09/17/2017 15:53	WG1018676
Chloroethane	U		0.00105	0.00555	1	09/17/2017 15:53	WG1018676
Chloroform	U		0.000254	0.00555	1	09/17/2017 15:53	WG1018676
Chloromethane	U		0.000416	0.00278	1	09/17/2017 15:53	WG1018676
2-Chlorotoluene	U		0.000334	0.00111	1	09/17/2017 15:53	WG1018676
4-Chlorotoluene	U		0.000267	0.00111	1	09/17/2017 15:53	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00555	1	09/17/2017 15:53	WG1018676
1,2-Dibromoethane	U		0.000381	0.00111	1	09/17/2017 15:53	WG1018676
Dibromomethane	U		0.000424	0.00111	1	09/17/2017 15:53	WG1018676
1,2-Dichlorobenzene	U		0.000339	0.00111	1	09/17/2017 15:53	WG1018676
1,3-Dichlorobenzene	U		0.000265	0.00111	1	09/17/2017 15:53	WG1018676
1,4-Dichlorobenzene	U		0.000251	0.00111	1	09/17/2017 15:53	WG1018676
Dichlorodifluoromethane	U		0.000792	0.00555	1	09/17/2017 15:53	WG1018676
1,1-Dichloroethane	U		0.000221	0.00111	1	09/17/2017 15:53	WG1018676
1,2-Dichloroethane	U		0.000294	0.00111	1	09/17/2017 15:53	WG1018676
1,1-Dichloroethene	U		0.000336	0.00111	1	09/17/2017 15:53	WG1018676
cis-1,2-Dichloroethene	U	J4	0.000261	0.00111	1	09/17/2017 15:53	WG1018676
trans-1,2-Dichloroethene	U		0.000293	0.00111	1	09/17/2017 15:53	WG1018676
1,2-Dichloropropane	U		0.000398	0.00111	1	09/17/2017 15:53	WG1018676
1,1-Dichloropropene	U		0.000352	0.00111	1	09/17/2017 15:53	WG1018676
1,3-Dichloropropane	U		0.000230	0.00111	1	09/17/2017 15:53	WG1018676
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	09/17/2017 15:53	WG1018676
trans-1,3-Dichloropropene	U		0.000296	0.00111	1	09/17/2017 15:53	WG1018676
trans-1,4-Dichloro-2-butene	U	JO	0.000864	0.00278	1	09/17/2017 15:53	WG1018676
2,2-Dichloropropane	U		0.000310	0.00111	1	09/17/2017 15:53	WG1018676
Di-isopropyl ether	U	JO	0.000275	0.00111	1	09/17/2017 15:53	WG1018676
Ethylbenzene	U		0.000330	0.00111	1	09/17/2017 15:53	WG1018676
Hexachloro-1,3-butadiene	U		0.000380	0.00111	1	09/17/2017 15:53	WG1018676
2-Hexanone	U		0.00152	0.0111	1	09/17/2017 15:53	WG1018676
n-Hexane	0.00245	J	0.000322	0.0111	1	09/17/2017 15:53	WG1018676
Iodomethane	U		0.00281	0.0111	1	09/17/2017 15:53	WG1018676
Isopropylbenzene	U		0.000270	0.00111	1	09/17/2017 15:53	WG1018676
p-Isopropyltoluene	U		0.000227	0.00111	1	09/17/2017 15:53	WG1018676
2-Butanone (MEK)	U		0.00520	0.0111	1	09/17/2017 15:53	WG1018676
Methylene Chloride	U		0.00111	0.00555	1	09/17/2017 15:53	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	09/17/2017 15:53	WG1018676

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 09/07/17 14:00

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000235	0.00111	1	09/17/2017 15:53	WG1018676
Naphthalene	U		0.00111	0.00555	1	09/17/2017 15:53	WG1018676
n-Propylbenzene	U		0.000229	0.00111	1	09/17/2017 15:53	WG1018676
Styrene	U		0.000260	0.00111	1	09/17/2017 15:53	WG1018676
1,1,1-Tetrachloroethane	U		0.000293	0.00111	1	09/17/2017 15:53	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000405	0.00111	1	09/17/2017 15:53	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000405	0.00111	1	09/17/2017 15:53	WG1018676
Tetrachloroethene	U		0.000306	0.00111	1	09/17/2017 15:53	WG1018676
Toluene	U		0.000482	0.00555	1	09/17/2017 15:53	WG1018676
1,2,3-Trichlorobenzene	U		0.000340	0.00111	1	09/17/2017 15:53	WG1018676
1,2,4-Trichlorobenzene	U		0.000431	0.00111	1	09/17/2017 15:53	WG1018676
1,1,1-Trichloroethane	U		0.000318	0.00111	1	09/17/2017 15:53	WG1018676
1,1,2-Trichloroethane	U		0.000308	0.00111	1	09/17/2017 15:53	WG1018676
Trichloroethene	U		0.000310	0.00111	1	09/17/2017 15:53	WG1018676
Trichlorofluoromethane	U		0.000424	0.00555	1	09/17/2017 15:53	WG1018676
1,2,3-Trichloropropane	U		0.000823	0.00278	1	09/17/2017 15:53	WG1018676
1,2,4-Trimethylbenzene	U		0.000234	0.00111	1	09/17/2017 15:53	WG1018676
1,2,3-Trimethylbenzene	U	J4	0.000319	0.00111	1	09/17/2017 15:53	WG1018676
1,3,5-Trimethylbenzene	U		0.000295	0.00111	1	09/17/2017 15:53	WG1018676
Vinyl acetate	U		0.00265	0.0111	1	09/17/2017 15:53	WG1018676
Vinyl chloride	U		0.000323	0.00111	1	09/17/2017 15:53	WG1018676
Xylenes, Total	U		0.000775	0.00333	1	09/17/2017 15:53	WG1018676
(S) Toluene-d8	101			80.0-120		09/17/2017 15:53	WG1018676
(S) Dibromofluoromethane	102			74.0-131		09/17/2017 15:53	WG1018676
(S) 4-Bromofluorobenzene	103			64.0-132		09/17/2017 15:53	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.8		1	09/14/2017 11:54	WG1020007

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.977	2.88	25	09/14/2017 01:36	WG1018994
(S) a,a,a-Trifluorotoluene(FID)	92.0			77.0-120		09/14/2017 01:36	WG1018994

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	0.0129	J JO	0.0115	0.0576	1	09/17/2017 16:12	WG1018676
Acrylonitrile	U		0.00206	0.0115	1	09/17/2017 16:12	WG1018676
Benzene	U		0.000311	0.00115	1	09/17/2017 16:12	WG1018676
Bromobenzene	U		0.000327	0.00115	1	09/17/2017 16:12	WG1018676
Bromodichloromethane	U		0.000293	0.00115	1	09/17/2017 16:12	WG1018676
Bromochloromethane	U		0.000449	0.00576	1	09/17/2017 16:12	WG1018676
Bromoform	U		0.000488	0.00115	1	09/17/2017 16:12	WG1018676
Bromomethane	U		0.00154	0.00576	1	09/17/2017 16:12	WG1018676
n-Butylbenzene	U		0.000297	0.00115	1	09/17/2017 16:12	WG1018676
sec-Butylbenzene	U		0.000232	0.00115	1	09/17/2017 16:12	WG1018676
tert-Butylbenzene	U		0.000237	0.00115	1	09/17/2017 16:12	WG1018676
Carbon disulfide	U		0.000255	0.00115	1	09/17/2017 16:12	WG1018676
Carbon tetrachloride	U		0.000378	0.00115	1	09/17/2017 16:12	WG1018676
Chlorobenzene	U		0.000244	0.00115	1	09/17/2017 16:12	WG1018676
Chlorodibromomethane	U		0.000430	0.00115	1	09/17/2017 16:12	WG1018676
Chloroethane	U		0.00109	0.00576	1	09/17/2017 16:12	WG1018676
Chloroform	U		0.000264	0.00576	1	09/17/2017 16:12	WG1018676
Chloromethane	U		0.000432	0.00288	1	09/17/2017 16:12	WG1018676
2-Chlorotoluene	U		0.000347	0.00115	1	09/17/2017 16:12	WG1018676
4-Chlorotoluene	U		0.000276	0.00115	1	09/17/2017 16:12	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00576	1	09/17/2017 16:12	WG1018676
1,2-Dibromoethane	U		0.000395	0.00115	1	09/17/2017 16:12	WG1018676
Dibromomethane	U		0.000440	0.00115	1	09/17/2017 16:12	WG1018676
1,2-Dichlorobenzene	U		0.000351	0.00115	1	09/17/2017 16:12	WG1018676
1,3-Dichlorobenzene	U		0.000275	0.00115	1	09/17/2017 16:12	WG1018676
1,4-Dichlorobenzene	U		0.000260	0.00115	1	09/17/2017 16:12	WG1018676
Dichlorodifluoromethane	U		0.000821	0.00576	1	09/17/2017 16:12	WG1018676
1,1-Dichloroethane	U		0.000229	0.00115	1	09/17/2017 16:12	WG1018676
1,2-Dichloroethane	U		0.000305	0.00115	1	09/17/2017 16:12	WG1018676
1,1-Dichloroethene	U		0.000349	0.00115	1	09/17/2017 16:12	WG1018676
cis-1,2-Dichloroethene	U	J4	0.000271	0.00115	1	09/17/2017 16:12	WG1018676
trans-1,2-Dichloroethene	U		0.000304	0.00115	1	09/17/2017 16:12	WG1018676
1,2-Dichloropropane	U		0.000412	0.00115	1	09/17/2017 16:12	WG1018676
1,1-Dichloropropene	U		0.000365	0.00115	1	09/17/2017 16:12	WG1018676
1,3-Dichloropropane	U		0.000238	0.00115	1	09/17/2017 16:12	WG1018676
cis-1,3-Dichloropropene	U		0.000302	0.00115	1	09/17/2017 16:12	WG1018676
trans-1,3-Dichloropropene	U		0.000308	0.00115	1	09/17/2017 16:12	WG1018676
trans-1,4-Dichloro-2-butene	U	JO	0.000896	0.00288	1	09/17/2017 16:12	WG1018676
2,2-Dichloropropane	U		0.000321	0.00115	1	09/17/2017 16:12	WG1018676
Di-isopropyl ether	U	JO	0.000286	0.00115	1	09/17/2017 16:12	WG1018676
Ethylbenzene	U		0.000342	0.00115	1	09/17/2017 16:12	WG1018676
Hexachloro-1,3-butadiene	U		0.000394	0.00115	1	09/17/2017 16:12	WG1018676
2-Hexanone	U		0.00158	0.0115	1	09/17/2017 16:12	WG1018676
n-Hexane	U		0.000334	0.0115	1	09/17/2017 16:12	WG1018676

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 10:10

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00291	0.0115	1	09/17/2017 16:12	WG1018676
Isopropylbenzene	U		0.000280	0.00115	1	09/17/2017 16:12	WG1018676
p-Isopropyltoluene	U		0.000235	0.00115	1	09/17/2017 16:12	WG1018676
2-Butanone (MEK)	U		0.00539	0.0115	1	09/17/2017 16:12	WG1018676
Methylene Chloride	U		0.00115	0.00576	1	09/17/2017 16:12	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00217	0.0115	1	09/17/2017 16:12	WG1018676
Methyl tert-butyl ether	U		0.000244	0.00115	1	09/17/2017 16:12	WG1018676
Naphthalene	U		0.00115	0.00576	1	09/17/2017 16:12	WG1018676
n-Propylbenzene	U		0.000237	0.00115	1	09/17/2017 16:12	WG1018676
Styrene	U		0.000270	0.00115	1	09/17/2017 16:12	WG1018676
1,1,1,2-Tetrachloroethane	U		0.000304	0.00115	1	09/17/2017 16:12	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000420	0.00115	1	09/17/2017 16:12	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000420	0.00115	1	09/17/2017 16:12	WG1018676
Tetrachloroethene	U		0.000318	0.00115	1	09/17/2017 16:12	WG1018676
Toluene	U		0.000500	0.00576	1	09/17/2017 16:12	WG1018676
1,2,3-Trichlorobenzene	U		0.000352	0.00115	1	09/17/2017 16:12	WG1018676
1,2,4-Trichlorobenzene	U		0.000447	0.00115	1	09/17/2017 16:12	WG1018676
1,1,1-Trichloroethane	U		0.000329	0.00115	1	09/17/2017 16:12	WG1018676
1,1,2-Trichloroethane	U		0.000319	0.00115	1	09/17/2017 16:12	WG1018676
Trichloroethene	U		0.000321	0.00115	1	09/17/2017 16:12	WG1018676
Trichlorofluoromethane	U		0.000440	0.00576	1	09/17/2017 16:12	WG1018676
1,2,3-Trichloropropane	U		0.000853	0.00288	1	09/17/2017 16:12	WG1018676
1,2,4-Trimethylbenzene	U		0.000243	0.00115	1	09/17/2017 16:12	WG1018676
1,2,3-Trimethylbenzene	U	J4	0.000331	0.00115	1	09/17/2017 16:12	WG1018676
1,3,5-Trimethylbenzene	U		0.000306	0.00115	1	09/17/2017 16:12	WG1018676
Vinyl acetate	U		0.00275	0.0115	1	09/17/2017 16:12	WG1018676
Vinyl chloride	U		0.000335	0.00115	1	09/17/2017 16:12	WG1018676
Xylenes, Total	U		0.000804	0.00346	1	09/17/2017 16:12	WG1018676
(S) Toluene-d8	101			80.0-120		09/17/2017 16:12	WG1018676
(S) Dibromofluoromethane	101			74.0-131		09/17/2017 16:12	WG1018676
(S) 4-Bromofluorobenzene	103			64.0-132		09/17/2017 16:12	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 10:25

L935150

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	96.3		1	09/14/2017 11:54	WG1020007

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	63.0		0.881	2.60	25	09/14/2017 01:58	WG1018994
(S) a,a,a-Trifluorotoluene(FID)	92.3			77.0-120		09/14/2017 01:58	WG1018994

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0605	<u>JO</u>	0.0104	0.0519	1	09/17/2017 16:32	WG1018676
Acrylonitrile	U		0.00186	0.0104	1	09/17/2017 16:32	WG1018676
Benzene	0.000346	<u>J</u>	0.000281	0.00104	1	09/17/2017 16:32	WG1018676
Bromobenzene	U		0.000295	0.00104	1	09/17/2017 16:32	WG1018676
Bromodichloromethane	U		0.000264	0.00104	1	09/17/2017 16:32	WG1018676
Bromochloromethane	U		0.000405	0.00519	1	09/17/2017 16:32	WG1018676
Bromoform	U		0.000441	0.00104	1	09/17/2017 16:32	WG1018676
Bromomethane	U		0.00139	0.00519	1	09/17/2017 16:32	WG1018676
n-Butylbenzene	0.00372		0.000268	0.00104	1	09/17/2017 16:32	WG1018676
sec-Butylbenzene	0.00234		0.000209	0.00104	1	09/17/2017 16:32	WG1018676
tert-Butylbenzene	U		0.000214	0.00104	1	09/17/2017 16:32	WG1018676
Carbon disulfide	0.00174		0.000230	0.00104	1	09/17/2017 16:32	WG1018676
Carbon tetrachloride	U		0.000341	0.00104	1	09/17/2017 16:32	WG1018676
Chlorobenzene	U		0.000220	0.00104	1	09/17/2017 16:32	WG1018676
Chlorodibromomethane	U		0.000388	0.00104	1	09/17/2017 16:32	WG1018676
Chloroethane	U		0.000983	0.00519	1	09/17/2017 16:32	WG1018676
Chloroform	U		0.000238	0.00519	1	09/17/2017 16:32	WG1018676
Chloromethane	U		0.000390	0.00260	1	09/17/2017 16:32	WG1018676
2-Chlorotoluene	U		0.000313	0.00104	1	09/17/2017 16:32	WG1018676
4-Chlorotoluene	U		0.000249	0.00104	1	09/17/2017 16:32	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00109	0.00519	1	09/17/2017 16:32	WG1018676
1,2-Dibromoethane	U		0.000356	0.00104	1	09/17/2017 16:32	WG1018676
Dibromomethane	U		0.000397	0.00104	1	09/17/2017 16:32	WG1018676
1,2-Dichlorobenzene	U		0.000317	0.00104	1	09/17/2017 16:32	WG1018676
1,3-Dichlorobenzene	U		0.000248	0.00104	1	09/17/2017 16:32	WG1018676
1,4-Dichlorobenzene	U		0.000235	0.00104	1	09/17/2017 16:32	WG1018676
Dichlorodifluoromethane	U		0.000741	0.00519	1	09/17/2017 16:32	WG1018676
1,1-Dichloroethane	U		0.000207	0.00104	1	09/17/2017 16:32	WG1018676
1,2-Dichloroethane	U		0.000275	0.00104	1	09/17/2017 16:32	WG1018676
1,1-Dichloroethene	U		0.000315	0.00104	1	09/17/2017 16:32	WG1018676
cis-1,2-Dichloroethene	U	<u>J4</u>	0.000244	0.00104	1	09/17/2017 16:32	WG1018676
trans-1,2-Dichloroethene	U		0.000274	0.00104	1	09/17/2017 16:32	WG1018676
1,2-Dichloropropane	U		0.000372	0.00104	1	09/17/2017 16:32	WG1018676
1,1-Dichloropropene	U		0.000329	0.00104	1	09/17/2017 16:32	WG1018676
1,3-Dichloropropane	U		0.000215	0.00104	1	09/17/2017 16:32	WG1018676
cis-1,3-Dichloropropene	U		0.000272	0.00104	1	09/17/2017 16:32	WG1018676
trans-1,3-Dichloropropene	U		0.000277	0.00104	1	09/17/2017 16:32	WG1018676
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000808	0.00260	1	09/17/2017 16:32	WG1018676
2,2-Dichloropropane	U		0.000290	0.00104	1	09/17/2017 16:32	WG1018676
Di-isopropyl ether	U	<u>JO</u>	0.000258	0.00104	1	09/17/2017 16:32	WG1018676
Ethylbenzene	0.00103	<u>J</u>	0.000309	0.00104	1	09/17/2017 16:32	WG1018676
Hexachloro-1,3-butadiene	U		0.000355	0.00104	1	09/17/2017 16:32	WG1018676
2-Hexanone	U		0.00142	0.0104	1	09/17/2017 16:32	WG1018676
n-Hexane	U		0.000301	0.0104	1	09/17/2017 16:32	WG1018676

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 10:25

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00263	0.0104	1	09/17/2017 16:32	WG1018676
Isopropylbenzene	0.00134		0.000252	0.00104	1	09/17/2017 16:32	WG1018676
p-Isopropyltoluene	0.00256		0.000212	0.00104	1	09/17/2017 16:32	WG1018676
2-Butanone (MEK)	0.0148		0.00486	0.0104	1	09/17/2017 16:32	WG1018676
Methylene Chloride	U		0.00104	0.00519	1	09/17/2017 16:32	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00195	0.0104	1	09/17/2017 16:32	WG1018676
Methyl tert-butyl ether	U		0.000220	0.00104	1	09/17/2017 16:32	WG1018676
Naphthalene	0.0257		0.00104	0.00519	1	09/17/2017 16:32	WG1018676
n-Propylbenzene	0.00280		0.000214	0.00104	1	09/17/2017 16:32	WG1018676
Styrene	U		0.000243	0.00104	1	09/17/2017 16:32	WG1018676
1,1,1-Tetrachloroethane	U		0.000274	0.00104	1	09/17/2017 16:32	WG1018676
1,1,2-Tetrachloroethane	U		0.000379	0.00104	1	09/17/2017 16:32	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000379	0.00104	1	09/17/2017 16:32	WG1018676
Tetrachloroethene	0.000490	J	0.000287	0.00104	1	09/17/2017 16:32	WG1018676
Toluene	0.000649	J	0.000451	0.00519	1	09/17/2017 16:32	WG1018676
1,2,3-Trichlorobenzene	U		0.000318	0.00104	1	09/17/2017 16:32	WG1018676
1,2,4-Trichlorobenzene	U		0.000403	0.00104	1	09/17/2017 16:32	WG1018676
1,1,1-Trichloroethane	U		0.000297	0.00104	1	09/17/2017 16:32	WG1018676
1,1,2-Trichloroethane	U		0.000288	0.00104	1	09/17/2017 16:32	WG1018676
Trichloroethene	U		0.000290	0.00104	1	09/17/2017 16:32	WG1018676
Trichlorofluoromethane	U		0.000397	0.00519	1	09/17/2017 16:32	WG1018676
1,2,3-Trichloropropane	U		0.000770	0.00260	1	09/17/2017 16:32	WG1018676
1,2,4-Trimethylbenzene	0.0435		0.000219	0.00104	1	09/17/2017 16:32	WG1018676
1,2,3-Trimethylbenzene	0.0237	J4	0.000298	0.00104	1	09/17/2017 16:32	WG1018676
1,3,5-Trimethylbenzene	0.00931		0.000276	0.00104	1	09/17/2017 16:32	WG1018676
Vinyl acetate	U		0.00248	0.0104	1	09/17/2017 16:32	WG1018676
Vinyl chloride	U		0.000302	0.00104	1	09/17/2017 16:32	WG1018676
Xylenes, Total	0.0131		0.000725	0.00312	1	09/17/2017 16:32	WG1018676
(S) Toluene-d8	102			80.0-120		09/17/2017 16:32	WG1018676
(S) Dibromofluoromethane	103			74.0-131		09/17/2017 16:32	WG1018676
(S) 4-Bromofluorobenzene	114			64.0-132		09/17/2017 16:32	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 10:45

L935150

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	09/14/2017 12:11	WG1020015

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.98	<u>B J</u>	0.925	2.73	25	09/14/2017 02:20	WG1018994
(S) a,a,a-Trifluorotoluene(FID)	92.7			77.0-120		09/14/2017 02:20	WG1018994

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0109	0.0545	1	09/17/2017 16:51	WG1018676
Acrylonitrile	U		0.00195	0.0109	1	09/17/2017 16:51	WG1018676
Benzene	U		0.000294	0.00109	1	09/17/2017 16:51	WG1018676
Bromobenzene	U		0.000310	0.00109	1	09/17/2017 16:51	WG1018676
Bromodichloromethane	U		0.000277	0.00109	1	09/17/2017 16:51	WG1018676
Bromochloromethane	U		0.000425	0.00545	1	09/17/2017 16:51	WG1018676
Bromoform	U		0.000462	0.00109	1	09/17/2017 16:51	WG1018676
Bromomethane	U		0.00146	0.00545	1	09/17/2017 16:51	WG1018676
n-Butylbenzene	U		0.000281	0.00109	1	09/17/2017 16:51	WG1018676
sec-Butylbenzene	U		0.000219	0.00109	1	09/17/2017 16:51	WG1018676
tert-Butylbenzene	U		0.000225	0.00109	1	09/17/2017 16:51	WG1018676
Carbon disulfide	0.000626	<u>J</u>	0.000241	0.00109	1	09/17/2017 16:51	WG1018676
Carbon tetrachloride	U		0.000358	0.00109	1	09/17/2017 16:51	WG1018676
Chlorobenzene	U		0.000231	0.00109	1	09/17/2017 16:51	WG1018676
Chlorodibromomethane	U		0.000407	0.00109	1	09/17/2017 16:51	WG1018676
Chloroethane	U		0.00103	0.00545	1	09/17/2017 16:51	WG1018676
Chloroform	U		0.000250	0.00545	1	09/17/2017 16:51	WG1018676
Chloromethane	U		0.000409	0.00273	1	09/17/2017 16:51	WG1018676
2-Chlorotoluene	U		0.000328	0.00109	1	09/17/2017 16:51	WG1018676
4-Chlorotoluene	U		0.000262	0.00109	1	09/17/2017 16:51	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00545	1	09/17/2017 16:51	WG1018676
1,2-Dibromoethane	U		0.000374	0.00109	1	09/17/2017 16:51	WG1018676
Dibromomethane	U		0.000417	0.00109	1	09/17/2017 16:51	WG1018676
1,2-Dichlorobenzene	U		0.000333	0.00109	1	09/17/2017 16:51	WG1018676
1,3-Dichlorobenzene	U		0.000261	0.00109	1	09/17/2017 16:51	WG1018676
1,4-Dichlorobenzene	U		0.000246	0.00109	1	09/17/2017 16:51	WG1018676
Dichlorodifluoromethane	U		0.000778	0.00545	1	09/17/2017 16:51	WG1018676
1,1-Dichloroethane	U		0.000217	0.00109	1	09/17/2017 16:51	WG1018676
1,2-Dichloroethane	U		0.000289	0.00109	1	09/17/2017 16:51	WG1018676
1,1-Dichloroethene	U		0.000330	0.00109	1	09/17/2017 16:51	WG1018676
cis-1,2-Dichloroethene	U	<u>J4</u>	0.000256	0.00109	1	09/17/2017 16:51	WG1018676
trans-1,2-Dichloroethene	U		0.000288	0.00109	1	09/17/2017 16:51	WG1018676
1,2-Dichloropropane	U		0.000390	0.00109	1	09/17/2017 16:51	WG1018676
1,1-Dichloropropene	U		0.000346	0.00109	1	09/17/2017 16:51	WG1018676
1,3-Dichloropropane	U		0.000226	0.00109	1	09/17/2017 16:51	WG1018676
cis-1,3-Dichloropropene	U		0.000286	0.00109	1	09/17/2017 16:51	WG1018676
trans-1,3-Dichloropropene	U		0.000291	0.00109	1	09/17/2017 16:51	WG1018676
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000848	0.00273	1	09/17/2017 16:51	WG1018676
2,2-Dichloropropane	U		0.000304	0.00109	1	09/17/2017 16:51	WG1018676
Di-isopropyl ether	U	<u>JO</u>	0.000270	0.00109	1	09/17/2017 16:51	WG1018676
Ethylbenzene	U		0.000324	0.00109	1	09/17/2017 16:51	WG1018676
Hexachloro-1,3-butadiene	U		0.000373	0.00109	1	09/17/2017 16:51	WG1018676
2-Hexanone	U		0.00149	0.0109	1	09/17/2017 16:51	WG1018676
n-Hexane	0.00122	<u>J</u>	0.000316	0.0109	1	09/17/2017 16:51	WG1018676

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 10:45

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00276	0.0109	1	09/17/2017 16:51	WG1018676
Isopropylbenzene	U		0.000265	0.00109	1	09/17/2017 16:51	WG1018676
p-Isopropyltoluene	U		0.000222	0.00109	1	09/17/2017 16:51	WG1018676
2-Butanone (MEK)	U		0.00510	0.0109	1	09/17/2017 16:51	WG1018676
Methylene Chloride	U		0.00109	0.00545	1	09/17/2017 16:51	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0109	1	09/17/2017 16:51	WG1018676
Methyl tert-butyl ether	U		0.000231	0.00109	1	09/17/2017 16:51	WG1018676
Naphthalene	U		0.00109	0.00545	1	09/17/2017 16:51	WG1018676
n-Propylbenzene	U		0.000225	0.00109	1	09/17/2017 16:51	WG1018676
Styrene	U		0.000255	0.00109	1	09/17/2017 16:51	WG1018676
1,1,1-Tetrachloroethane	U		0.000288	0.00109	1	09/17/2017 16:51	WG1018676
1,1,2-Tetrachloroethane	U		0.000398	0.00109	1	09/17/2017 16:51	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000398	0.00109	1	09/17/2017 16:51	WG1018676
Tetrachloroethene	0.000955	J	0.000301	0.00109	1	09/17/2017 16:51	WG1018676
Toluene	U		0.000473	0.00545	1	09/17/2017 16:51	WG1018676
1,2,3-Trichlorobenzene	U		0.000334	0.00109	1	09/17/2017 16:51	WG1018676
1,2,4-Trichlorobenzene	U		0.000423	0.00109	1	09/17/2017 16:51	WG1018676
1,1,1-Trichloroethane	U		0.000312	0.00109	1	09/17/2017 16:51	WG1018676
1,1,2-Trichloroethane	U		0.000302	0.00109	1	09/17/2017 16:51	WG1018676
Trichloroethene	U		0.000304	0.00109	1	09/17/2017 16:51	WG1018676
Trichlorofluoromethane	U		0.000417	0.00545	1	09/17/2017 16:51	WG1018676
1,2,3-Trichloropropane	U		0.000808	0.00273	1	09/17/2017 16:51	WG1018676
1,2,4-Trimethylbenzene	U		0.000230	0.00109	1	09/17/2017 16:51	WG1018676
1,2,3-Trimethylbenzene	U	J4	0.000313	0.00109	1	09/17/2017 16:51	WG1018676
1,3,5-Trimethylbenzene	U		0.000290	0.00109	1	09/17/2017 16:51	WG1018676
Vinyl acetate	U		0.00261	0.0109	1	09/17/2017 16:51	WG1018676
Vinyl chloride	U		0.000317	0.00109	1	09/17/2017 16:51	WG1018676
Xylenes, Total	U		0.000761	0.00327	1	09/17/2017 16:51	WG1018676
(S) Toluene-d8	103			80.0-120		09/17/2017 16:51	WG1018676
(S) Dibromofluoromethane	99.1			74.0-131		09/17/2017 16:51	WG1018676
(S) 4-Bromofluorobenzene	97.9			64.0-132		09/17/2017 16:51	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	95.6		1	09/14/2017 12:11	WG1020015

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2.81	<u>B</u>	0.887	2.62	25	09/14/2017 02:43	WG1018994
(S) a,a,a-Trifluorotoluene(FID)	92.5			77.0-120		09/14/2017 02:43	WG1018994

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	0.0221	<u>J JO</u>	0.0105	0.0523	1	09/17/2017 17:11	WG1018676
Acrylonitrile	U		0.00187	0.0105	1	09/17/2017 17:11	WG1018676
Benzene	0.000303	<u>J</u>	0.000282	0.00105	1	09/17/2017 17:11	WG1018676
Bromobenzene	U		0.000297	0.00105	1	09/17/2017 17:11	WG1018676
Bromodichloromethane	U		0.000266	0.00105	1	09/17/2017 17:11	WG1018676
Bromochloromethane	U		0.000408	0.00523	1	09/17/2017 17:11	WG1018676
Bromoform	U		0.000444	0.00105	1	09/17/2017 17:11	WG1018676
Bromomethane	U		0.00140	0.00523	1	09/17/2017 17:11	WG1018676
n-Butylbenzene	U		0.000270	0.00105	1	09/17/2017 17:11	WG1018676
sec-Butylbenzene	U		0.000210	0.00105	1	09/17/2017 17:11	WG1018676
tert-Butylbenzene	U		0.000216	0.00105	1	09/17/2017 17:11	WG1018676
Carbon disulfide	0.00195		0.000231	0.00105	1	09/17/2017 17:11	WG1018676
Carbon tetrachloride	U		0.000343	0.00105	1	09/17/2017 17:11	WG1018676
Chlorobenzene	U		0.000222	0.00105	1	09/17/2017 17:11	WG1018676
Chlorodibromomethane	U		0.000390	0.00105	1	09/17/2017 17:11	WG1018676
Chloroethane	U		0.000990	0.00523	1	09/17/2017 17:11	WG1018676
Chloroform	U		0.000240	0.00523	1	09/17/2017 17:11	WG1018676
Chloromethane	U		0.000392	0.00262	1	09/17/2017 17:11	WG1018676
2-Chlorotoluene	U		0.000315	0.00105	1	09/17/2017 17:11	WG1018676
4-Chlorotoluene	U		0.000251	0.00105	1	09/17/2017 17:11	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00110	0.00523	1	09/17/2017 17:11	WG1018676
1,2-Dibromoethane	U		0.000359	0.00105	1	09/17/2017 17:11	WG1018676
Dibromomethane	U		0.000400	0.00105	1	09/17/2017 17:11	WG1018676
1,2-Dichlorobenzene	U		0.000319	0.00105	1	09/17/2017 17:11	WG1018676
1,3-Dichlorobenzene	U		0.000250	0.00105	1	09/17/2017 17:11	WG1018676
1,4-Dichlorobenzene	U		0.000236	0.00105	1	09/17/2017 17:11	WG1018676
Dichlorodifluoromethane	U		0.000746	0.00523	1	09/17/2017 17:11	WG1018676
1,1-Dichloroethane	U		0.000208	0.00105	1	09/17/2017 17:11	WG1018676
1,2-Dichloroethane	U		0.000277	0.00105	1	09/17/2017 17:11	WG1018676
1,1-Dichloroethene	U		0.000317	0.00105	1	09/17/2017 17:11	WG1018676
cis-1,2-Dichloroethene	U	<u>J4</u>	0.000246	0.00105	1	09/17/2017 17:11	WG1018676
trans-1,2-Dichloroethene	U		0.000276	0.00105	1	09/17/2017 17:11	WG1018676
1,2-Dichloropropane	U		0.000375	0.00105	1	09/17/2017 17:11	WG1018676
1,1-Dichloropropene	U		0.000332	0.00105	1	09/17/2017 17:11	WG1018676
1,3-Dichloropropane	U		0.000217	0.00105	1	09/17/2017 17:11	WG1018676
cis-1,3-Dichloropropene	U		0.000274	0.00105	1	09/17/2017 17:11	WG1018676
trans-1,3-Dichloropropene	U		0.000279	0.00105	1	09/17/2017 17:11	WG1018676
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000814	0.00262	1	09/17/2017 17:11	WG1018676
2,2-Dichloropropane	U		0.000292	0.00105	1	09/17/2017 17:11	WG1018676
Di-isopropyl ether	U	<u>JO</u>	0.000259	0.00105	1	09/17/2017 17:11	WG1018676
Ethylbenzene	U		0.000311	0.00105	1	09/17/2017 17:11	WG1018676
Hexachloro-1,3-butadiene	U		0.000358	0.00105	1	09/17/2017 17:11	WG1018676
2-Hexanone	U		0.00143	0.0105	1	09/17/2017 17:11	WG1018676
n-Hexane	0.0126		0.000303	0.0105	1	09/17/2017 17:11	WG1018676

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 11:15

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00265	0.0105	1	09/17/2017 17:11	WG1018676
Isopropylbenzene	U		0.000254	0.00105	1	09/17/2017 17:11	WG1018676
p-Isopropyltoluene	U		0.000213	0.00105	1	09/17/2017 17:11	WG1018676
2-Butanone (MEK)	0.00512	J	0.00490	0.0105	1	09/17/2017 17:11	WG1018676
Methylene Chloride	U		0.00105	0.00523	1	09/17/2017 17:11	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00197	0.0105	1	09/17/2017 17:11	WG1018676
Methyl tert-butyl ether	U		0.000222	0.00105	1	09/17/2017 17:11	WG1018676
Naphthalene	U		0.00105	0.00523	1	09/17/2017 17:11	WG1018676
n-Propylbenzene	U		0.000216	0.00105	1	09/17/2017 17:11	WG1018676
Styrene	U		0.000245	0.00105	1	09/17/2017 17:11	WG1018676
1,1,1,2-Tetrachloroethane	U		0.000276	0.00105	1	09/17/2017 17:11	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000382	0.00105	1	09/17/2017 17:11	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000382	0.00105	1	09/17/2017 17:11	WG1018676
Tetrachloroethene	U		0.000289	0.00105	1	09/17/2017 17:11	WG1018676
Toluene	U		0.000454	0.00523	1	09/17/2017 17:11	WG1018676
1,2,3-Trichlorobenzene	U		0.000320	0.00105	1	09/17/2017 17:11	WG1018676
1,2,4-Trichlorobenzene	U		0.000406	0.00105	1	09/17/2017 17:11	WG1018676
1,1,1-Trichloroethane	U		0.000299	0.00105	1	09/17/2017 17:11	WG1018676
1,1,2-Trichloroethane	U		0.000290	0.00105	1	09/17/2017 17:11	WG1018676
Trichloroethene	U		0.000292	0.00105	1	09/17/2017 17:11	WG1018676
Trichlorofluoromethane	U		0.000400	0.00523	1	09/17/2017 17:11	WG1018676
1,2,3-Trichloropropane	U		0.000775	0.00262	1	09/17/2017 17:11	WG1018676
1,2,4-Trimethylbenzene	U		0.000221	0.00105	1	09/17/2017 17:11	WG1018676
1,2,3-Trimethylbenzene	U	J4	0.000300	0.00105	1	09/17/2017 17:11	WG1018676
1,3,5-Trimethylbenzene	U		0.000278	0.00105	1	09/17/2017 17:11	WG1018676
Vinyl acetate	U		0.00250	0.0105	1	09/17/2017 17:11	WG1018676
Vinyl chloride	U		0.000304	0.00105	1	09/17/2017 17:11	WG1018676
Xylenes, Total	U		0.000730	0.00314	1	09/17/2017 17:11	WG1018676
(S) Toluene-d8	104			80.0-120		09/17/2017 17:11	WG1018676
(S) Dibromofluoromethane	96.2			74.0-131		09/17/2017 17:11	WG1018676
(S) 4-Bromofluorobenzene	104			64.0-132		09/17/2017 17:11	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.6		1	09/14/2017 12:11	WG1020015

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3.40	<u>B</u>	0.957	2.82	25	09/12/2017 19:46	WG1018994
(S) a,a,a-Trifluorotoluene(FID)	98.9			77.0-120		09/12/2017 19:46	WG1018994

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0564	1	09/17/2017 17:31	WG1018676
Acrylonitrile	U		0.00202	0.0113	1	09/17/2017 17:31	WG1018676
Benzene	U		0.000305	0.00113	1	09/17/2017 17:31	WG1018676
Bromobenzene	U		0.000320	0.00113	1	09/17/2017 17:31	WG1018676
Bromodichloromethane	U		0.000287	0.00113	1	09/17/2017 17:31	WG1018676
Bromochloromethane	U		0.000440	0.00564	1	09/17/2017 17:31	WG1018676
Bromoform	U		0.000478	0.00113	1	09/17/2017 17:31	WG1018676
Bromomethane	U		0.00151	0.00564	1	09/17/2017 17:31	WG1018676
n-Butylbenzene	U		0.000291	0.00113	1	09/17/2017 17:31	WG1018676
sec-Butylbenzene	U		0.000227	0.00113	1	09/17/2017 17:31	WG1018676
tert-Butylbenzene	U		0.000232	0.00113	1	09/17/2017 17:31	WG1018676
Carbon disulfide	0.000278	<u>J</u>	0.000249	0.00113	1	09/17/2017 17:31	WG1018676
Carbon tetrachloride	U		0.000370	0.00113	1	09/17/2017 17:31	WG1018676
Chlorobenzene	U		0.000239	0.00113	1	09/17/2017 17:31	WG1018676
Chlorodibromomethane	U		0.000421	0.00113	1	09/17/2017 17:31	WG1018676
Chloroethane	U		0.00107	0.00564	1	09/17/2017 17:31	WG1018676
Chloroform	U		0.000258	0.00564	1	09/17/2017 17:31	WG1018676
Chloromethane	U		0.000423	0.00282	1	09/17/2017 17:31	WG1018676
2-Chlorotoluene	U		0.000340	0.00113	1	09/17/2017 17:31	WG1018676
4-Chlorotoluene	U		0.000271	0.00113	1	09/17/2017 17:31	WG1018676
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00564	1	09/17/2017 17:31	WG1018676
1,2-Dibromoethane	U		0.000387	0.00113	1	09/17/2017 17:31	WG1018676
Dibromomethane	U		0.000431	0.00113	1	09/17/2017 17:31	WG1018676
1,2-Dichlorobenzene	U		0.000344	0.00113	1	09/17/2017 17:31	WG1018676
1,3-Dichlorobenzene	U		0.000270	0.00113	1	09/17/2017 17:31	WG1018676
1,4-Dichlorobenzene	U		0.000255	0.00113	1	09/17/2017 17:31	WG1018676
Dichlorodifluoromethane	U		0.000804	0.00564	1	09/17/2017 17:31	WG1018676
1,1-Dichloroethane	U		0.000225	0.00113	1	09/17/2017 17:31	WG1018676
1,2-Dichloroethane	U		0.000299	0.00113	1	09/17/2017 17:31	WG1018676
1,1-Dichloroethene	U		0.000342	0.00113	1	09/17/2017 17:31	WG1018676
cis-1,2-Dichloroethene	U	<u>J4</u>	0.000265	0.00113	1	09/17/2017 17:31	WG1018676
trans-1,2-Dichloroethene	U		0.000298	0.00113	1	09/17/2017 17:31	WG1018676
1,2-Dichloropropane	U		0.000404	0.00113	1	09/17/2017 17:31	WG1018676
1,1-Dichloropropene	U		0.000358	0.00113	1	09/17/2017 17:31	WG1018676
1,3-Dichloropropane	U		0.000234	0.00113	1	09/17/2017 17:31	WG1018676
cis-1,3-Dichloropropene	U		0.000296	0.00113	1	09/17/2017 17:31	WG1018676
trans-1,3-Dichloropropene	U		0.000301	0.00113	1	09/17/2017 17:31	WG1018676
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000878	0.00282	1	09/17/2017 17:31	WG1018676
2,2-Dichloropropane	U		0.000315	0.00113	1	09/17/2017 17:31	WG1018676
Di-isopropyl ether	U	<u>JO</u>	0.000280	0.00113	1	09/17/2017 17:31	WG1018676
Ethylbenzene	U		0.000335	0.00113	1	09/17/2017 17:31	WG1018676
Hexachloro-1,3-butadiene	U		0.000386	0.00113	1	09/17/2017 17:31	WG1018676
2-Hexanone	U		0.00155	0.0113	1	09/17/2017 17:31	WG1018676
n-Hexane	U		0.000327	0.0113	1	09/17/2017 17:31	WG1018676

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 11:45

L935150

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00285	0.0113	1	09/17/2017 17:31	WG1018676
Isopropylbenzene	U		0.000274	0.00113	1	09/17/2017 17:31	WG1018676
p-Isopropyltoluene	U		0.000230	0.00113	1	09/17/2017 17:31	WG1018676
2-Butanone (MEK)	U		0.00528	0.0113	1	09/17/2017 17:31	WG1018676
Methylene Chloride	U		0.00113	0.00564	1	09/17/2017 17:31	WG1018676
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	09/17/2017 17:31	WG1018676
Methyl tert-butyl ether	U		0.000239	0.00113	1	09/17/2017 17:31	WG1018676
Naphthalene	U		0.00113	0.00564	1	09/17/2017 17:31	WG1018676
n-Propylbenzene	U		0.000232	0.00113	1	09/17/2017 17:31	WG1018676
Styrene	U		0.000264	0.00113	1	09/17/2017 17:31	WG1018676
1,1,1,2-Tetrachloroethane	U		0.000298	0.00113	1	09/17/2017 17:31	WG1018676
1,1,2,2-Tetrachloroethane	U		0.000412	0.00113	1	09/17/2017 17:31	WG1018676
1,1,2-Trichlorotrifluoroethane	U		0.000412	0.00113	1	09/17/2017 17:31	WG1018676
Tetrachloroethene	U		0.000311	0.00113	1	09/17/2017 17:31	WG1018676
Toluene	U		0.000490	0.00564	1	09/17/2017 17:31	WG1018676
1,2,3-Trichlorobenzene	U		0.000345	0.00113	1	09/17/2017 17:31	WG1018676
1,2,4-Trichlorobenzene	U		0.000438	0.00113	1	09/17/2017 17:31	WG1018676
1,1,1-Trichloroethane	U		0.000323	0.00113	1	09/17/2017 17:31	WG1018676
1,1,2-Trichloroethane	U		0.000313	0.00113	1	09/17/2017 17:31	WG1018676
Trichloroethene	U		0.000315	0.00113	1	09/17/2017 17:31	WG1018676
Trichlorofluoromethane	U		0.000431	0.00564	1	09/17/2017 17:31	WG1018676
1,2,3-Trichloropropane	U		0.000836	0.00282	1	09/17/2017 17:31	WG1018676
1,2,4-Trimethylbenzene	U		0.000238	0.00113	1	09/17/2017 17:31	WG1018676
1,2,3-Trimethylbenzene	U	J4	0.000324	0.00113	1	09/17/2017 17:31	WG1018676
1,3,5-Trimethylbenzene	U		0.000300	0.00113	1	09/17/2017 17:31	WG1018676
Vinyl acetate	U		0.00270	0.0113	1	09/17/2017 17:31	WG1018676
Vinyl chloride	U		0.000328	0.00113	1	09/17/2017 17:31	WG1018676
Xylenes, Total	U		0.000787	0.00338	1	09/17/2017 17:31	WG1018676
(S) Toluene-d8	102			80.0-120		09/17/2017 17:31	WG1018676
(S) Dibromofluoromethane	99.9			74.0-131		09/17/2017 17:31	WG1018676
(S) 4-Bromofluorobenzene	106			64.0-132		09/17/2017 17:31	WG1018676

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

[L935150-01.02.03.04.05.06.07](#)

Method Blank (MB)

(MB) R3249487-1 09/14/17 11:54

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Total Solids 0.00100

L935148-02 Original Sample (OS) • Duplicate (DUP)

(OS) L935148-02 09/14/17 11:54 • (DUP) R3249487-3 09/14/17 11:54

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Total Solids 92.2 91.1 1 1.16 5

Laboratory Control Sample (LCS)

(LCS) R3249487-2 09/14/17 11:54

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	%

Total Solids 50.0 50.0 100 85.0-115

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Total Solids by Method 2540 G-2011

[L935150-08.09.10](#)

Method Blank (MB)

(MB) R3249488-1 09/14/17 12:11

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Total Solids 0.00120

L935150-08 Original Sample (OS) • Duplicate (DUP)

(OS) L935150-08 09/14/17 12:11 • (DUP) R3249488-3 09/14/17 12:11

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Total Solids 91.7 92.4 1 0.772 5

Laboratory Control Sample (LCS)

(LCS) R3249488-2 09/14/17 12:11

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	%

Total Solids 50.0 50.0 100 85.0-115

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L935150-06.07.08.09.10](#)

Method Blank (MB)

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Gasoline Range Organics-NWTPH	0.0348	J	0.0339	0.100
^(S) a,a'-Trifluorotoluene(FID)	98.3			77.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier		LCSD Qualifier		RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5.50	6.11	6.48	111	118	70.0-133					5.78	20
^(S) a,a'-Trifluorotoluene(FID)				112	113	77.0-120						

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Method Blank (MB)

(MB) R3249874-3 09/09/17 20:20

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R3249874-3 09/09/17 20:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	106		80.0-120	
(S) Dibromofluoromethane	99.1		74.0-131	
(S) 4-Bromofluorobenzene	92.4		64.0-132	

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3249874-1 09/09/17 19:19 • (LCSD) R3249874-2 09/09/17 19:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0776	0.0787	62.0	62.9	11.0-160			1.42	23
Acrylonitrile	0.125	0.100	0.0978	80.1	78.2	61.0-143			2.36	20
Benzene	0.0250	0.0204	0.0199	81.5	79.4	71.0-124			2.64	20
Bromobenzene	0.0250	0.0199	0.0195	79.6	78.1	78.0-120			1.82	20
Bromodichloromethane	0.0250	0.0212	0.0209	84.6	83.6	75.0-120			1.23	20
Bromoform	0.0250	0.0204	0.0212	81.5	85.0	65.0-133			4.20	20
Bromochloromethane	0.0250	0.0212	0.0203	85.0	81.3	80.0-121			4.44	20
Bromomethane	0.0250	0.0239	0.0234	95.5	93.4	26.0-160			2.14	20
n-Butylbenzene	0.0250	0.0213	0.0213	85.0	85.1	73.0-126			0.130	20
sec-Butylbenzene	0.0250	0.0204	0.0200	81.7	79.8	75.0-121			2.33	20
tert-Butylbenzene	0.0250	0.0201	0.0203	80.5	81.4	74.0-122			1.04	20
Carbon tetrachloride	0.0250	0.0203	0.0198	81.1	79.3	66.0-123			2.31	20
Carbon disulfide	0.0250	0.0224	0.0213	89.6	85.4	53.0-130			4.83	20
Chlorobenzene	0.0250	0.0228	0.0221	91.3	88.4	79.0-121			3.30	20
Chlorodibromomethane	0.0250	0.0217	0.0215	86.9	86.1	74.0-128			0.860	20
Chloroethane	0.0250	0.0232	0.0223	92.9	89.2	51.0-147			4.06	20
Chloroform	0.0250	0.0207	0.0203	83.0	81.0	73.0-123			2.40	20
Chloromethane	0.0250	0.0230	0.0221	92.1	88.3	51.0-138			4.22	20
2-Chlorotoluene	0.0250	0.0206	0.0202	82.3	80.8	72.0-124			1.80	20
4-Chlorotoluene	0.0250	0.0200	0.0200	80.1	79.9	78.0-120			0.220	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0196	0.0225	78.3	90.0	65.0-126			13.9	20
1,2-Dibromoethane	0.0250	0.0209	0.0212	83.7	84.9	78.0-122			1.40	20
Dibromomethane	0.0250	0.0207	0.0204	82.6	81.8	79.0-120			1.07	20
1,2-Dichlorobenzene	0.0250	0.0218	0.0217	87.1	86.9	80.0-120			0.270	20
1,3-Dichlorobenzene	0.0250	0.0220	0.0220	88.1	88.2	72.0-123			0.130	20
1,4-Dichlorobenzene	0.0250	0.0211	0.0207	84.2	82.8	77.0-120			1.76	20
Dichlorodifluoromethane	0.0250	0.0248	0.0237	99.2	95.0	49.0-155			4.38	20
trans-1,4-Dichloro-2-butene	0.0250	0.0210	0.0228	83.9	91.1	68.0-126			8.27	20
1,1-Dichloroethane	0.0250	0.0215	0.0207	86.0	83.0	70.0-128			3.57	20
1,2-Dichloroethane	0.0250	0.0215	0.0214	86.2	85.5	69.0-128			0.770	20
1,1-Dichloroethene	0.0250	0.0216	0.0207	86.5	82.6	63.0-131			4.57	20
cis-1,2-Dichloroethene	0.0250	0.0194	0.0181	77.5	72.3	74.0-123		J4	6.98	20
trans-1,2-Dichloroethene	0.0250	0.0190	0.0189	75.9	75.6	72.0-122			0.430	20
1,2-Dichloropropane	0.0250	0.0223	0.0221	89.3	88.3	75.0-126			1.13	20
1,1-Dichloropropene	0.0250	0.0207	0.0198	82.7	79.4	72.0-130			4.12	20
1,3-Dichloropropane	0.0250	0.0223	0.0225	89.3	90.0	80.0-121			0.810	20
cis-1,3-Dichloropropene	0.0250	0.0239	0.0233	95.4	93.3	80.0-125			2.24	20
trans-1,3-Dichloropropene	0.0250	0.0244	0.0243	97.6	97.2	75.0-129			0.400	20
2,2-Dichloropropane	0.0250	0.0210	0.0208	84.0	83.3	60.0-129			0.810	20
Di-isopropyl ether	0.0250	0.0202	0.0198	80.8	79.0	62.0-133			2.16	20

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L935150-01.02.03.04.05.06.07.08.09.10](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3249874-1 09/09/17 19:19 • (LCSD) R3249874-2 09/09/17 19:40

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0211	0.0199	84.5	79.5	77.0-120			6.06	20
Hexachloro-1,3-butadiene	0.0250	0.0224	0.0235	89.6	93.9	68.0-128			4.73	20
2-Hexanone	0.125	0.0959	0.102	76.7	81.4	61.0-143			6.00	20
Isopropylbenzene	0.0250	0.0198	0.0192	79.2	76.7	75.0-120			3.26	20
n-Hexane	0.0250	0.0188	0.0181	75.1	72.3	57.0-125			3.78	20
Iodomethane	0.125	0.128	0.114	103	91.2	67.0-132			11.7	20
p-Isopropyltoluene	0.0250	0.0214	0.0214	85.8	85.7	74.0-125			0.100	20
2-Butanone (MEK)	0.125	0.0937	0.101	75.0	80.7	37.0-159			7.31	20
Methylene Chloride	0.0250	0.0191	0.0187	76.3	74.6	67.0-123			2.21	20
4-Methyl-2-pentanone (MIBK)	0.125	0.104	0.109	82.9	87.3	60.0-144			5.19	20
Methyl tert-butyl ether	0.0250	0.0190	0.0190	75.9	75.9	66.0-125			0.000	20
Naphthalene	0.0250	0.0190	0.0205	76.1	81.9	64.0-125			7.39	20
n-Propylbenzene	0.0250	0.0209	0.0203	83.6	81.3	78.0-120			2.77	20
Styrene	0.0250	0.0204	0.0202	81.7	80.7	78.0-124			1.21	20
1,1,1,2-Tetrachloroethane	0.0250	0.0208	0.0210	83.3	83.8	74.0-124			0.610	20
1,1,2,2-Tetrachloroethane	0.0250	0.0193	0.0198	77.1	79.3	73.0-120			2.79	20
Tetrachloroethene	0.0250	0.0238	0.0229	95.2	91.6	70.0-127			3.79	20
Toluene	0.0250	0.0203	0.0197	81.4	78.9	77.0-120			3.06	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0226	0.0208	90.5	83.4	64.0-135			8.20	20
1,2,3-Trichlorobenzene	0.0250	0.0219	0.0237	87.6	94.7	68.0-126			7.84	20
1,2,4-Trichlorobenzene	0.0250	0.0227	0.0242	90.7	96.8	70.0-127			6.50	20
1,1,1-Trichloroethane	0.0250	0.0204	0.0197	81.7	78.8	69.0-125			3.61	20
1,1,2-Trichloroethane	0.0250	0.0199	0.0201	79.4	80.3	78.0-120			1.03	20
Trichloroethene	0.0250	0.0218	0.0216	87.3	86.3	79.0-120			1.10	20
Trichlorofluoromethane	0.0250	0.0276	0.0273	111	109	59.0-136			1.36	20
1,2,3-Trichloropropane	0.0250	0.0183	0.0192	73.2	76.8	73.0-124			4.79	20
1,2,3-Trimethylbenzene	0.0250	0.0191	0.0185	76.4	73.9	76.0-120			3.43	20
1,2,4-Trimethylbenzene	0.0250	0.0190	0.0190	76.0	75.8	75.0-120			0.180	20
1,3,5-Trimethylbenzene	0.0250	0.0200	0.0198	79.8	79.1	75.0-120			0.900	20
Vinyl chloride	0.0250	0.0267	0.0264	107	106	63.0-134			1.22	20
Xylenes, Total	0.0750	0.0619	0.0600	82.5	80.0	77.0-120			3.12	20
Vinyl acetate	0.125	0.117	0.119	93.4	95.4	58.0-156			2.06	20
(S) Toluene-d8				103	102	80.0-120				
(S) Dibromofluoromethane				95.4	94.1	74.0-131				
(S) 4-Bromofluorobenzene				90.0	89.7	64.0-132				

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc. - WA

1413.001.02.602

L935150

09/19/17 19:22

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
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- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J4	The associated batch QC was outside the established quality control range for accuracy.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

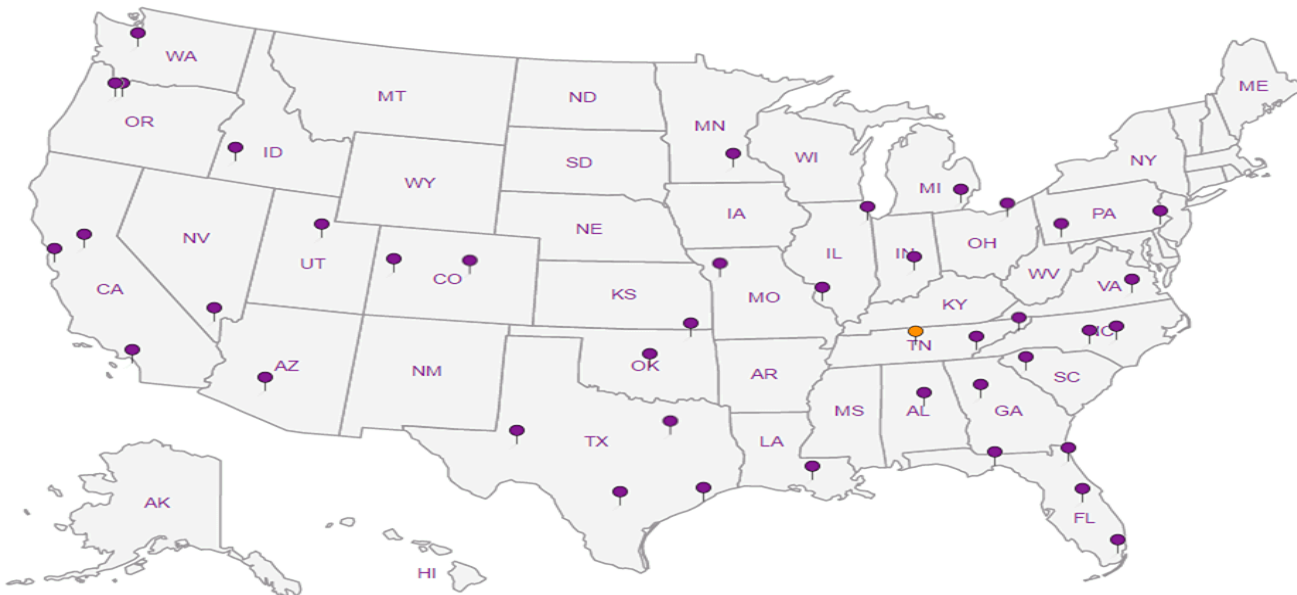
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeman

Email To: bhaldeman@pesenv.com

Project
Description: **American Linen Project**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.602

Collected by (print):
SHANNON MCKERNAN

Site/Facility ID #
1413.001.02.602

City/State Collected:
SEATTLE, WA

Lab Project #
PESENVSWA-ALP

P.O. #
Quote #

Immediately Packed on Ice N Y X

Rush? (Lab MUST Be Notified)
 Same Day
 Next Day
 Two Day
 Three Day
 5 Day (Rad Only)
 10 Day (Rad Only)

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts
B-214-15	GRAB	SS	15	9/7/17	1030	48
B-214-25		SS	25		1055	48
B-214-35		SS	35		1120	48
B-214-45		SS	45		1150	48
B-214-55		SS	55		1400	48
B-212-15		SS	15	9/8/17	1010	5
B-212-21		SS	21		1025	5
B-212-35		SS	35		1045	5
B-212-45		SS	45		1115	5
B-212-55		SS	55		1145	5

Matrix:
 SS - Soil
 AIR - Air
 GW - Groundwater
 WW - Wastewater
 DW - Drinking Water
 OT - Other

F - Filter
 B - Bioassay

Remarks:

Samples returned via:
 UPS
 FedEx
 Courier

Relinquished by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Analysis / Container / Preservative

Analysis / Container / Preservative	Pres Ck
NWTPHGX 2ozClr-NoPres	
T5 4ozClr-NoPres	
V8260C 40ml/NaHSO4/Syr/MeOH	

pH _____ Temp _____
 Flow _____ Other _____

Trip Blank Received: Yes/No
 Yes No

Temp: _____
 °C Bottles Received: _____
 TBR

Date: _____ Time: _____

Received by: (Signature) _____

Received by: (Signature) _____

Chain of Custody Page 1 of 2

COOLER 1

PES
 Environmental Sciences
 a subsidiary of **Pennington**

12005 Lebonan Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

L# **1935150**

Table # **B170**

Accnum: **PESENVSWA-ALP**

Template: **T126584**

Prelogin: **P615998**

TSR: **110 - Brian Ford**

PBM: **DM 8.31.17**

Shipped Via: **FedEx Ground**

Remarks _____ Sample # (lab only) _____

Sample Receipt Checklist

COC Seal Present/Intact: Yes No

COC Signed/Accurate: Yes No

Bottles arrive intact: Yes No

Correct bottles used: Yes No

Sufficient volume sent: Yes No

If Applicable

VOA Zero Headspace: Yes No

Preservation Correct/Checked: Yes No

If preservation required by login, Date/Time

Hold: _____

Condition: **NCF / 08**

September 20, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L935266
Samples Received: 09/09/2017
Project Number: 1413.001.02.602
Description: American Linen Project
Site: 1413.001.02.602
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford

Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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B-214-75 L935266-04	12
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9 Sc



B-212-65 L935266-01 Solid

Collected by Shannon McKernan
Collected date/time 09/08/17 12:30
Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020726	1	09/15/17 09:38	09/15/17 09:48	KDW
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1020338	25	09/08/17 12:30	09/14/17 16:13	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019379	1	09/08/17 12:30	09/12/17 21:19	ACG

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

B-212-75 L935266-02 Solid

Collected by Shannon McKernan
Collected date/time 09/08/17 13:50
Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020726	1	09/15/17 09:38	09/15/17 09:48	KDW
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1020338	26.75	09/08/17 13:50	09/14/17 16:35	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019379	1	09/08/17 13:50	09/12/17 21:41	ACG

B-214-65 L935266-03 Solid

Collected by Shannon McKernan
Collected date/time 09/08/17 10:30
Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020385	1	09/14/17 13:15	09/14/17 13:28	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019379	1	09/08/17 10:30	09/12/17 22:03	ACG

B-214-75 L935266-04 Solid

Collected by Shannon McKernan
Collected date/time 09/08/17 11:10
Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020385	1	09/14/17 13:15	09/14/17 13:28	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019379	1	09/08/17 11:10	09/18/17 13:29	JHH

B-214-85 L935266-05 Solid

Collected by Shannon McKernan
Collected date/time 09/08/17 11:55
Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020385	1	09/14/17 13:15	09/14/17 13:28	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019379	1	09/08/17 11:55	09/18/17 13:49	JHH

B-908-100 L935266-06 Solid

Collected by Shannon McKernan
Collected date/time 09/08/17 12:30
Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020385	1	09/14/17 13:15	09/14/17 13:28	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019379	1	09/08/17 12:30	09/18/17 14:08	JHH

B-214-95 L935266-07 Solid

Collected by Shannon McKernan
Collected date/time 09/08/17 13:10
Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020385	1	09/14/17 13:15	09/14/17 13:28	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019379	1	09/08/17 13:10	09/18/17 14:28	JHH



B-214-105 L935266-08 Solid

Collected by Shannon McKernan
 Collected date/time 09/08/17 14:00
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020385	1	09/14/17 13:15	09/14/17 13:28	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/08/17 14:00	09/14/17 15:13	ACG

1 Cp

2 Tc

3 Ss

B-907-25 L935266-09 Solid

Collected by Shannon McKernan
 Collected date/time 09/08/17 08:30
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1020730	1	09/15/17 10:52	09/15/17 11:14	KDW
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1020338	25	09/08/17 08:30	09/14/17 16:57	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	25	09/08/17 08:30	09/18/17 15:41	JHH

4 Cn

5 Sr

6 Qc

TRIP BLANK-090817 L935266-10 GW

Collected by Shannon McKernan
 Collected date/time 09/08/17 00:00
 Received date/time 09/09/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1019184	1	09/12/17 13:44	09/12/17 13:44	LRL

7 Gl

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.2		1	09/15/2017 09:48	WG1020726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.29	<u>B J</u>	0.984	2.90	25	09/14/2017 16:13	WG1020338
(S) a,a,a-Trifluorotoluene(FID)	95.6			77.0-120		09/14/2017 16:13	WG1020338

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO J3</u>	0.0116	0.0580	1	09/12/2017 21:19	WG1019379
Acrylonitrile	U		0.00208	0.0116	1	09/12/2017 21:19	WG1019379
Benzene	U		0.000313	0.00116	1	09/12/2017 21:19	WG1019379
Bromobenzene	U		0.000330	0.00116	1	09/12/2017 21:19	WG1019379
Bromodichloromethane	U		0.000295	0.00116	1	09/12/2017 21:19	WG1019379
Bromochloromethane	U		0.000453	0.00580	1	09/12/2017 21:19	WG1019379
Bromoform	U		0.000492	0.00116	1	09/12/2017 21:19	WG1019379
Bromomethane	U		0.00156	0.00580	1	09/12/2017 21:19	WG1019379
n-Butylbenzene	U		0.000299	0.00116	1	09/12/2017 21:19	WG1019379
sec-Butylbenzene	U		0.000233	0.00116	1	09/12/2017 21:19	WG1019379
tert-Butylbenzene	U		0.000239	0.00116	1	09/12/2017 21:19	WG1019379
Carbon disulfide	0.00107	<u>J</u>	0.000257	0.00116	1	09/12/2017 21:19	WG1019379
Carbon tetrachloride	U		0.000381	0.00116	1	09/12/2017 21:19	WG1019379
Chlorobenzene	U		0.000246	0.00116	1	09/12/2017 21:19	WG1019379
Chlorodibromomethane	U		0.000433	0.00116	1	09/12/2017 21:19	WG1019379
Chloroethane	U		0.00110	0.00580	1	09/12/2017 21:19	WG1019379
Chloroform	U		0.000266	0.00580	1	09/12/2017 21:19	WG1019379
Chloromethane	U		0.000435	0.00290	1	09/12/2017 21:19	WG1019379
2-Chlorotoluene	U		0.000349	0.00116	1	09/12/2017 21:19	WG1019379
4-Chlorotoluene	U		0.000279	0.00116	1	09/12/2017 21:19	WG1019379
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00580	1	09/12/2017 21:19	WG1019379
1,2-Dibromoethane	U		0.000398	0.00116	1	09/12/2017 21:19	WG1019379
Dibromomethane	U		0.000443	0.00116	1	09/12/2017 21:19	WG1019379
1,2-Dichlorobenzene	U		0.000354	0.00116	1	09/12/2017 21:19	WG1019379
1,3-Dichlorobenzene	U		0.000277	0.00116	1	09/12/2017 21:19	WG1019379
1,4-Dichlorobenzene	U		0.000262	0.00116	1	09/12/2017 21:19	WG1019379
Dichlorodifluoromethane	U		0.000828	0.00580	1	09/12/2017 21:19	WG1019379
1,1-Dichloroethane	U		0.000231	0.00116	1	09/12/2017 21:19	WG1019379
1,2-Dichloroethane	U	<u>JO J4</u>	0.000308	0.00116	1	09/12/2017 21:19	WG1019379
1,1-Dichloroethene	U		0.000352	0.00116	1	09/12/2017 21:19	WG1019379
cis-1,2-Dichloroethene	U		0.000273	0.00116	1	09/12/2017 21:19	WG1019379
trans-1,2-Dichloroethene	U		0.000306	0.00116	1	09/12/2017 21:19	WG1019379
1,2-Dichloropropane	U		0.000416	0.00116	1	09/12/2017 21:19	WG1019379
1,1-Dichloropropene	U		0.000368	0.00116	1	09/12/2017 21:19	WG1019379
1,3-Dichloropropane	U		0.000240	0.00116	1	09/12/2017 21:19	WG1019379
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	09/12/2017 21:19	WG1019379
trans-1,3-Dichloropropene	U		0.000310	0.00116	1	09/12/2017 21:19	WG1019379
trans-1,4-Dichloro-2-butene	U	<u>JO J4</u>	0.000903	0.00290	1	09/12/2017 21:19	WG1019379
2,2-Dichloropropane	U		0.000324	0.00116	1	09/12/2017 21:19	WG1019379
Di-isopropyl ether	U		0.000288	0.00116	1	09/12/2017 21:19	WG1019379
Ethylbenzene	U		0.000345	0.00116	1	09/12/2017 21:19	WG1019379
Hexachloro-1,3-butadiene	U		0.000397	0.00116	1	09/12/2017 21:19	WG1019379
2-Hexanone	U		0.00159	0.0116	1	09/12/2017 21:19	WG1019379
n-Hexane	0.00322	<u>J</u>	0.000337	0.0116	1	09/12/2017 21:19	WG1019379

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 12:30

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00294	0.0116	1	09/12/2017 21:19	WG1019379
Isopropylbenzene	U		0.000282	0.00116	1	09/12/2017 21:19	WG1019379
p-Isopropyltoluene	U		0.000237	0.00116	1	09/12/2017 21:19	WG1019379
2-Butanone (MEK)	U	<u>JO</u>	0.00543	0.0116	1	09/12/2017 21:19	WG1019379
Methylene Chloride	U		0.00116	0.00580	1	09/12/2017 21:19	WG1019379
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	09/12/2017 21:19	WG1019379
Methyl tert-butyl ether	U		0.000246	0.00116	1	09/12/2017 21:19	WG1019379
Naphthalene	U		0.00116	0.00580	1	09/12/2017 21:19	WG1019379
n-Propylbenzene	U		0.000239	0.00116	1	09/12/2017 21:19	WG1019379
Styrene	U		0.000272	0.00116	1	09/12/2017 21:19	WG1019379
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	09/12/2017 21:19	WG1019379
1,1,2,2-Tetrachloroethane	U		0.000424	0.00116	1	09/12/2017 21:19	WG1019379
1,1,2-Trichlorotrifluoroethane	U		0.000424	0.00116	1	09/12/2017 21:19	WG1019379
Tetrachloroethene	U		0.000320	0.00116	1	09/12/2017 21:19	WG1019379
Toluene	U		0.000504	0.00580	1	09/12/2017 21:19	WG1019379
1,2,3-Trichlorobenzene	U		0.000355	0.00116	1	09/12/2017 21:19	WG1019379
1,2,4-Trichlorobenzene	U		0.000450	0.00116	1	09/12/2017 21:19	WG1019379
1,1,1-Trichloroethane	U		0.000332	0.00116	1	09/12/2017 21:19	WG1019379
1,1,2-Trichloroethane	U		0.000322	0.00116	1	09/12/2017 21:19	WG1019379
Trichloroethene	U		0.000324	0.00116	1	09/12/2017 21:19	WG1019379
Trichlorofluoromethane	U		0.000443	0.00580	1	09/12/2017 21:19	WG1019379
1,2,3-Trichloropropane	U		0.000860	0.00290	1	09/12/2017 21:19	WG1019379
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	09/12/2017 21:19	WG1019379
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	09/12/2017 21:19	WG1019379
1,3,5-Trimethylbenzene	U		0.000309	0.00116	1	09/12/2017 21:19	WG1019379
Vinyl acetate	U		0.00277	0.0116	1	09/12/2017 21:19	WG1019379
Vinyl chloride	U		0.000338	0.00116	1	09/12/2017 21:19	WG1019379
Xylenes, Total	U		0.000810	0.00348	1	09/12/2017 21:19	WG1019379
<i>(S) Toluene-d8</i>	96.5			80.0-120		09/12/2017 21:19	WG1019379
<i>(S) Dibromofluoromethane</i>	98.5			74.0-131		09/12/2017 21:19	WG1019379
<i>(S) 4-Bromofluorobenzene</i>	95.7			64.0-132		09/12/2017 21:19	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.0		1	09/15/2017 09:48	WG1020726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		1.05	3.11	26.75	09/14/2017 16:35	WG1020338
(S) a,a,a-Trifluorotoluene(FID)	95.2			77.0-120		09/14/2017 16:35	WG1020338

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	0.0116	0.0581	1	09/12/2017 21:41	WG1019379
Acrylonitrile	U		0.00208	0.0116	1	09/12/2017 21:41	WG1019379
Benzene	U		0.000314	0.00116	1	09/12/2017 21:41	WG1019379
Bromobenzene	U		0.000330	0.00116	1	09/12/2017 21:41	WG1019379
Bromodichloromethane	U		0.000295	0.00116	1	09/12/2017 21:41	WG1019379
Bromochloromethane	U		0.000454	0.00581	1	09/12/2017 21:41	WG1019379
Bromoform	U		0.000493	0.00116	1	09/12/2017 21:41	WG1019379
Bromomethane	U		0.00156	0.00581	1	09/12/2017 21:41	WG1019379
n-Butylbenzene	U		0.000300	0.00116	1	09/12/2017 21:41	WG1019379
sec-Butylbenzene	U		0.000234	0.00116	1	09/12/2017 21:41	WG1019379
tert-Butylbenzene	U		0.000240	0.00116	1	09/12/2017 21:41	WG1019379
Carbon disulfide	0.000919	J	0.000257	0.00116	1	09/12/2017 21:41	WG1019379
Carbon tetrachloride	U		0.000381	0.00116	1	09/12/2017 21:41	WG1019379
Chlorobenzene	U		0.000247	0.00116	1	09/12/2017 21:41	WG1019379
Chlorodibromomethane	U		0.000434	0.00116	1	09/12/2017 21:41	WG1019379
Chloroethane	U		0.00110	0.00581	1	09/12/2017 21:41	WG1019379
Chloroform	U		0.000266	0.00581	1	09/12/2017 21:41	WG1019379
Chloromethane	U		0.000436	0.00291	1	09/12/2017 21:41	WG1019379
2-Chlorotoluene	U		0.000350	0.00116	1	09/12/2017 21:41	WG1019379
4-Chlorotoluene	U		0.000279	0.00116	1	09/12/2017 21:41	WG1019379
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00581	1	09/12/2017 21:41	WG1019379
1,2-Dibromoethane	U		0.000399	0.00116	1	09/12/2017 21:41	WG1019379
Dibromomethane	U		0.000444	0.00116	1	09/12/2017 21:41	WG1019379
1,2-Dichlorobenzene	U		0.000355	0.00116	1	09/12/2017 21:41	WG1019379
1,3-Dichlorobenzene	U		0.000278	0.00116	1	09/12/2017 21:41	WG1019379
1,4-Dichlorobenzene	U		0.000263	0.00116	1	09/12/2017 21:41	WG1019379
Dichlorodifluoromethane	U		0.000829	0.00581	1	09/12/2017 21:41	WG1019379
1,1-Dichloroethane	U		0.000231	0.00116	1	09/12/2017 21:41	WG1019379
1,2-Dichloroethane	U	JO J4	0.000308	0.00116	1	09/12/2017 21:41	WG1019379
1,1-Dichloroethene	U		0.000352	0.00116	1	09/12/2017 21:41	WG1019379
cis-1,2-Dichloroethene	U		0.000273	0.00116	1	09/12/2017 21:41	WG1019379
trans-1,2-Dichloroethene	U		0.000307	0.00116	1	09/12/2017 21:41	WG1019379
1,2-Dichloropropane	U		0.000416	0.00116	1	09/12/2017 21:41	WG1019379
1,1-Dichloropropene	U		0.000369	0.00116	1	09/12/2017 21:41	WG1019379
1,3-Dichloropropane	U		0.000241	0.00116	1	09/12/2017 21:41	WG1019379
cis-1,3-Dichloropropene	U		0.000305	0.00116	1	09/12/2017 21:41	WG1019379
trans-1,3-Dichloropropene	U		0.000311	0.00116	1	09/12/2017 21:41	WG1019379
trans-1,4-Dichloro-2-butene	U	JO J4	0.000905	0.00291	1	09/12/2017 21:41	WG1019379
2,2-Dichloropropane	U		0.000324	0.00116	1	09/12/2017 21:41	WG1019379
Di-isopropyl ether	U		0.000288	0.00116	1	09/12/2017 21:41	WG1019379
Ethylbenzene	U		0.000345	0.00116	1	09/12/2017 21:41	WG1019379
Hexachloro-1,3-butadiene	U		0.000398	0.00116	1	09/12/2017 21:41	WG1019379
2-Hexanone	U		0.00159	0.0116	1	09/12/2017 21:41	WG1019379
n-Hexane	0.00125	J	0.000337	0.0116	1	09/12/2017 21:41	WG1019379

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 13:50

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00294	0.0116	1	09/12/2017 21:41	WG1019379
Isopropylbenzene	U		0.000283	0.00116	1	09/12/2017 21:41	WG1019379
p-Isopropyltoluene	U		0.000237	0.00116	1	09/12/2017 21:41	WG1019379
2-Butanone (MEK)	U	<u>JO</u>	0.00544	0.0116	1	09/12/2017 21:41	WG1019379
Methylene Chloride	U		0.00116	0.00581	1	09/12/2017 21:41	WG1019379
4-Methyl-2-pentanone (MIBK)	U		0.00219	0.0116	1	09/12/2017 21:41	WG1019379
Methyl tert-butyl ether	U		0.000247	0.00116	1	09/12/2017 21:41	WG1019379
Naphthalene	U		0.00116	0.00581	1	09/12/2017 21:41	WG1019379
n-Propylbenzene	U		0.000240	0.00116	1	09/12/2017 21:41	WG1019379
Styrene	U		0.000272	0.00116	1	09/12/2017 21:41	WG1019379
1,1,1-Tetrachloroethane	U		0.000307	0.00116	1	09/12/2017 21:41	WG1019379
1,1,2-Tetrachloroethane	U		0.000424	0.00116	1	09/12/2017 21:41	WG1019379
1,1,2-Trichlorotrifluoroethane	U		0.000424	0.00116	1	09/12/2017 21:41	WG1019379
Tetrachloroethene	U		0.000321	0.00116	1	09/12/2017 21:41	WG1019379
Toluene	U		0.000505	0.00581	1	09/12/2017 21:41	WG1019379
1,2,3-Trichlorobenzene	U		0.000356	0.00116	1	09/12/2017 21:41	WG1019379
1,2,4-Trichlorobenzene	U		0.000451	0.00116	1	09/12/2017 21:41	WG1019379
1,1,1-Trichloroethane	U		0.000333	0.00116	1	09/12/2017 21:41	WG1019379
1,1,2-Trichloroethane	U		0.000322	0.00116	1	09/12/2017 21:41	WG1019379
Trichloroethene	U		0.000324	0.00116	1	09/12/2017 21:41	WG1019379
Trichlorofluoromethane	U		0.000444	0.00581	1	09/12/2017 21:41	WG1019379
1,2,3-Trichloropropane	U		0.000862	0.00291	1	09/12/2017 21:41	WG1019379
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	09/12/2017 21:41	WG1019379
1,2,3-Trimethylbenzene	U		0.000334	0.00116	1	09/12/2017 21:41	WG1019379
1,3,5-Trimethylbenzene	U		0.000309	0.00116	1	09/12/2017 21:41	WG1019379
Vinyl acetate	U		0.00278	0.0116	1	09/12/2017 21:41	WG1019379
Vinyl chloride	U		0.000338	0.00116	1	09/12/2017 21:41	WG1019379
Xylenes, Total	U		0.000812	0.00349	1	09/12/2017 21:41	WG1019379
(S) Toluene-d8	98.8			80.0-120		09/12/2017 21:41	WG1019379
(S) Dibromofluoromethane	103			74.0-131		09/12/2017 21:41	WG1019379
(S) 4-Bromofluorobenzene	98.6			64.0-132		09/12/2017 21:41	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 10:30

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	77.7		1	09/14/2017 13:28	WG1020385

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	0.0129	0.0643	1	09/12/2017 22:03	WG1019379
Acrylonitrile	U		0.00230	0.0129	1	09/12/2017 22:03	WG1019379
Benzene	U		0.000347	0.00129	1	09/12/2017 22:03	WG1019379
Bromobenzene	U		0.000366	0.00129	1	09/12/2017 22:03	WG1019379
Bromodichloromethane	U		0.000327	0.00129	1	09/12/2017 22:03	WG1019379
Bromochloromethane	U		0.000502	0.00643	1	09/12/2017 22:03	WG1019379
Bromoform	U		0.000546	0.00129	1	09/12/2017 22:03	WG1019379
Bromomethane	U		0.00172	0.00643	1	09/12/2017 22:03	WG1019379
n-Butylbenzene	U		0.000332	0.00129	1	09/12/2017 22:03	WG1019379
sec-Butylbenzene	U		0.000259	0.00129	1	09/12/2017 22:03	WG1019379
tert-Butylbenzene	U		0.000265	0.00129	1	09/12/2017 22:03	WG1019379
Carbon disulfide	U		0.000284	0.00129	1	09/12/2017 22:03	WG1019379
Carbon tetrachloride	U		0.000422	0.00129	1	09/12/2017 22:03	WG1019379
Chlorobenzene	U		0.000273	0.00129	1	09/12/2017 22:03	WG1019379
Chlorodibromomethane	U		0.000480	0.00129	1	09/12/2017 22:03	WG1019379
Chloroethane	U		0.00122	0.00643	1	09/12/2017 22:03	WG1019379
Chloroform	U		0.000295	0.00643	1	09/12/2017 22:03	WG1019379
Chloromethane	U		0.000483	0.00322	1	09/12/2017 22:03	WG1019379
2-Chlorotoluene	U		0.000387	0.00129	1	09/12/2017 22:03	WG1019379
4-Chlorotoluene	U		0.000309	0.00129	1	09/12/2017 22:03	WG1019379
1,2-Dibromo-3-Chloropropane	U		0.00135	0.00643	1	09/12/2017 22:03	WG1019379
1,2-Dibromoethane	U		0.000441	0.00129	1	09/12/2017 22:03	WG1019379
Dibromomethane	U		0.000492	0.00129	1	09/12/2017 22:03	WG1019379
1,2-Dichlorobenzene	U		0.000393	0.00129	1	09/12/2017 22:03	WG1019379
1,3-Dichlorobenzene	U		0.000308	0.00129	1	09/12/2017 22:03	WG1019379
1,4-Dichlorobenzene	U		0.000291	0.00129	1	09/12/2017 22:03	WG1019379
Dichlorodifluoromethane	U		0.000918	0.00643	1	09/12/2017 22:03	WG1019379
1,1-Dichloroethane	U		0.000256	0.00129	1	09/12/2017 22:03	WG1019379
1,2-Dichloroethane	U	JO J4	0.000341	0.00129	1	09/12/2017 22:03	WG1019379
1,1-Dichloroethene	U		0.000390	0.00129	1	09/12/2017 22:03	WG1019379
cis-1,2-Dichloroethene	U		0.000302	0.00129	1	09/12/2017 22:03	WG1019379
trans-1,2-Dichloroethene	U		0.000340	0.00129	1	09/12/2017 22:03	WG1019379
1,2-Dichloropropane	U		0.000461	0.00129	1	09/12/2017 22:03	WG1019379
1,1-Dichloropropene	U		0.000408	0.00129	1	09/12/2017 22:03	WG1019379
1,3-Dichloropropane	U		0.000266	0.00129	1	09/12/2017 22:03	WG1019379
cis-1,3-Dichloropropene	U		0.000337	0.00129	1	09/12/2017 22:03	WG1019379
trans-1,3-Dichloropropene	U		0.000344	0.00129	1	09/12/2017 22:03	WG1019379
trans-1,4-Dichloro-2-butene	U	JO J4	0.00100	0.00322	1	09/12/2017 22:03	WG1019379
2,2-Dichloropropane	U		0.000359	0.00129	1	09/12/2017 22:03	WG1019379
Di-isopropyl ether	U		0.000319	0.00129	1	09/12/2017 22:03	WG1019379
Ethylbenzene	U		0.000382	0.00129	1	09/12/2017 22:03	WG1019379
Hexachloro-1,3-butadiene	U		0.000440	0.00129	1	09/12/2017 22:03	WG1019379
2-Hexanone	U		0.00176	0.0129	1	09/12/2017 22:03	WG1019379
n-Hexane	U		0.000373	0.0129	1	09/12/2017 22:03	WG1019379
Iodomethane	U		0.00326	0.0129	1	09/12/2017 22:03	WG1019379
Isopropylbenzene	U		0.000313	0.00129	1	09/12/2017 22:03	WG1019379
p-Isopropyltoluene	U		0.000263	0.00129	1	09/12/2017 22:03	WG1019379
2-Butanone (MEK)	U	JO	0.00602	0.0129	1	09/12/2017 22:03	WG1019379
Methylene Chloride	U		0.00129	0.00643	1	09/12/2017 22:03	WG1019379
4-Methyl-2-pentanone (MIBK)	U		0.00242	0.0129	1	09/12/2017 22:03	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 10:30

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000273	0.00129	1	09/12/2017 22:03	WG1019379
Naphthalene	U		0.00129	0.00643	1	09/12/2017 22:03	WG1019379
n-Propylbenzene	U		0.000265	0.00129	1	09/12/2017 22:03	WG1019379
Styrene	U		0.000301	0.00129	1	09/12/2017 22:03	WG1019379
1,1,1,2-Tetrachloroethane	U		0.000340	0.00129	1	09/12/2017 22:03	WG1019379
1,1,2,2-Tetrachloroethane	U		0.000470	0.00129	1	09/12/2017 22:03	WG1019379
1,1,2-Trichlorotrifluoroethane	U		0.000470	0.00129	1	09/12/2017 22:03	WG1019379
Tetrachloroethene	U		0.000355	0.00129	1	09/12/2017 22:03	WG1019379
Toluene	U		0.000559	0.00643	1	09/12/2017 22:03	WG1019379
1,2,3-Trichlorobenzene	U		0.000394	0.00129	1	09/12/2017 22:03	WG1019379
1,2,4-Trichlorobenzene	U		0.000499	0.00129	1	09/12/2017 22:03	WG1019379
1,1,1-Trichloroethane	U		0.000368	0.00129	1	09/12/2017 22:03	WG1019379
1,1,2-Trichloroethane	U		0.000356	0.00129	1	09/12/2017 22:03	WG1019379
Trichloroethene	U		0.000359	0.00129	1	09/12/2017 22:03	WG1019379
Trichlorofluoromethane	U		0.000492	0.00643	1	09/12/2017 22:03	WG1019379
1,2,3-Trichloropropane	U		0.000954	0.00322	1	09/12/2017 22:03	WG1019379
1,2,4-Trimethylbenzene	U		0.000272	0.00129	1	09/12/2017 22:03	WG1019379
1,2,3-Trimethylbenzene	U		0.000369	0.00129	1	09/12/2017 22:03	WG1019379
1,3,5-Trimethylbenzene	U		0.000342	0.00129	1	09/12/2017 22:03	WG1019379
Vinyl acetate	U		0.00308	0.0129	1	09/12/2017 22:03	WG1019379
Vinyl chloride	U		0.000375	0.00129	1	09/12/2017 22:03	WG1019379
Xylenes, Total	U		0.000898	0.00386	1	09/12/2017 22:03	WG1019379
(S) Toluene-d8	97.0			80.0-120		09/12/2017 22:03	WG1019379
(S) Dibromofluoromethane	104			74.0-131		09/12/2017 22:03	WG1019379
(S) 4-Bromofluorobenzene	98.4			64.0-132		09/12/2017 22:03	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 11:10

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.0		1	09/14/2017 13:28	WG1020385

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0121	J J3	0.0111	0.0555	1	09/18/2017 13:29	WG1019379
Acrylonitrile	U		0.00199	0.0111	1	09/18/2017 13:29	WG1019379
Benzene	U		0.000300	0.00111	1	09/18/2017 13:29	WG1019379
Bromobenzene	U		0.000316	0.00111	1	09/18/2017 13:29	WG1019379
Bromodichloromethane	U		0.000282	0.00111	1	09/18/2017 13:29	WG1019379
Bromochloromethane	U		0.000433	0.00555	1	09/18/2017 13:29	WG1019379
Bromoform	U		0.000471	0.00111	1	09/18/2017 13:29	WG1019379
Bromomethane	U		0.00149	0.00555	1	09/18/2017 13:29	WG1019379
n-Butylbenzene	U		0.000287	0.00111	1	09/18/2017 13:29	WG1019379
sec-Butylbenzene	U		0.000223	0.00111	1	09/18/2017 13:29	WG1019379
tert-Butylbenzene	U		0.000229	0.00111	1	09/18/2017 13:29	WG1019379
Carbon disulfide	0.000650	J	0.000246	0.00111	1	09/18/2017 13:29	WG1019379
Carbon tetrachloride	U		0.000364	0.00111	1	09/18/2017 13:29	WG1019379
Chlorobenzene	U		0.000236	0.00111	1	09/18/2017 13:29	WG1019379
Chlorodibromomethane	U		0.000414	0.00111	1	09/18/2017 13:29	WG1019379
Chloroethane	U		0.00105	0.00555	1	09/18/2017 13:29	WG1019379
Chloroform	U		0.000254	0.00555	1	09/18/2017 13:29	WG1019379
Chloromethane	U	J0	0.000417	0.00278	1	09/18/2017 13:29	WG1019379
2-Chlorotoluene	U		0.000334	0.00111	1	09/18/2017 13:29	WG1019379
4-Chlorotoluene	U		0.000267	0.00111	1	09/18/2017 13:29	WG1019379
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00555	1	09/18/2017 13:29	WG1019379
1,2-Dibromoethane	U		0.000381	0.00111	1	09/18/2017 13:29	WG1019379
Dibromomethane	U		0.000424	0.00111	1	09/18/2017 13:29	WG1019379
1,2-Dichlorobenzene	U		0.000339	0.00111	1	09/18/2017 13:29	WG1019379
1,3-Dichlorobenzene	U		0.000266	0.00111	1	09/18/2017 13:29	WG1019379
1,4-Dichlorobenzene	U		0.000251	0.00111	1	09/18/2017 13:29	WG1019379
Dichlorodifluoromethane	U		0.000792	0.00555	1	09/18/2017 13:29	WG1019379
1,1-Dichloroethane	U		0.000221	0.00111	1	09/18/2017 13:29	WG1019379
1,2-Dichloroethane	U	J4	0.000294	0.00111	1	09/18/2017 13:29	WG1019379
1,1-Dichloroethene	U		0.000337	0.00111	1	09/18/2017 13:29	WG1019379
cis-1,2-Dichloroethene	U		0.000261	0.00111	1	09/18/2017 13:29	WG1019379
trans-1,2-Dichloroethene	U		0.000293	0.00111	1	09/18/2017 13:29	WG1019379
1,2-Dichloropropane	U		0.000398	0.00111	1	09/18/2017 13:29	WG1019379
1,1-Dichloropropene	U		0.000352	0.00111	1	09/18/2017 13:29	WG1019379
1,3-Dichloropropane	U		0.000230	0.00111	1	09/18/2017 13:29	WG1019379
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	09/18/2017 13:29	WG1019379
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	09/18/2017 13:29	WG1019379
trans-1,4-Dichloro-2-butene	U	J0 J4	0.000864	0.00278	1	09/18/2017 13:29	WG1019379
2,2-Dichloropropane	U		0.000310	0.00111	1	09/18/2017 13:29	WG1019379
Di-isopropyl ether	U	J0	0.000276	0.00111	1	09/18/2017 13:29	WG1019379
Ethylbenzene	U		0.000330	0.00111	1	09/18/2017 13:29	WG1019379
Hexachloro-1,3-butadiene	U		0.000380	0.00111	1	09/18/2017 13:29	WG1019379
2-Hexanone	U		0.00152	0.0111	1	09/18/2017 13:29	WG1019379
n-Hexane	0.000642	J	0.000322	0.0111	1	09/18/2017 13:29	WG1019379
Iodomethane	U		0.00281	0.0111	1	09/18/2017 13:29	WG1019379
Isopropylbenzene	U		0.000270	0.00111	1	09/18/2017 13:29	WG1019379
p-Isopropyltoluene	U		0.000227	0.00111	1	09/18/2017 13:29	WG1019379
2-Butanone (MEK)	U		0.00520	0.0111	1	09/18/2017 13:29	WG1019379
Methylene Chloride	U		0.00111	0.00555	1	09/18/2017 13:29	WG1019379
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	09/18/2017 13:29	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 11:10

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.00111	1	09/18/2017 13:29	WG1019379
Naphthalene	U		0.00111	0.00555	1	09/18/2017 13:29	WG1019379
n-Propylbenzene	U		0.000229	0.00111	1	09/18/2017 13:29	WG1019379
Styrene	U		0.000260	0.00111	1	09/18/2017 13:29	WG1019379
1,1,1,2-Tetrachloroethane	U		0.000293	0.00111	1	09/18/2017 13:29	WG1019379
1,1,2,2-Tetrachloroethane	U		0.000405	0.00111	1	09/18/2017 13:29	WG1019379
1,1,2-Trichlorotrifluoroethane	U		0.000405	0.00111	1	09/18/2017 13:29	WG1019379
Tetrachloroethene	U		0.000307	0.00111	1	09/18/2017 13:29	WG1019379
Toluene	U		0.000482	0.00555	1	09/18/2017 13:29	WG1019379
1,2,3-Trichlorobenzene	U		0.000340	0.00111	1	09/18/2017 13:29	WG1019379
1,2,4-Trichlorobenzene	U		0.000431	0.00111	1	09/18/2017 13:29	WG1019379
1,1,1-Trichloroethane	U		0.000318	0.00111	1	09/18/2017 13:29	WG1019379
1,1,2-Trichloroethane	U		0.000308	0.00111	1	09/18/2017 13:29	WG1019379
Trichloroethene	U		0.000310	0.00111	1	09/18/2017 13:29	WG1019379
Trichlorofluoromethane	U		0.000424	0.00555	1	09/18/2017 13:29	WG1019379
1,2,3-Trichloropropane	U		0.000823	0.00278	1	09/18/2017 13:29	WG1019379
1,2,4-Trimethylbenzene	U		0.000234	0.00111	1	09/18/2017 13:29	WG1019379
1,2,3-Trimethylbenzene	U		0.000319	0.00111	1	09/18/2017 13:29	WG1019379
1,3,5-Trimethylbenzene	U		0.000296	0.00111	1	09/18/2017 13:29	WG1019379
Vinyl acetate	U		0.00266	0.0111	1	09/18/2017 13:29	WG1019379
Vinyl chloride	U		0.000323	0.00111	1	09/18/2017 13:29	WG1019379
Xylenes, Total	U		0.000775	0.00333	1	09/18/2017 13:29	WG1019379
<i>(S) Toluene-d8</i>	98.7			80.0-120		09/18/2017 13:29	WG1019379
<i>(S) Dibromofluoromethane</i>	105			74.0-131		09/18/2017 13:29	WG1019379
<i>(S) 4-Bromofluorobenzene</i>	104			64.0-132		09/18/2017 13:29	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.2		1	09/14/2017 13:28	WG1020385

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0150	J J3	0.0120	0.0601	1	09/18/2017 13:49	WG1019379
Acrylonitrile	U		0.00215	0.0120	1	09/18/2017 13:49	WG1019379
Benzene	U		0.000325	0.00120	1	09/18/2017 13:49	WG1019379
Bromobenzene	U		0.000341	0.00120	1	09/18/2017 13:49	WG1019379
Bromodichloromethane	U		0.000305	0.00120	1	09/18/2017 13:49	WG1019379
Bromochloromethane	U		0.000469	0.00601	1	09/18/2017 13:49	WG1019379
Bromoform	U		0.000510	0.00120	1	09/18/2017 13:49	WG1019379
Bromomethane	U		0.00161	0.00601	1	09/18/2017 13:49	WG1019379
n-Butylbenzene	U		0.000310	0.00120	1	09/18/2017 13:49	WG1019379
sec-Butylbenzene	U		0.000242	0.00120	1	09/18/2017 13:49	WG1019379
tert-Butylbenzene	U		0.000248	0.00120	1	09/18/2017 13:49	WG1019379
Carbon disulfide	0.00148		0.000266	0.00120	1	09/18/2017 13:49	WG1019379
Carbon tetrachloride	U		0.000394	0.00120	1	09/18/2017 13:49	WG1019379
Chlorobenzene	U		0.000255	0.00120	1	09/18/2017 13:49	WG1019379
Chlorodibromomethane	U		0.000448	0.00120	1	09/18/2017 13:49	WG1019379
Chloroethane	U		0.00114	0.00601	1	09/18/2017 13:49	WG1019379
Chloroform	U		0.000275	0.00601	1	09/18/2017 13:49	WG1019379
Chloromethane	U	J0	0.000451	0.00301	1	09/18/2017 13:49	WG1019379
2-Chlorotoluene	U		0.000362	0.00120	1	09/18/2017 13:49	WG1019379
4-Chlorotoluene	U		0.000288	0.00120	1	09/18/2017 13:49	WG1019379
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00601	1	09/18/2017 13:49	WG1019379
1,2-Dibromoethane	U		0.000412	0.00120	1	09/18/2017 13:49	WG1019379
Dibromomethane	U		0.000459	0.00120	1	09/18/2017 13:49	WG1019379
1,2-Dichlorobenzene	U		0.000367	0.00120	1	09/18/2017 13:49	WG1019379
1,3-Dichlorobenzene	U		0.000287	0.00120	1	09/18/2017 13:49	WG1019379
1,4-Dichlorobenzene	U		0.000272	0.00120	1	09/18/2017 13:49	WG1019379
Dichlorodifluoromethane	U		0.000857	0.00601	1	09/18/2017 13:49	WG1019379
1,1-Dichloroethane	U		0.000239	0.00120	1	09/18/2017 13:49	WG1019379
1,2-Dichloroethane	U	J4	0.000319	0.00120	1	09/18/2017 13:49	WG1019379
1,1-Dichloroethene	U		0.000364	0.00120	1	09/18/2017 13:49	WG1019379
cis-1,2-Dichloroethene	U		0.000282	0.00120	1	09/18/2017 13:49	WG1019379
trans-1,2-Dichloroethene	U		0.000317	0.00120	1	09/18/2017 13:49	WG1019379
1,2-Dichloropropane	U		0.000430	0.00120	1	09/18/2017 13:49	WG1019379
1,1-Dichloropropene	U		0.000381	0.00120	1	09/18/2017 13:49	WG1019379
1,3-Dichloropropane	U		0.000249	0.00120	1	09/18/2017 13:49	WG1019379
cis-1,3-Dichloropropene	U		0.000315	0.00120	1	09/18/2017 13:49	WG1019379
trans-1,3-Dichloropropene	U		0.000321	0.00120	1	09/18/2017 13:49	WG1019379
trans-1,4-Dichloro-2-butene	U	J0 J4	0.000935	0.00301	1	09/18/2017 13:49	WG1019379
2,2-Dichloropropane	U		0.000335	0.00120	1	09/18/2017 13:49	WG1019379
Di-isopropyl ether	U	J0	0.000298	0.00120	1	09/18/2017 13:49	WG1019379
Ethylbenzene	U		0.000357	0.00120	1	09/18/2017 13:49	WG1019379
Hexachloro-1,3-butadiene	U		0.000411	0.00120	1	09/18/2017 13:49	WG1019379
2-Hexanone	U		0.00165	0.0120	1	09/18/2017 13:49	WG1019379
n-Hexane	0.000620	J	0.000349	0.0120	1	09/18/2017 13:49	WG1019379
Iodomethane	U		0.00304	0.0120	1	09/18/2017 13:49	WG1019379
Isopropylbenzene	U		0.000292	0.00120	1	09/18/2017 13:49	WG1019379
p-Isopropyltoluene	U		0.000245	0.00120	1	09/18/2017 13:49	WG1019379
2-Butanone (MEK)	U		0.00563	0.0120	1	09/18/2017 13:49	WG1019379
Methylene Chloride	U		0.00120	0.00601	1	09/18/2017 13:49	WG1019379
4-Methyl-2-pentanone (MIBK)	U		0.00226	0.0120	1	09/18/2017 13:49	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 11:55

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000255	0.00120	1	09/18/2017 13:49	WG1019379
Naphthalene	U		0.00120	0.00601	1	09/18/2017 13:49	WG1019379
n-Propylbenzene	U		0.000248	0.00120	1	09/18/2017 13:49	WG1019379
Styrene	U		0.000281	0.00120	1	09/18/2017 13:49	WG1019379
1,1,1,2-Tetrachloroethane	U		0.000317	0.00120	1	09/18/2017 13:49	WG1019379
1,1,2,2-Tetrachloroethane	U		0.000439	0.00120	1	09/18/2017 13:49	WG1019379
1,1,2-Trichlorotrifluoroethane	U		0.000439	0.00120	1	09/18/2017 13:49	WG1019379
Tetrachloroethene	U		0.000332	0.00120	1	09/18/2017 13:49	WG1019379
Toluene	U		0.000522	0.00601	1	09/18/2017 13:49	WG1019379
1,2,3-Trichlorobenzene	U		0.000368	0.00120	1	09/18/2017 13:49	WG1019379
1,2,4-Trichlorobenzene	U		0.000466	0.00120	1	09/18/2017 13:49	WG1019379
1,1,1-Trichloroethane	U		0.000344	0.00120	1	09/18/2017 13:49	WG1019379
1,1,2-Trichloroethane	U		0.000333	0.00120	1	09/18/2017 13:49	WG1019379
Trichloroethene	U		0.000335	0.00120	1	09/18/2017 13:49	WG1019379
Trichlorofluoromethane	U		0.000459	0.00601	1	09/18/2017 13:49	WG1019379
1,2,3-Trichloropropane	U		0.000891	0.00301	1	09/18/2017 13:49	WG1019379
1,2,4-Trimethylbenzene	U		0.000254	0.00120	1	09/18/2017 13:49	WG1019379
1,2,3-Trimethylbenzene	U		0.000345	0.00120	1	09/18/2017 13:49	WG1019379
1,3,5-Trimethylbenzene	U		0.000320	0.00120	1	09/18/2017 13:49	WG1019379
Vinyl acetate	U		0.00287	0.0120	1	09/18/2017 13:49	WG1019379
Vinyl chloride	U		0.000350	0.00120	1	09/18/2017 13:49	WG1019379
Xylenes, Total	U		0.000839	0.00361	1	09/18/2017 13:49	WG1019379
(S) Toluene-d8	103			80.0-120		09/18/2017 13:49	WG1019379
(S) Dibromofluoromethane	101			74.0-131		09/18/2017 13:49	WG1019379
(S) 4-Bromofluorobenzene	102			64.0-132		09/18/2017 13:49	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.5		1	09/14/2017 13:28	WG1020385

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0230	J J3	0.0112	0.0559	1	09/18/2017 14:08	WG1019379
Acrylonitrile	U		0.00200	0.0112	1	09/18/2017 14:08	WG1019379
Benzene	U		0.000302	0.00112	1	09/18/2017 14:08	WG1019379
Bromobenzene	U		0.000317	0.00112	1	09/18/2017 14:08	WG1019379
Bromodichloromethane	U		0.000284	0.00112	1	09/18/2017 14:08	WG1019379
Bromochloromethane	U		0.000436	0.00559	1	09/18/2017 14:08	WG1019379
Bromoform	U		0.000474	0.00112	1	09/18/2017 14:08	WG1019379
Bromomethane	U		0.00150	0.00559	1	09/18/2017 14:08	WG1019379
n-Butylbenzene	U		0.000288	0.00112	1	09/18/2017 14:08	WG1019379
sec-Butylbenzene	U		0.000225	0.00112	1	09/18/2017 14:08	WG1019379
tert-Butylbenzene	U		0.000230	0.00112	1	09/18/2017 14:08	WG1019379
Carbon disulfide	0.00203		0.000247	0.00112	1	09/18/2017 14:08	WG1019379
Carbon tetrachloride	U		0.000367	0.00112	1	09/18/2017 14:08	WG1019379
Chlorobenzene	U		0.000237	0.00112	1	09/18/2017 14:08	WG1019379
Chlorodibromomethane	U		0.000417	0.00112	1	09/18/2017 14:08	WG1019379
Chloroethane	U		0.00106	0.00559	1	09/18/2017 14:08	WG1019379
Chloroform	U		0.000256	0.00559	1	09/18/2017 14:08	WG1019379
Chloromethane	U	J0	0.000419	0.00279	1	09/18/2017 14:08	WG1019379
2-Chlorotoluene	U		0.000336	0.00112	1	09/18/2017 14:08	WG1019379
4-Chlorotoluene	U		0.000268	0.00112	1	09/18/2017 14:08	WG1019379
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00559	1	09/18/2017 14:08	WG1019379
1,2-Dibromoethane	U		0.000383	0.00112	1	09/18/2017 14:08	WG1019379
Dibromomethane	U		0.000427	0.00112	1	09/18/2017 14:08	WG1019379
1,2-Dichlorobenzene	U		0.000341	0.00112	1	09/18/2017 14:08	WG1019379
1,3-Dichlorobenzene	U		0.000267	0.00112	1	09/18/2017 14:08	WG1019379
1,4-Dichlorobenzene	U		0.000253	0.00112	1	09/18/2017 14:08	WG1019379
Dichlorodifluoromethane	U		0.000797	0.00559	1	09/18/2017 14:08	WG1019379
1,1-Dichloroethane	U		0.000222	0.00112	1	09/18/2017 14:08	WG1019379
1,2-Dichloroethane	U	J4	0.000296	0.00112	1	09/18/2017 14:08	WG1019379
1,1-Dichloroethene	U		0.000339	0.00112	1	09/18/2017 14:08	WG1019379
cis-1,2-Dichloroethene	U		0.000263	0.00112	1	09/18/2017 14:08	WG1019379
trans-1,2-Dichloroethene	U		0.000295	0.00112	1	09/18/2017 14:08	WG1019379
1,2-Dichloropropane	U		0.000400	0.00112	1	09/18/2017 14:08	WG1019379
1,1-Dichloropropene	U		0.000354	0.00112	1	09/18/2017 14:08	WG1019379
1,3-Dichloropropane	U		0.000231	0.00112	1	09/18/2017 14:08	WG1019379
cis-1,3-Dichloropropene	U		0.000293	0.00112	1	09/18/2017 14:08	WG1019379
trans-1,3-Dichloropropene	U		0.000298	0.00112	1	09/18/2017 14:08	WG1019379
trans-1,4-Dichloro-2-butene	U	J0 J4	0.000870	0.00279	1	09/18/2017 14:08	WG1019379
2,2-Dichloropropane	U		0.000312	0.00112	1	09/18/2017 14:08	WG1019379
Di-isopropyl ether	U	J0	0.000277	0.00112	1	09/18/2017 14:08	WG1019379
Ethylbenzene	U		0.000332	0.00112	1	09/18/2017 14:08	WG1019379
Hexachloro-1,3-butadiene	U		0.000382	0.00112	1	09/18/2017 14:08	WG1019379
2-Hexanone	U		0.00153	0.0112	1	09/18/2017 14:08	WG1019379
n-Hexane	0.000668	J	0.000324	0.0112	1	09/18/2017 14:08	WG1019379
Iodomethane	U		0.00283	0.0112	1	09/18/2017 14:08	WG1019379
Isopropylbenzene	U		0.000272	0.00112	1	09/18/2017 14:08	WG1019379
p-Isopropyltoluene	U		0.000228	0.00112	1	09/18/2017 14:08	WG1019379
2-Butanone (MEK)	U		0.00523	0.0112	1	09/18/2017 14:08	WG1019379
Methylene Chloride	U		0.00112	0.00559	1	09/18/2017 14:08	WG1019379
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	09/18/2017 14:08	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 12:30

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	09/18/2017 14:08	WG1019379
Naphthalene	U		0.00112	0.00559	1	09/18/2017 14:08	WG1019379
n-Propylbenzene	U		0.000230	0.00112	1	09/18/2017 14:08	WG1019379
Styrene	U		0.000262	0.00112	1	09/18/2017 14:08	WG1019379
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	09/18/2017 14:08	WG1019379
1,1,2,2-Tetrachloroethane	U		0.000408	0.00112	1	09/18/2017 14:08	WG1019379
1,1,2-Trichlorotrifluoroethane	U		0.000408	0.00112	1	09/18/2017 14:08	WG1019379
Tetrachloroethene	U		0.000309	0.00112	1	09/18/2017 14:08	WG1019379
Toluene	U		0.000485	0.00559	1	09/18/2017 14:08	WG1019379
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	09/18/2017 14:08	WG1019379
1,2,4-Trichlorobenzene	U		0.000434	0.00112	1	09/18/2017 14:08	WG1019379
1,1,1-Trichloroethane	U		0.000320	0.00112	1	09/18/2017 14:08	WG1019379
1,1,2-Trichloroethane	U		0.000310	0.00112	1	09/18/2017 14:08	WG1019379
Trichloroethene	U		0.000312	0.00112	1	09/18/2017 14:08	WG1019379
Trichlorofluoromethane	U		0.000427	0.00559	1	09/18/2017 14:08	WG1019379
1,2,3-Trichloropropane	U		0.000828	0.00279	1	09/18/2017 14:08	WG1019379
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	09/18/2017 14:08	WG1019379
1,2,3-Trimethylbenzene	U		0.000321	0.00112	1	09/18/2017 14:08	WG1019379
1,3,5-Trimethylbenzene	U		0.000297	0.00112	1	09/18/2017 14:08	WG1019379
Vinyl acetate	U		0.00267	0.0112	1	09/18/2017 14:08	WG1019379
Vinyl chloride	U		0.000325	0.00112	1	09/18/2017 14:08	WG1019379
Xylenes, Total	U		0.000780	0.00335	1	09/18/2017 14:08	WG1019379
(S) Toluene-d8	101			80.0-120		09/18/2017 14:08	WG1019379
(S) Dibromofluoromethane	104			74.0-131		09/18/2017 14:08	WG1019379
(S) 4-Bromofluorobenzene	101			64.0-132		09/18/2017 14:08	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.1		1	09/14/2017 13:28	WG1020385

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0125	J J3	0.0110	0.0549	1	09/18/2017 14:28	WG1019379
Acrylonitrile	U		0.00196	0.0110	1	09/18/2017 14:28	WG1019379
Benzene	U		0.000296	0.00110	1	09/18/2017 14:28	WG1019379
Bromobenzene	U		0.000312	0.00110	1	09/18/2017 14:28	WG1019379
Bromodichloromethane	U		0.000279	0.00110	1	09/18/2017 14:28	WG1019379
Bromochloromethane	U		0.000428	0.00549	1	09/18/2017 14:28	WG1019379
Bromoform	U		0.000465	0.00110	1	09/18/2017 14:28	WG1019379
Bromomethane	U		0.00147	0.00549	1	09/18/2017 14:28	WG1019379
n-Butylbenzene	U		0.000283	0.00110	1	09/18/2017 14:28	WG1019379
sec-Butylbenzene	U		0.000221	0.00110	1	09/18/2017 14:28	WG1019379
tert-Butylbenzene	U		0.000226	0.00110	1	09/18/2017 14:28	WG1019379
Carbon disulfide	0.00135		0.000243	0.00110	1	09/18/2017 14:28	WG1019379
Carbon tetrachloride	U		0.000360	0.00110	1	09/18/2017 14:28	WG1019379
Chlorobenzene	U		0.000233	0.00110	1	09/18/2017 14:28	WG1019379
Chlorodibromomethane	U		0.000409	0.00110	1	09/18/2017 14:28	WG1019379
Chloroethane	U		0.00104	0.00549	1	09/18/2017 14:28	WG1019379
Chloroform	U		0.000251	0.00549	1	09/18/2017 14:28	WG1019379
Chloromethane	U	J0	0.000412	0.00274	1	09/18/2017 14:28	WG1019379
2-Chlorotoluene	U		0.000330	0.00110	1	09/18/2017 14:28	WG1019379
4-Chlorotoluene	U		0.000263	0.00110	1	09/18/2017 14:28	WG1019379
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00549	1	09/18/2017 14:28	WG1019379
1,2-Dibromoethane	U		0.000377	0.00110	1	09/18/2017 14:28	WG1019379
Dibromomethane	U		0.000419	0.00110	1	09/18/2017 14:28	WG1019379
1,2-Dichlorobenzene	U		0.000335	0.00110	1	09/18/2017 14:28	WG1019379
1,3-Dichlorobenzene	U		0.000262	0.00110	1	09/18/2017 14:28	WG1019379
1,4-Dichlorobenzene	U		0.000248	0.00110	1	09/18/2017 14:28	WG1019379
Dichlorodifluoromethane	U		0.000783	0.00549	1	09/18/2017 14:28	WG1019379
1,1-Dichloroethane	U		0.000218	0.00110	1	09/18/2017 14:28	WG1019379
1,2-Dichloroethane	U	J4	0.000291	0.00110	1	09/18/2017 14:28	WG1019379
1,1-Dichloroethene	U		0.000333	0.00110	1	09/18/2017 14:28	WG1019379
cis-1,2-Dichloroethene	U		0.000258	0.00110	1	09/18/2017 14:28	WG1019379
trans-1,2-Dichloroethene	U		0.000290	0.00110	1	09/18/2017 14:28	WG1019379
1,2-Dichloropropane	U		0.000393	0.00110	1	09/18/2017 14:28	WG1019379
1,1-Dichloropropene	U		0.000348	0.00110	1	09/18/2017 14:28	WG1019379
1,3-Dichloropropane	U		0.000227	0.00110	1	09/18/2017 14:28	WG1019379
cis-1,3-Dichloropropene	U		0.000288	0.00110	1	09/18/2017 14:28	WG1019379
trans-1,3-Dichloropropene	U		0.000293	0.00110	1	09/18/2017 14:28	WG1019379
trans-1,4-Dichloro-2-butene	U	J0 J4	0.000854	0.00274	1	09/18/2017 14:28	WG1019379
2,2-Dichloropropane	U		0.000306	0.00110	1	09/18/2017 14:28	WG1019379
Di-isopropyl ether	U	J0	0.000272	0.00110	1	09/18/2017 14:28	WG1019379
Ethylbenzene	U		0.000326	0.00110	1	09/18/2017 14:28	WG1019379
Hexachloro-1,3-butadiene	U		0.000375	0.00110	1	09/18/2017 14:28	WG1019379
2-Hexanone	U		0.00150	0.0110	1	09/18/2017 14:28	WG1019379
n-Hexane	0.00343	J	0.000318	0.0110	1	09/18/2017 14:28	WG1019379
Iodomethane	U		0.00278	0.0110	1	09/18/2017 14:28	WG1019379
Isopropylbenzene	U		0.000267	0.00110	1	09/18/2017 14:28	WG1019379
p-Isopropyltoluene	U		0.000224	0.00110	1	09/18/2017 14:28	WG1019379
2-Butanone (MEK)	U		0.00514	0.0110	1	09/18/2017 14:28	WG1019379
Methylene Chloride	U		0.00110	0.00549	1	09/18/2017 14:28	WG1019379
4-Methyl-2-pentanone (MIBK)	U		0.00206	0.0110	1	09/18/2017 14:28	WG1019379

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/08/17 13:10

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	09/18/2017 14:28	WG1019379
Naphthalene	U		0.00110	0.00549	1	09/18/2017 14:28	WG1019379
n-Propylbenzene	U		0.000226	0.00110	1	09/18/2017 14:28	WG1019379
Styrene	U		0.000257	0.00110	1	09/18/2017 14:28	WG1019379
1,1,1,2-Tetrachloroethane	U		0.000290	0.00110	1	09/18/2017 14:28	WG1019379
1,1,2,2-Tetrachloroethane	U		0.000401	0.00110	1	09/18/2017 14:28	WG1019379
1,1,2-Trichlorotrifluoroethane	U		0.000401	0.00110	1	09/18/2017 14:28	WG1019379
Tetrachloroethene	U		0.000303	0.00110	1	09/18/2017 14:28	WG1019379
Toluene	U		0.000476	0.00549	1	09/18/2017 14:28	WG1019379
1,2,3-Trichlorobenzene	U		0.000336	0.00110	1	09/18/2017 14:28	WG1019379
1,2,4-Trichlorobenzene	U		0.000426	0.00110	1	09/18/2017 14:28	WG1019379
1,1,1-Trichloroethane	U		0.000314	0.00110	1	09/18/2017 14:28	WG1019379
1,1,2-Trichloroethane	U		0.000304	0.00110	1	09/18/2017 14:28	WG1019379
Trichloroethene	U		0.000306	0.00110	1	09/18/2017 14:28	WG1019379
Trichlorofluoromethane	U		0.000419	0.00549	1	09/18/2017 14:28	WG1019379
1,2,3-Trichloropropane	U		0.000813	0.00274	1	09/18/2017 14:28	WG1019379
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	09/18/2017 14:28	WG1019379
1,2,3-Trimethylbenzene	U		0.000315	0.00110	1	09/18/2017 14:28	WG1019379
1,3,5-Trimethylbenzene	U		0.000292	0.00110	1	09/18/2017 14:28	WG1019379
Vinyl acetate	U		0.00262	0.0110	1	09/18/2017 14:28	WG1019379
Vinyl chloride	U		0.000319	0.00110	1	09/18/2017 14:28	WG1019379
Xylenes, Total	U		0.000766	0.00329	1	09/18/2017 14:28	WG1019379
(S) Toluene-d8	97.2			80.0-120		09/18/2017 14:28	WG1019379
(S) Dibromofluoromethane	103			74.0-131		09/18/2017 14:28	WG1019379
(S) 4-Bromofluorobenzene	102			64.0-132		09/18/2017 14:28	WG1019379

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 14:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	79.0		1	09/14/2017 13:28	WG1020385

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.0127	0.0633	1	09/14/2017 15:13	WG1020390
Acrylonitrile	U		0.00226	0.0127	1	09/14/2017 15:13	WG1020390
Benzene	U		0.000342	0.00127	1	09/14/2017 15:13	WG1020390
Bromobenzene	U	JO	0.000359	0.00127	1	09/14/2017 15:13	WG1020390
Bromodichloromethane	U		0.000321	0.00127	1	09/14/2017 15:13	WG1020390
Bromochloromethane	U		0.000493	0.00633	1	09/14/2017 15:13	WG1020390
Bromoform	U		0.000537	0.00127	1	09/14/2017 15:13	WG1020390
Bromomethane	U		0.00170	0.00633	1	09/14/2017 15:13	WG1020390
n-Butylbenzene	U		0.000326	0.00127	1	09/14/2017 15:13	WG1020390
sec-Butylbenzene	U		0.000254	0.00127	1	09/14/2017 15:13	WG1020390
tert-Butylbenzene	U		0.000261	0.00127	1	09/14/2017 15:13	WG1020390
Carbon disulfide	U		0.000280	0.00127	1	09/14/2017 15:13	WG1020390
Carbon tetrachloride	U		0.000415	0.00127	1	09/14/2017 15:13	WG1020390
Chlorobenzene	U		0.000268	0.00127	1	09/14/2017 15:13	WG1020390
Chlorodibromomethane	U		0.000472	0.00127	1	09/14/2017 15:13	WG1020390
Chloroethane	U	JO	0.00120	0.00633	1	09/14/2017 15:13	WG1020390
Chloroform	U		0.000290	0.00633	1	09/14/2017 15:13	WG1020390
Chloromethane	U	JO	0.000475	0.00316	1	09/14/2017 15:13	WG1020390
2-Chlorotoluene	U		0.000381	0.00127	1	09/14/2017 15:13	WG1020390
4-Chlorotoluene	U		0.000304	0.00127	1	09/14/2017 15:13	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00633	1	09/14/2017 15:13	WG1020390
1,2-Dibromoethane	U		0.000434	0.00127	1	09/14/2017 15:13	WG1020390
Dibromomethane	U		0.000483	0.00127	1	09/14/2017 15:13	WG1020390
1,2-Dichlorobenzene	U		0.000386	0.00127	1	09/14/2017 15:13	WG1020390
1,3-Dichlorobenzene	U		0.000302	0.00127	1	09/14/2017 15:13	WG1020390
1,4-Dichlorobenzene	U		0.000286	0.00127	1	09/14/2017 15:13	WG1020390
Dichlorodifluoromethane	U		0.000902	0.00633	1	09/14/2017 15:13	WG1020390
1,1-Dichloroethane	U		0.000252	0.00127	1	09/14/2017 15:13	WG1020390
1,2-Dichloroethane	U		0.000335	0.00127	1	09/14/2017 15:13	WG1020390
1,1-Dichloroethene	U		0.000383	0.00127	1	09/14/2017 15:13	WG1020390
cis-1,2-Dichloroethene	U		0.000297	0.00127	1	09/14/2017 15:13	WG1020390
trans-1,2-Dichloroethene	U		0.000334	0.00127	1	09/14/2017 15:13	WG1020390
1,2-Dichloropropane	U		0.000453	0.00127	1	09/14/2017 15:13	WG1020390
1,1-Dichloropropene	U		0.000401	0.00127	1	09/14/2017 15:13	WG1020390
1,3-Dichloropropane	U		0.000262	0.00127	1	09/14/2017 15:13	WG1020390
cis-1,3-Dichloropropene	U		0.000332	0.00127	1	09/14/2017 15:13	WG1020390
trans-1,3-Dichloropropene	U		0.000338	0.00127	1	09/14/2017 15:13	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.000984	0.00316	1	09/14/2017 15:13	WG1020390
2,2-Dichloropropane	U		0.000353	0.00127	1	09/14/2017 15:13	WG1020390
Di-isopropyl ether	U		0.000314	0.00127	1	09/14/2017 15:13	WG1020390
Ethylbenzene	U		0.000376	0.00127	1	09/14/2017 15:13	WG1020390
Hexachloro-1,3-butadiene	U		0.000433	0.00127	1	09/14/2017 15:13	WG1020390
2-Hexanone	U		0.00173	0.0127	1	09/14/2017 15:13	WG1020390
n-Hexane	0.000426	J JO	0.000367	0.0127	1	09/14/2017 15:13	WG1020390
Iodomethane	U		0.00320	0.0127	1	09/14/2017 15:13	WG1020390
Isopropylbenzene	U		0.000307	0.00127	1	09/14/2017 15:13	WG1020390
p-Isopropyltoluene	U		0.000258	0.00127	1	09/14/2017 15:13	WG1020390
2-Butanone (MEK)	U	JO	0.00592	0.0127	1	09/14/2017 15:13	WG1020390
Methylene Chloride	U		0.00127	0.00633	1	09/14/2017 15:13	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00238	0.0127	1	09/14/2017 15:13	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 14:00

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000268	0.00127	1	09/14/2017 15:13	WG1020390
Naphthalene	U		0.00127	0.00633	1	09/14/2017 15:13	WG1020390
n-Propylbenzene	U		0.000261	0.00127	1	09/14/2017 15:13	WG1020390
Styrene	U		0.000296	0.00127	1	09/14/2017 15:13	WG1020390
1,1,1-Tetrachloroethane	U		0.000334	0.00127	1	09/14/2017 15:13	WG1020390
1,1,2-Tetrachloroethane	U		0.000462	0.00127	1	09/14/2017 15:13	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000462	0.00127	1	09/14/2017 15:13	WG1020390
Tetrachloroethene	U		0.000349	0.00127	1	09/14/2017 15:13	WG1020390
Toluene	U		0.000549	0.00633	1	09/14/2017 15:13	WG1020390
1,2,3-Trichlorobenzene	U		0.000387	0.00127	1	09/14/2017 15:13	WG1020390
1,2,4-Trichlorobenzene	U		0.000491	0.00127	1	09/14/2017 15:13	WG1020390
1,1,1-Trichloroethane	U		0.000362	0.00127	1	09/14/2017 15:13	WG1020390
1,1,2-Trichloroethane	U		0.000351	0.00127	1	09/14/2017 15:13	WG1020390
Trichloroethene	U		0.000353	0.00127	1	09/14/2017 15:13	WG1020390
Trichlorofluoromethane	U		0.000483	0.00633	1	09/14/2017 15:13	WG1020390
1,2,3-Trichloropropane	U		0.000938	0.00316	1	09/14/2017 15:13	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000267	0.00127	1	09/14/2017 15:13	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000363	0.00127	1	09/14/2017 15:13	WG1020390
1,3,5-Trimethylbenzene	U		0.000337	0.00127	1	09/14/2017 15:13	WG1020390
Vinyl acetate	U		0.00302	0.0127	1	09/14/2017 15:13	WG1020390
Vinyl chloride	U		0.000368	0.00127	1	09/14/2017 15:13	WG1020390
Xylenes, Total	U		0.000883	0.00380	1	09/14/2017 15:13	WG1020390
(S) Toluene-d8	104			80.0-120		09/14/2017 15:13	WG1020390
(S) Dibromofluoromethane	89.9			74.0-131		09/14/2017 15:13	WG1020390
(S) 4-Bromofluorobenzene	89.3			64.0-132		09/14/2017 15:13	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.7		1	09/15/2017 11:14	WG1020730

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1.16	B J	1.01	2.99	25	09/14/2017 16:57	WG1020338
(S) a,a,a-Trifluorotoluene(FID)	95.4			77.0-120		09/14/2017 16:57	WG1020338

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.299	1.49	25	09/18/2017 15:41	WG1020390
Acrylonitrile	U		0.0536	0.299	25	09/18/2017 15:41	WG1020390
Benzene	U		0.00807	0.0299	25	09/18/2017 15:41	WG1020390
Bromobenzene	U		0.00849	0.0299	25	09/18/2017 15:41	WG1020390
Bromodichloromethane	U		0.00759	0.0299	25	09/18/2017 15:41	WG1020390
Bromochloromethane	U		0.0117	0.149	25	09/18/2017 15:41	WG1020390
Bromoform	U		0.0127	0.0299	25	09/18/2017 15:41	WG1020390
Bromomethane	U		0.0400	0.149	25	09/18/2017 15:41	WG1020390
n-Butylbenzene	U		0.00771	0.0299	25	09/18/2017 15:41	WG1020390
sec-Butylbenzene	U		0.00600	0.0299	25	09/18/2017 15:41	WG1020390
tert-Butylbenzene	U		0.00616	0.0299	25	09/18/2017 15:41	WG1020390
Carbon disulfide	U		0.00660	0.0299	25	09/18/2017 15:41	WG1020390
Carbon tetrachloride	U		0.00980	0.0299	25	09/18/2017 15:41	WG1020390
Chlorobenzene	U		0.00634	0.0299	25	09/18/2017 15:41	WG1020390
Chlorodibromomethane	U		0.0111	0.0299	25	09/18/2017 15:41	WG1020390
Chloroethane	U		0.0282	0.149	25	09/18/2017 15:41	WG1020390
Chloroform	U		0.00684	0.149	25	09/18/2017 15:41	WG1020390
Chloromethane	U	JO	0.0112	0.0747	25	09/18/2017 15:41	WG1020390
2-Chlorotoluene	U		0.00899	0.0299	25	09/18/2017 15:41	WG1020390
4-Chlorotoluene	U		0.00717	0.0299	25	09/18/2017 15:41	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.0313	0.149	25	09/18/2017 15:41	WG1020390
1,2-Dibromoethane	U		0.0103	0.0299	25	09/18/2017 15:41	WG1020390
Dibromomethane	U		0.0114	0.0299	25	09/18/2017 15:41	WG1020390
1,2-Dichlorobenzene	U		0.00911	0.0299	25	09/18/2017 15:41	WG1020390
1,3-Dichlorobenzene	U		0.00715	0.0299	25	09/18/2017 15:41	WG1020390
1,4-Dichlorobenzene	U		0.00675	0.0299	25	09/18/2017 15:41	WG1020390
Dichlorodifluoromethane	U		0.0213	0.149	25	09/18/2017 15:41	WG1020390
1,1-Dichloroethane	U		0.00595	0.0299	25	09/18/2017 15:41	WG1020390
1,2-Dichloroethane	U		0.00791	0.0299	25	09/18/2017 15:41	WG1020390
1,1-Dichloroethene	U		0.00906	0.0299	25	09/18/2017 15:41	WG1020390
cis-1,2-Dichloroethene	U		0.00703	0.0299	25	09/18/2017 15:41	WG1020390
trans-1,2-Dichloroethene	U		0.00789	0.0299	25	09/18/2017 15:41	WG1020390
1,2-Dichloropropane	U		0.0107	0.0299	25	09/18/2017 15:41	WG1020390
1,1-Dichloropropene	U		0.00947	0.0299	25	09/18/2017 15:41	WG1020390
1,3-Dichloropropane	U		0.00619	0.0299	25	09/18/2017 15:41	WG1020390
cis-1,3-Dichloropropene	U		0.00783	0.0299	25	09/18/2017 15:41	WG1020390
trans-1,3-Dichloropropene	U		0.00799	0.0299	25	09/18/2017 15:41	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.0232	0.0747	25	09/18/2017 15:41	WG1020390
2,2-Dichloropropane	U		0.00834	0.0299	25	09/18/2017 15:41	WG1020390
Di-isopropyl ether	U	JO	0.00741	0.0299	25	09/18/2017 15:41	WG1020390
Ethylbenzene	U		0.00887	0.0299	25	09/18/2017 15:41	WG1020390
Hexachloro-1,3-butadiene	U		0.0102	0.0299	25	09/18/2017 15:41	WG1020390
2-Hexanone	U		0.0409	0.299	25	09/18/2017 15:41	WG1020390
n-Hexane	U		0.00867	0.299	25	09/18/2017 15:41	WG1020390



Collected date/time: 09/08/17 08:30

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.0755	0.299	25	09/18/2017 15:41	WG1020390
Isopropylbenzene	U		0.00727	0.0299	25	09/18/2017 15:41	WG1020390
p-Isopropyltoluene	U		0.00610	0.0299	25	09/18/2017 15:41	WG1020390
2-Butanone (MEK)	U		0.140	0.299	25	09/18/2017 15:41	WG1020390
Methylene Chloride	U		0.0299	0.149	25	09/18/2017 15:41	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.0562	0.299	25	09/18/2017 15:41	WG1020390
Methyl tert-butyl ether	U		0.00634	0.0299	25	09/18/2017 15:41	WG1020390
Naphthalene	U		0.0299	0.149	25	09/18/2017 15:41	WG1020390
n-Propylbenzene	U		0.00616	0.0299	25	09/18/2017 15:41	WG1020390
Styrene	U		0.00699	0.0299	25	09/18/2017 15:41	WG1020390
1,1,1,2-Tetrachloroethane	U		0.00789	0.0299	25	09/18/2017 15:41	WG1020390
1,1,2,2-Tetrachloroethane	U		0.0109	0.0299	25	09/18/2017 15:41	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.0109	0.0299	25	09/18/2017 15:41	WG1020390
Tetrachloroethene	U		0.00825	0.0299	25	09/18/2017 15:41	WG1020390
Toluene	U		0.0129	0.149	25	09/18/2017 15:41	WG1020390
1,2,3-Trichlorobenzene	U		0.00914	0.0299	25	09/18/2017 15:41	WG1020390
1,2,4-Trichlorobenzene	U		0.0116	0.0299	25	09/18/2017 15:41	WG1020390
1,1,1-Trichloroethane	U		0.00855	0.0299	25	09/18/2017 15:41	WG1020390
1,1,2-Trichloroethane	U		0.00827	0.0299	25	09/18/2017 15:41	WG1020390
Trichloroethene	U		0.00834	0.0299	25	09/18/2017 15:41	WG1020390
Trichlorofluoromethane	U		0.0114	0.149	25	09/18/2017 15:41	WG1020390
1,2,3-Trichloropropane	U		0.0221	0.0747	25	09/18/2017 15:41	WG1020390
1,2,4-Trimethylbenzene	U		0.00631	0.0299	25	09/18/2017 15:41	WG1020390
1,2,3-Trimethylbenzene	U		0.00858	0.0299	25	09/18/2017 15:41	WG1020390
1,3,5-Trimethylbenzene	U		0.00795	0.0299	25	09/18/2017 15:41	WG1020390
Vinyl acetate	U		0.0715	0.299	25	09/18/2017 15:41	WG1020390
Vinyl chloride	U		0.00870	0.0299	25	09/18/2017 15:41	WG1020390
Xylenes, Total	U		0.0208	0.0897	25	09/18/2017 15:41	WG1020390
(S) Toluene-d8	101			80.0-120		09/18/2017 15:41	WG1020390
(S) Dibromofluoromethane	95.3			74.0-131		09/18/2017 15:41	WG1020390
(S) 4-Bromofluorobenzene	101			64.0-132		09/18/2017 15:41	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L935266-09 WG1020390: Elevated RL. IS failed in both 1x analysis due to matrix interference. Reported from MEOH vial.



Collected date/time: 09/08/17 00:00

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/12/2017 13:44	WG1019184
Acrylonitrile	U		0.873	5.00	1	09/12/2017 13:44	WG1019184
Benzene	U		0.0896	0.500	1	09/12/2017 13:44	WG1019184
Bromobenzene	U		0.133	0.500	1	09/12/2017 13:44	WG1019184
Bromodichloromethane	U		0.0800	0.500	1	09/12/2017 13:44	WG1019184
Bromochloromethane	U		0.145	0.500	1	09/12/2017 13:44	WG1019184
Bromoform	U		0.186	0.500	1	09/12/2017 13:44	WG1019184
Bromomethane	U		0.157	2.50	1	09/12/2017 13:44	WG1019184
n-Butylbenzene	U		0.143	0.500	1	09/12/2017 13:44	WG1019184
sec-Butylbenzene	U		0.134	0.500	1	09/12/2017 13:44	WG1019184
tert-Butylbenzene	U		0.183	0.500	1	09/12/2017 13:44	WG1019184
Carbon disulfide	U		0.101	0.500	1	09/12/2017 13:44	WG1019184
Carbon tetrachloride	U		0.159	0.500	1	09/12/2017 13:44	WG1019184
Chlorobenzene	U		0.140	0.500	1	09/12/2017 13:44	WG1019184
Chlorodibromomethane	U		0.128	0.500	1	09/12/2017 13:44	WG1019184
Chloroethane	U		0.141	2.50	1	09/12/2017 13:44	WG1019184
Chloroform	U		0.0860	0.500	1	09/12/2017 13:44	WG1019184
Chloromethane	U		0.153	1.25	1	09/12/2017 13:44	WG1019184
2-Chlorotoluene	U		0.111	0.500	1	09/12/2017 13:44	WG1019184
4-Chlorotoluene	U		0.0972	0.500	1	09/12/2017 13:44	WG1019184
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/12/2017 13:44	WG1019184
1,2-Dibromoethane	U		0.193	0.500	1	09/12/2017 13:44	WG1019184
Dibromomethane	U		0.117	0.500	1	09/12/2017 13:44	WG1019184
1,2-Dichlorobenzene	U		0.101	0.500	1	09/12/2017 13:44	WG1019184
1,3-Dichlorobenzene	U		0.130	0.500	1	09/12/2017 13:44	WG1019184
1,4-Dichlorobenzene	U		0.121	0.500	1	09/12/2017 13:44	WG1019184
Dichlorodifluoromethane	U		0.127	2.50	1	09/12/2017 13:44	WG1019184
1,1-Dichloroethane	U		0.114	0.500	1	09/12/2017 13:44	WG1019184
1,2-Dichloroethane	U		0.108	0.500	1	09/12/2017 13:44	WG1019184
1,1-Dichloroethene	U		0.188	0.500	1	09/12/2017 13:44	WG1019184
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/12/2017 13:44	WG1019184
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/12/2017 13:44	WG1019184
1,2-Dichloropropane	U		0.190	0.500	1	09/12/2017 13:44	WG1019184
1,1-Dichloropropene	U		0.128	0.500	1	09/12/2017 13:44	WG1019184
1,3-Dichloropropane	U		0.147	1.00	1	09/12/2017 13:44	WG1019184
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/12/2017 13:44	WG1019184
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/12/2017 13:44	WG1019184
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/12/2017 13:44	WG1019184
2,2-Dichloropropane	U		0.0929	0.500	1	09/12/2017 13:44	WG1019184
Di-isopropyl ether	U		0.0924	0.500	1	09/12/2017 13:44	WG1019184
Ethylbenzene	U		0.158	0.500	1	09/12/2017 13:44	WG1019184
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/12/2017 13:44	WG1019184
2-Hexanone	U		0.757	5.00	1	09/12/2017 13:44	WG1019184
n-Hexane	U		0.305	5.00	1	09/12/2017 13:44	WG1019184
Iodomethane	U		0.377	10.0	1	09/12/2017 13:44	WG1019184
Isopropylbenzene	U		0.126	0.500	1	09/12/2017 13:44	WG1019184
p-Isopropyltoluene	U		0.138	0.500	1	09/12/2017 13:44	WG1019184
2-Butanone (MEK)	U		1.28	5.00	1	09/12/2017 13:44	WG1019184
Methylene Chloride	U		1.07	2.50	1	09/12/2017 13:44	WG1019184
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/12/2017 13:44	WG1019184
Methyl tert-butyl ether	U		0.102	0.500	1	09/12/2017 13:44	WG1019184
Naphthalene	U		0.174	2.50	1	09/12/2017 13:44	WG1019184
n-Propylbenzene	U		0.162	0.500	1	09/12/2017 13:44	WG1019184
Styrene	U		0.117	0.500	1	09/12/2017 13:44	WG1019184
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/12/2017 13:44	WG1019184
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/12/2017 13:44	WG1019184

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/08/17 00:00

L935266

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/12/2017 13:44	WG1019184
Tetrachloroethene	U		0.199	0.500	1	09/12/2017 13:44	WG1019184
Toluene	U		0.412	0.500	1	09/12/2017 13:44	WG1019184
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/12/2017 13:44	WG1019184
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/12/2017 13:44	WG1019184
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/12/2017 13:44	WG1019184
1,1,2-Trichloroethane	U		0.186	0.500	1	09/12/2017 13:44	WG1019184
Trichloroethene	0.690		0.153	0.500	1	09/12/2017 13:44	WG1019184
Trichlorofluoromethane	U		0.130	2.50	1	09/12/2017 13:44	WG1019184
1,2,3-Trichloropropane	U		0.247	2.50	1	09/12/2017 13:44	WG1019184
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/12/2017 13:44	WG1019184
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/12/2017 13:44	WG1019184
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/12/2017 13:44	WG1019184
Vinyl acetate	U		0.645	5.00	1	09/12/2017 13:44	WG1019184
Vinyl chloride	U		0.118	0.500	1	09/12/2017 13:44	WG1019184
Xylenes, Total	U		0.316	1.50	1	09/12/2017 13:44	WG1019184
(S) Toluene-d8	102			80.0-120		09/12/2017 13:44	WG1019184
(S) Dibromofluoromethane	101			76.0-123		09/12/2017 13:44	WG1019184
(S) 4-Bromofluorobenzene	101			80.0-120		09/12/2017 13:44	WG1019184

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3249490-1 09/14/17 13:28

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Total Solids 0.000900

L935266-03 Original Sample (OS) • Duplicate (DUP)

(OS) L935266-03 09/14/17 13:28 • (DUP) R3249490-3 09/14/17 13:28

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Total Solids 77.7 77.4 1 0.392 5

Laboratory Control Sample (LCS)

(LCS) R3249490-2 09/14/17 13:28

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	%

Total Solids 50.0 50.0 100 85.0-115

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Total Solids by Method 2540 G-2011

[L935266-01.02](#)

Method Blank (MB)

(MB) R3249769-1 09/15/17 09:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000	%	%	%

L935266-02 Original Sample (OS) • Duplicate (DUP)

(OS) L935266-02 09/15/17 09:48 • (DUP) R3249769-3 09/15/17 09:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	86.0	86.4	1	0.449	%	5

Laboratory Control Sample (LCS)

(LCS) R3249769-2 09/15/17 09:48

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

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1413.001.02.602

L935266

09/20/17 09:56

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Method Blank (MB)

(MB) R3249774-1	09/15/17	11:14	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%			%		
Total Solids	0.00100					

L935270-01 Original Sample (OS) • Duplicate (DUP)

(OS) L935270-01	09/15/17	11:14	• (DUP) R3249774-3	09/15/17	11:14	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Total Solids	77.5	81.2	1	4.63		5

Laboratory Control Sample (LCS)

(LCS) R3249774-2	09/15/17	11:14	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	%			%	%	%	
Total Solids	50.0	50.0	100			85.0-115	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L935266-01.02.09](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3249508-3 09/14/17 12:40				
TPHG C6 - C12	0.0413	J	0.0339	0.100
(S) <i>o,o</i> -Trifluorotoluene(FID)	95.3			77.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3249508-1 09/14/17 11:34 • (LCSD) R3249508-2 09/14/17 11:56										
TPHG C6 - C12	5.50	5.48	5.80	99.6	105	70.0-133			5.77	20
(S) <i>o,o</i> -Trifluorotoluene(FID)				108	108	77.0-120				

L935266-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount (dry)	Original Result (dry)	MS Result (dry)	MSD Result (dry)	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L935266-01 09/14/17 16:13 • (MS) R3249508-4 09/14/17 21:22 • (MSD) R3249508-5 09/14/17 21:44												
TPHG C6 - C12	6.38	1.29	128	140	79.2	86.9	25	10.0-146			9.19	30
(S) <i>o,o</i> -Trifluorotoluene(FID)					103	104		77.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

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Method Blank (MB)

(MB) R3248904-5 09/12/17 10:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L935266-10](#)

Method Blank (MB)

(MB) R3248904-5 09/12/17 10:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) 4-Bromofluorobenzene	101			80.0-120

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT: PES Environmental, Inc. - WA

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248904-1 09/12/17 09:08 • (LCSD) R3248904-2 09/12/17 09:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	156	149	125	120	10.0-160			4.06	23
Acrylonitrile	125	140	137	112	109	60.0-142			2.23	20
Benzene	25.0	25.6	25.7	102	103	69.0-123			0.680	20
Bromobenzene	25.0	23.3	23.7	93.3	94.9	79.0-120			1.75	20
Bromodichloromethane	25.0	25.7	25.9	103	104	76.0-120			0.980	20
Bromochloromethane	25.0	26.6	26.4	107	106	76.0-122			0.930	20
Bromoform	25.0	26.1	26.0	104	104	67.0-132			0.560	20
Bromomethane	25.0	25.4	24.9	102	99.7	18.0-160			2.03	20
n-Butylbenzene	25.0	26.8	27.1	107	108	72.0-126			1.34	20
sec-Butylbenzene	25.0	25.2	25.6	101	102	74.0-121			1.29	20
tert-Butylbenzene	25.0	24.7	25.1	99.0	100	75.0-122			1.31	20
Carbon disulfide	25.0	25.7	25.9	103	104	55.0-127			0.620	20
Carbon tetrachloride	25.0	24.6	24.9	98.5	99.5	63.0-122			0.990	20
Chlorobenzene	25.0	25.3	25.6	101	102	79.0-121			1.41	20
Chlorodibromomethane	25.0	26.4	26.5	106	106	75.0-125			0.610	20
Chloroethane	25.0	25.3	25.3	101	101	47.0-152			0.0500	20
Chloroform	25.0	25.9	25.8	103	103	72.0-121			0.100	20
Chloromethane	25.0	23.0	23.2	92.2	92.9	48.0-139			0.800	20
2-Chlorotoluene	25.0	24.5	24.6	98.0	98.5	74.0-122			0.580	20
4-Chlorotoluene	25.0	24.2	24.7	96.9	99.0	79.0-120			2.08	20
1,2-Dibromo-3-Chloropropane	25.0	24.7	24.5	98.7	98.2	64.0-127			0.560	20
1,2-Dibromoethane	25.0	26.2	26.3	105	105	77.0-123			0.480	20
Dibromomethane	25.0	26.1	26.2	104	105	78.0-120			0.520	20
1,2-Dichlorobenzene	25.0	25.2	25.3	101	101	80.0-120			0.510	20
1,3-Dichlorobenzene	25.0	25.2	25.0	101	99.9	72.0-123			0.750	20
1,4-Dichlorobenzene	25.0	24.3	24.7	97.3	98.9	77.0-120			1.62	20
Dichlorodifluoromethane	25.0	24.8	24.6	99.2	98.4	49.0-155			0.830	20
1,1-Dichloroethane	25.0	26.3	26.2	105	105	70.0-126			0.480	20
1,2-Dichloroethane	25.0	26.6	26.5	106	106	67.0-126			0.460	20
1,1-Dichloroethene	25.0	26.1	26.4	104	106	64.0-129			1.31	20
cis-1,2-Dichloroethene	25.0	25.7	25.6	103	102	73.0-120			0.400	20
trans-1,2-Dichloroethene	25.0	25.9	26.1	104	104	71.0-121			0.590	20
1,2-Dichloropropane	25.0	26.9	27.0	108	108	75.0-125			0.380	20
1,1-Dichloropropene	25.0	26.0	26.3	104	105	71.0-129			1.29	20
1,3-Dichloropropene	25.0	25.5	26.1	102	104	80.0-121			2.05	20
cis-1,3-Dichloropropene	25.0	28.7	29.0	115	116	79.0-123			0.900	20
trans-1,3-Dichloropropene	25.0	28.4	28.5	114	114	74.0-127			0.140	20
trans-1,4-Dichloro-2-butene	25.0	22.9	23.2	91.4	92.9	55.0-134			1.56	20
2,2-Dichloropropane	25.0	24.9	24.7	99.7	98.9	60.0-125			0.760	20
Di-isopropyl ether	25.0	26.2	26.1	105	104	59.0-133			0.410	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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PES Environmental, Inc.- WA

PROJECT:

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248904-1 09/12/17 09:08 • (LCSD) R3248904-2 09/12/17 09:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.8	25.3	99.2	101	77.0-120			1.78	20
Hexachloro-1,3-butadiene	25.0	27.3	27.6	109	111	64.0-131			1.20	20
2-Hexanone	125	144	146	115	117	58.0-147			1.17	20
n-Hexane	25.0	27.1	27.5	109	110	56.0-124			1.52	20
Iodomethane	125	134	133	107	107	57.0-140			0.180	20
Isopropylbenzene	25.0	24.2	24.8	96.7	99.2	75.0-120			2.61	20
p-Isopropyltoluene	25.0	26.3	26.5	105	106	74.0-126			0.800	20
2-Butanone (MEK)	125	119	118	94.8	94.4	37.0-158			0.420	20
Methylene Chloride	25.0	25.8	25.8	103	103	66.0-121			0.0800	20
4-Methyl-2-pentanone (MIBK)	125	137	137	110	110	59.0-143			0.0500	20
Methyl tert-butyl ether	25.0	25.5	25.3	102	101	64.0-123			0.810	20
Naphthalene	25.0	24.5	25.1	98.2	100	62.0-128			2.12	20
n-Propylbenzene	25.0	24.9	25.4	99.7	102	79.0-120			1.84	20
Styrene	25.0	25.5	25.9	102	104	78.0-124			1.65	20
1,1,1,2-Tetrachloroethane	25.0	25.5	25.6	102	103	75.0-122			0.540	20
1,1,2,2-Tetrachloroethane	25.0	26.0	26.2	104	105	71.0-122			0.750	20
1,1,2-Trichlorotrifluoroethane	25.0	26.8	26.9	107	108	61.0-136			0.410	20
Tetrachloroethene	25.0	24.8	25.2	99.3	101	70.0-127			1.36	20
Toluene	25.0	24.6	24.9	98.2	99.5	77.0-120			1.34	20
1,2,3-Trichlorobenzene	25.0	27.7	28.0	111	112	61.0-133			1.02	20
1,2,4-Trichlorobenzene	25.0	27.4	27.2	110	109	69.0-129			0.550	20
1,1,1-Trichloroethane	25.0	25.8	26.0	103	104	68.0-122			0.620	20
1,1,2-Trichloroethane	25.0	26.2	26.1	105	104	78.0-120			0.360	20
Trichloroethene	25.0	24.5	25.2	98.1	101	78.0-120			2.54	20
Trichlorofluoromethane	25.0	25.7	25.6	103	103	56.0-137			0.430	20
1,2,3-Trichloropropane	25.0	25.6	25.4	102	101	72.0-124			0.870	20
1,2,4-Trimethylbenzene	25.0	25.2	25.1	101	100	75.0-120			0.420	20
1,2,3-Trimethylbenzene	25.0	23.2	23.3	92.9	93.1	75.0-120			0.170	20
1,3,5-Trimethylbenzene	25.0	24.5	25.0	97.9	100	75.0-120			2.06	20
Vinyl acetate	125	177	175	141	140	46.0-160			0.720	20
Vinyl chloride	25.0	25.1	25.2	100	101	64.0-133			0.370	20
Xylenes, Total	75.0	75.2	76.4	100	102	77.0-120			1.58	20
(S) Toluene-d8				102	101	80.0-120				
(S) Dibromofluoromethane				103	101	76.0-123				
(S) 4-Bromofluorobenzene				101	101	80.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Method Blank (MB)

(MB) R3248785-3 09/12/17 11:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L935266-01.02.03.04.05.06.07](#)

Method Blank (MB)

(MB) R3248785-3 09/12/17 11:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
2-Hexanone	U		0.00137	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	0.00232	J	0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Naphthalene	U		0.00100	0.00500
Methyl tert-butyl ether	U		0.000212	0.00100
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	94.7			74.0-131
(S) 4-Bromofluorobenzene	97.1			64.0-132

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248785-1 09/12/17 10:27 • (LCSD) R3248785-6 09/12/17 20:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0613	0.0800	49.1	64.0	11.0-160		J3	26.4	23
Benzene	0.0250	0.0240	0.0273	96.0	109	71.0-124			12.8	20
Acrylonitrile	0.125	0.113	0.121	90.7	97.1	61.0-143			6.84	20
Bromobenzene	0.0250	0.0199	0.0220	79.7	88.0	78.0-120			10.0	20
Bromodichloromethane	0.0250	0.0200	0.0226	80.1	90.6	75.0-120			12.3	20
Bromochloromethane	0.0250	0.0240	0.0264	96.0	106	80.0-121			9.54	20
Bromoform	0.0250	0.0209	0.0227	83.4	90.8	65.0-133			8.51	20
Bromomethane	0.0250	0.0204	0.0236	81.6	94.5	26.0-160			14.6	20
n-Butylbenzene	0.0250	0.0211	0.0244	84.6	97.7	73.0-126			14.4	20
sec-Butylbenzene	0.0250	0.0224	0.0255	89.6	102	75.0-121			12.8	20
tert-Butylbenzene	0.0250	0.0223	0.0251	89.2	100	74.0-122			11.8	20
Carbon disulfide	0.0250	0.0221	0.0246	88.3	98.2	53.0-130			10.7	20
Carbon tetrachloride	0.0250	0.0198	0.0225	79.1	90.1	66.0-123			13.0	20
Chlorobenzene	0.0250	0.0240	0.0274	95.9	110	79.0-121			13.2	20
Chlorodibromomethane	0.0250	0.0222	0.0242	88.6	96.8	74.0-128			8.84	20
Chloroethane	0.0250	0.0191	0.0221	76.6	88.4	51.0-147			14.3	20
Chloroform	0.0250	0.0217	0.0249	86.9	99.5	73.0-123			13.4	20
Chloromethane	0.0250	0.0246	0.0285	98.2	114	51.0-138			14.9	20
2-Chlorotoluene	0.0250	0.0206	0.0235	82.3	94.1	72.0-124			13.3	20
4-Chlorotoluene	0.0250	0.0204	0.0234	81.4	93.7	78.0-120			14.0	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0198	0.0211	79.4	84.6	65.0-126			6.35	20
1,2-Dibromoethane	0.0250	0.0231	0.0249	92.3	99.4	78.0-122			7.39	20
Dibromomethane	0.0250	0.0204	0.0226	81.5	90.4	79.0-120			10.4	20
1,2-Dichlorobenzene	0.0250	0.0225	0.0256	90.1	102	80.0-120			12.6	20
1,3-Dichlorobenzene	0.0250	0.0226	0.0261	90.5	105	72.0-123			14.4	20
1,4-Dichlorobenzene	0.0250	0.0210	0.0243	83.9	97.1	77.0-120			14.7	20
Dichlorodifluoromethane	0.0250	0.0196	0.0232	78.4	92.9	49.0-155			16.9	20
trans-1,4-Dichloro-2-butene	0.0250	0.0145	0.0152	58.0	60.7	68.0-126	J4	J4	4.64	20
1,1-Dichloroethane	0.0250	0.0230	0.0262	92.1	105	70.0-128			12.8	20
1,2-Dichloroethane	0.0250	0.0168	0.0187	67.3	74.8	69.0-128	J4		10.4	20
1,1-Dichloroethene	0.0250	0.0223	0.0257	89.2	103	63.0-131			14.1	20
cis-1,2-Dichloroethene	0.0250	0.0233	0.0264	93.2	106	74.0-123			12.5	20
trans-1,2-Dichloroethene	0.0250	0.0243	0.0279	97.1	112	72.0-122			13.9	20
1,2-Dichloropropane	0.0250	0.0238	0.0269	95.4	108	75.0-126			12.1	20
1,1-Dichloropropene	0.0250	0.0220	0.0246	88.2	98.6	72.0-130			11.1	20
1,3-Dichloropropene	0.0250	0.0222	0.0241	88.8	96.5	80.0-121			8.32	20
cis-1,3-Dichloropropene	0.0250	0.0217	0.0243	87.0	97.4	80.0-125			11.3	20
trans-1,3-Dichloropropene	0.0250	0.0204	0.0223	81.6	89.0	75.0-129			8.75	20
2,2-Dichloropropane	0.0250	0.0218	0.0250	87.1	100	60.0-129			13.9	20
Ethylbenzene	0.0250	0.0242	0.0278	97.0	111	77.0-120			13.6	20

Public Review Draft

CP TC SS Cn Sr QC Gl AI Sc

ACCOUNT:

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PROJECT:

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3248785-1 09/12/17 10:27 • (LCSD) R3248785-6 09/12/17 20:06

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0250	0.0251	0.0278	100	111	62.0-133			10.1	20
2-Hexanone	0.125	0.0941	0.106	75.3	85.2	61.0-143			12.3	20
Hexachloro-1,3-butadiene	0.0250	0.0232	0.0258	92.9	103	68.0-128			10.7	20
Isopropylbenzene	0.0250	0.0217	0.0246	86.6	98.4	75.0-120			12.7	20
n-Hexane	0.0250	0.0259	0.0284	103	114	57.0-125			9.38	20
Iodomethane	0.125	0.119	0.140	94.8	112	67.0-132			16.6	20
p-Isopropyltoluene	0.0250	0.0221	0.0252	88.2	101	74.0-125			13.3	20
2-Butanone (MEK)	0.125	0.0798	0.0933	63.8	74.6	37.0-159			15.6	20
Methylene Chloride	0.0250	0.0227	0.0254	90.7	102	67.0-123			11.3	20
4-Methyl-2-pentanone (MIBK)	0.125	0.100	0.105	80.4	83.7	60.0-144			4.00	20
Methyl tert-butyl ether	0.0250	0.0210	0.0217	83.9	87.0	66.0-125			3.59	20
n-Propylbenzene	0.0250	0.0218	0.0249	87.3	99.7	78.0-120			13.2	20
Styrene	0.0250	0.0241	0.0272	96.6	109	78.0-124			11.9	20
1,1,1,2-Tetrachloroethane	0.0250	0.0239	0.0267	95.5	107	74.0-124			11.2	20
Naphthalene	0.0250	0.0191	0.0203	76.3	81.3	64.0-125			6.32	20
1,1,2,2-Tetrachloroethane	0.0250	0.0217	0.0234	86.7	93.6	73.0-120			7.67	20
Tetrachloroethene	0.0250	0.0262	0.0304	105	122	70.0-127			15.0	20
Toluene	0.0250	0.0240	0.0269	95.9	108	77.0-120			11.6	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0219	0.0259	87.4	104	64.0-135			16.9	20
1,2,3-Trichlorobenzene	0.0250	0.0206	0.0224	82.5	89.8	68.0-126			8.39	20
1,2,4-Trichlorobenzene	0.0250	0.0205	0.0240	82.2	95.9	70.0-127			15.4	20
1,1,1-Trichloroethane	0.0250	0.0218	0.0251	87.0	100	69.0-125			14.2	20
1,1,2-Trichloroethane	0.0250	0.0232	0.0252	92.7	101	78.0-120			8.29	20
Trichloroethene	0.0250	0.0236	0.0265	94.2	106	79.0-120			11.9	20
Trichlorofluoromethane	0.0250	0.0197	0.0226	78.6	90.5	59.0-136			14.0	20
1,2,3-Trichloropropane	0.0250	0.0189	0.0201	75.7	80.3	73.0-124			5.93	20
1,2,4-Trimethylbenzene	0.0250	0.0205	0.0235	81.9	93.9	75.0-120			13.5	20
1,3,5-Trimethylbenzene	0.0250	0.0213	0.0243	85.4	97.3	75.0-120			13.0	20
1,2,3-Trimethylbenzene	0.0250	0.0195	0.0219	78.1	87.5	76.0-120			11.4	20
Vinyl acetate	0.125	0.115	0.121	91.7	96.8	58.0-156			5.40	20
Vinyl chloride	0.0250	0.0224	0.0261	89.7	104	63.0-134			15.1	20
Xylenes, Total	0.0750	0.0741	0.0839	98.8	112	77.0-120			12.4	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										
	95.6		93.2			64.0-132				

Public Review Draft



Volatile Organic Compounds (GC/MS) by Method 8260C

[L935266-01.02.03.04.05.06.07](#)

L935438-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L935438-01 09/12/17 16:58 • (MS) R3248785-4 09/12/17 15:51 • (MSD) R3248785-5 09/12/17 16:13

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.208	U	0.0418	0.0488	20.1	23.5	1	10.0-160			15.3	36
Benzene	0.0415	U	0.00775	0.00887	18.7	21.3	1	13.0-146			13.4	27
Bromobenzene	0.0415	U	0.0139	0.0157	33.5	37.8	1	10.0-149			12.2	33
Bromodichloromethane	0.0415	U	0.0141	0.0162	34.0	38.9	1	15.0-142			13.4	28
Acrylonitrile	0.208	U	0.0875	0.106	42.2	50.8	1	14.0-160			18.6	33
Bromochloromethane	0.0415	U	0.00851	0.0104	20.5	25.0	1	24.0-146	J6		19.8	27
Bromoform	0.0415	U	0.0159	0.0200	38.2	48.1	1	10.0-147			22.9	31
Bromomethane	0.0415	U	ND	ND	0.000	0.000	1	10.0-160	J6	J6	0.000	32
n-Butylbenzene	0.0415	U	0.0169	0.0186	40.6	44.8	1	10.0-154			9.86	37
sec-Butylbenzene	0.0415	U	0.0778	0.0196	42.9	47.1	1	10.0-151			9.30	36
tert-Butylbenzene	0.0415	U	0.0778	0.0200	42.8	48.1	1	10.0-152			11.6	35
Carbon disulfide	0.0415	U	ND	ND	0.000	0.000	1	10.0-141	J6	J6	0.000	30
Carbon tetrachloride	0.0415	U	0.00807	0.00910	19.4	21.9	1	13.0-140			12.0	30
Chlorobenzene	0.0415	U	0.0138	0.0156	33.3	37.4	1	10.0-149			11.6	31
Chlorodibromomethane	0.0415	U	0.0164	0.0185	39.5	44.6	1	12.0-147			12.2	29
Chloroethane	0.0415	U	0.00201	0.00236	4.83	5.69	1	10.0-159	J6	J6	16.3	33
Chloroform	0.0415	U	0.0134	0.0154	32.2	37.0	1	18.0-148			13.9	28
Chloromethane	0.0415	U	0.00111	0.00105	2.67	2.53	1	10.0-146	J6	J6	5.43	29
2-Chlorotoluene	0.0415	U	0.0147	0.0166	35.5	40.1	1	10.0-151			12.1	35
4-Chlorotoluene	0.0415	U	0.0150	0.0170	36.0	40.9	1	10.0-150			12.7	35
1,2-Dibromo-3-Chloropropane	0.0415	U	0.0203	0.0255	48.9	61.4	1	10.0-149			22.6	34
1,2-Dibromoethane	0.0415	U	0.0127	0.0152	30.5	36.6	1	14.0-145			18.2	28
Dibromomethane	0.0415	U	0.00969	0.0119	23.3	28.5	1	18.0-144			20.2	27
1,2-Dichlorobenzene	0.0415	U	0.0177	0.0204	42.6	49.0	1	10.0-153			14.0	34
1,3-Dichlorobenzene	0.0415	U	0.0171	0.0190	41.2	45.7	1	10.0-150			10.5	35
1,4-Dichlorobenzene	0.0415	U	0.0163	0.0184	39.3	44.3	1	10.0-148			12.1	34
Dichlorodifluoromethane	0.0415	U	0.00233	0.00255	5.61	6.14	1	10.0-160	J6	J6	9.07	30
1,1-Dichloroethane	0.0415	U	0.0107	0.0124	25.8	29.8	1	19.0-148			14.3	28
1,2-Dichloroethane	0.0415	U	0.00828	0.00964	19.9	23.2	1	17.0-147			15.1	27
trans-1,4-Dichloro-2-butene	0.0415	U	0.0129	0.0170	31.2	40.9	1	10.0-160			27.0	40
1,1-Dichloroethene	0.0415	U	0.00332	0.00391	7.98	9.41	1	10.0-150	J6	J6	16.4	31
cis-1,2-Dichloroethene	0.0415	U	0.00956	0.0109	23.0	26.2	1	16.0-145			13.0	28
trans-1,2-Dichloroethene	0.0415	U	0.00339	0.00387	8.17	9.31	1	11.0-142	J6	J6	13.1	29
1,2-Dichloropropane	0.0415	U	0.0141	0.0163	34.0	39.2	1	17.0-148			14.2	28
1,1-Dichloropropene	0.0415	U	0.00479	0.00551	11.5	13.3	1	10.0-150			14.0	30
1,3-Dichloropropene	0.0415	U	0.0135	0.0163	32.4	39.1	1	16.0-148			18.8	27
cis-1,3-Dichloropropene	0.0415	U	0.0109	0.0127	26.3	30.6	1	13.0-150			15.3	28
trans-1,3-Dichloropropene	0.0415	U	0.0114	0.0134	27.5	32.2	1	10.0-152			15.8	29
2,2-Dichloropropene	0.0415	U	0.0124	0.0145	29.7	34.8	1	16.0-143			15.8	30

Public Review Draft

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L935438-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

[L935266-01.02.03.04.05.06.07](#)

(OS) L935438-01 09/12/17 16:58 • (MS) R3248785-4 09/12/17 15:51 • (MSD) R3248785-5 09/12/17 16:13

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0415	U	0.0134	0.0149	32.3	36.0	1	10.0-147			10.8	31
Di-isopropyl ether	0.0415	U	0.0164	0.0187	39.5	45.1	1	16.0-149			13.3	28
2-Hexanone	0.208	U	0.0823	0.102	39.6	49.1	1	12.0-158			21.4	30
Hexachloro-1,3-butadiene	0.0415	U	0.0197	0.0213	47.3	51.2	1	10.0-154			7.94	40
Isopropylbenzene	0.0415	U	0.0149	0.0168	35.9	40.4	1	10.0-147			11.9	33
p-Isopropyltoluene	0.0415	U	0.0173	0.0190	41.6	45.8	1	10.0-156			9.64	37
2-Butanone (MEK)	0.208	U	0.0585	0.0714	28.2	34.4	1	10.0-160			19.9	33
n-Hexane	0.0415	U	0.00238	0.00235	5.72	5.66	1	10.0-140	J6	J6	1.15	34
Iodomethane	0.208	U	0.0133	0.0154	6.42	7.44	1	10.0-157	J6	J6	14.6	34
Methylene Chloride	0.0415	U	0.00624	0.00739	15.0	17.8	1	16.0-139	J6		16.9	29
4-Methyl-2-pentanone (MIBK)	0.208	U	0.0888	0.109	42.8	52.7	1	12.0-160			20.8	32
Methyl tert-butyl ether	0.0415	U	0.0133	0.0165	32.1	39.6	1	21.0-145			21.1	29
n-Propylbenzene	0.0415	U	0.0150	0.0169	36.1	40.8	1	10.0-151			12.1	34
Styrene	0.0415	U	0.0155	0.0139	37.4	33.4	1	10.0-155			11.3	34
1,1,1,2-Tetrachloroethane	0.0415	U	0.0181	0.0207	43.7	49.9	1	10.0-147			13.3	30
1,1,2,2-Tetrachloroethane	0.0415	U	0.0195	0.0242	46.9	58.2	1	10.0-155			21.6	31
Naphthalene	0.0415	U	0.0175	0.0211	42.2	50.8	1	10.0-153			18.5	36
Tetrachloroethene	0.0415	U	0.00792	0.00898	19.1	21.6	1	10.0-144			12.5	32
Toluene	0.0415	U	0.00928	0.0105	22.3	25.4	1	10.0-144			12.8	28
1,1,2-Trichlorotrifluoroethane	0.0415	U	0.00880	0.0100	21.2	24.2	1	10.0-153			13.3	33
1,2,3-Trichlorobenzene	0.0415	U	0.0170	0.0199	40.9	47.8	1	10.0-153			15.7	40
1,2,4-Trichlorobenzene	0.0415	U	0.0176	0.0201	42.4	48.3	1	10.0-156			13.2	40
1,1,1-Trichloroethane	0.0415	U	0.0112	0.0128	27.0	30.9	1	18.0-145			13.6	29
1,1,2-Trichloroethane	0.0415	U	0.0167	0.0200	40.2	48.1	1	12.0-151			17.9	28
Trichloroethene	0.0415	0.00298	0.0109	0.0117	19.1	21.0	1	11.0-148			6.76	29
Trichlorofluoromethane	0.0415	U	0.00471	0.00542	11.3	13.0	1	10.0-157			14.0	34
1,2,3-Trichloropropane	0.0415	U	0.0167	0.0202	40.1	48.6	1	10.0-154			19.1	32
1,2,4-Trimethylbenzene	0.0415	U	0.0152	0.0169	36.6	40.6	1	10.0-151			10.3	34
1,3,5-Trimethylbenzene	0.0415	U	0.0150	0.0167	36.0	40.1	1	10.0-150			10.7	33
Vinyl acetate	0.208	U	0.0570	0.0667	27.4	32.1	1	10.0-160			15.7	40
Vinyl chloride	0.0415	U	0.00116	0.00133	2.80	3.20	1	10.0-150	J6	J6	13.2	29
1,2,3-Trimethylbenzene	0.0415	U	0.0154	0.0177	37.1	42.6	1	10.0-150			13.9	33
Xylenes, Total	0.125	U	0.0410	0.0450	32.9	36.1	1	10.0-150			9.27	31
(S) Toluene-d8					98.1	96.8		80.0-120				
(S) Dibromofluoromethane					100	102		74.0-131				
(S) 4-Bromofluorobenzene					93.7	94.8		64.0-132				

Public Review Draft

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Method Blank (MB)

(MB) R325016-3 09/14/17 12:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R3250116-3 09/14/17 12:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	107		80.0-120	
(S) Dibromofluoromethane	92.1		74.0-131	
(S) 4-Bromofluorobenzene	87.5		64.0-132	

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3250116-1 09/14/17 10:41 • (LCSD) R3250116-2 09/14/17 11:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0741	0.0814	59.3	65.1	11.0-160			9.34	23
Acrylonitrile	0.125	0.0983	0.0967	78.7	77.4	61.0-143			1.65	20
Benzene	0.0250	0.0209	0.0215	83.7	85.8	71.0-124			2.47	20
Bromobenzene	0.0250	0.0197	0.0210	78.9	83.8	78.0-120			6.08	20
Bromodichloromethane	0.0250	0.0221	0.0227	88.2	90.9	75.0-120			2.99	20
Bromochloromethane	0.0250	0.0231	0.0225	92.5	90.2	80.0-121			2.57	20
Bromoform	0.0250	0.0229	0.0240	91.5	95.8	65.0-133			4.63	20
Bromomethane	0.0250	0.0189	0.0203	75.4	81.2	26.0-160			7.35	20
n-Butylbenzene	0.0250	0.0211	0.0223	84.4	89.2	73.0-126			5.52	20
sec-Butylbenzene	0.0250	0.0210	0.0222	83.8	89.0	75.0-121			6.00	20
tert-Butylbenzene	0.0250	0.0210	0.0226	84.0	90.4	74.0-122			7.28	20
Carbon disulfide	0.0250	0.0193	0.0207	77.4	82.9	53.0-130			6.90	20
Carbon tetrachloride	0.0250	0.0212	0.0224	84.9	89.4	66.0-123			5.21	20
Chlorobenzene	0.0250	0.0248	0.0273	99.2	109	79.0-121			9.77	20
Chlorodibromomethane	0.0250	0.0245	0.0268	97.9	107	74.0-128			9.18	20
Chloroethane	0.0250	0.0173	0.0187	69.3	75.0	51.0-147			7.88	20
Chloroform	0.0250	0.0208	0.0219	83.1	87.4	73.0-123			5.00	20
Chloromethane	0.0250	0.0154	0.0166	61.8	66.3	51.0-138			7.08	20
2-Chlorotoluene	0.0250	0.0207	0.0220	82.7	87.8	72.0-124			5.97	20
4-Chlorotoluene	0.0250	0.0198	0.0213	79.3	85.2	78.0-120			7.23	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0225	0.0228	90.2	91.0	65.0-126			0.960	20
1,2-Dibromoethane	0.0250	0.0244	0.0259	97.8	104	78.0-122			5.86	20
Dibromomethane	0.0250	0.0219	0.0232	87.5	92.7	79.0-120			5.72	20
1,2-Dichlorobenzene	0.0250	0.0229	0.0244	91.4	97.4	80.0-120			6.39	20
1,3-Dichlorobenzene	0.0250	0.0232	0.0245	92.8	98.0	72.0-123			5.48	20
1,4-Dichlorobenzene	0.0250	0.0212	0.0224	84.9	89.8	77.0-120			5.57	20
trans-1,4-Dichloro-2-butene	0.0250	0.0213	0.0190	85.0	76.2	68.0-126			10.9	20
Dichlorodifluoromethane	0.0250	0.0186	0.0199	74.4	79.8	49.0-155			6.92	20
1,1-Dichloroethane	0.0250	0.0215	0.0215	85.9	86.0	70.0-128			0.120	20
1,2-Dichloroethane	0.0250	0.0219	0.0214	87.6	85.8	69.0-128			2.10	20
1,1-Dichloroethene	0.0250	0.0195	0.0211	77.9	84.4	63.0-131			8.00	20
cis-1,2-Dichloroethene	0.0250	0.0198	0.0206	79.1	82.2	74.0-123			3.81	20
trans-1,2-Dichloroethene	0.0250	0.0200	0.0208	79.9	83.2	72.0-122			4.04	20
1,2-Dichloropropane	0.0250	0.0220	0.0229	87.8	91.5	75.0-126			4.14	20
1,1-Dichloropropene	0.0250	0.0210	0.0215	84.0	86.0	72.0-130			2.31	20
1,3-Dichloropropene	0.0250	0.0243	0.0261	97.0	104	80.0-121			7.38	20
cis-1,3-Dichloropropene	0.0250	0.0259	0.0277	103	111	80.0-125			6.82	20
trans-1,3-Dichloropropene	0.0250	0.0261	0.0277	104	111	75.0-129			5.93	20
2,2-Dichloropropane	0.0250	0.0204	0.0212	81.7	84.6	60.0-129			3.54	20
Di-isopropyl ether	0.0250	0.0189	0.0191	75.6	76.5	62.0-133			1.13	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3250116-1 09/14/17 10:41 • (LCSD) R3250116-2 09/14/17 11:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0231	0.0250	92.5	100	77.0-120			7.86	20
Hexachloro-1,3-butadiene	0.0250	0.0238	0.0254	95.4	101	68.0-128			6.11	20
2-Hexanone	0.125	0.109	0.112	87.2	89.3	61.0-143			2.28	20
n-Hexane	0.0250	0.0175	0.0188	70.0	75.2	57.0-125			7.13	20
Iodomethane	0.125	0.126	0.132	101	106	67.0-132			5.09	20
Isopropylbenzene	0.0250	0.0204	0.0218	81.6	87.0	75.0-120			6.42	20
p-Isopropyltoluene	0.0250	0.0218	0.0234	87.3	93.7	74.0-125			7.08	20
2-Butanone (MEK)	0.125	0.0952	0.0907	76.2	72.5	37.0-159			4.89	20
Methylene Chloride	0.0250	0.0189	0.0198	75.7	79.3	67.0-123			4.69	20
4-Methyl-2-pentanone (MIBK)	0.125	0.111	0.113	89.1	90.1	60.0-144			1.10	20
Methyl tert-butyl ether	0.0250	0.0196	0.0205	78.2	81.9	66.0-125			4.51	20
Naphthalene	0.0250	0.0204	0.0222	81.8	88.7	64.0-125			8.17	20
n-Propylbenzene	0.0250	0.0205	0.0220	82.1	88.0	78.0-120			6.95	20
Styrene	0.0250	0.0212	0.0226	84.9	90.5	78.0-124			6.43	20
1,1,1,2-Tetrachloroethane	0.0250	0.0237	0.0258	94.8	103	74.0-124			8.69	20
1,1,2,2-Tetrachloroethane	0.0250	0.0199	0.0209	79.4	83.6	73.0-120			5.08	20
Tetrachloroethene	0.0250	0.0268	0.0291	107	116	70.0-127			8.13	20
Toluene	0.0250	0.0223	0.0240	89.1	96.1	77.0-120			7.63	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0205	0.0219	82.1	87.6	64.0-135			6.48	20
1,2,3-Trichlorobenzene	0.0250	0.0233	0.0253	93.3	101	68.0-126			8.24	20
1,2,4-Trichlorobenzene	0.0250	0.0236	0.0249	94.3	99.7	70.0-127			5.59	20
1,1,1-Trichloroethane	0.0250	0.0207	0.0214	83.0	85.7	69.0-125			3.24	20
1,1,2-Trichloroethane	0.0250	0.0226	0.0243	90.3	97.1	78.0-120			7.23	20
Trichloroethene	0.0250	0.0238	0.0249	95.4	99.7	79.0-120			4.47	20
Trichlorofluoromethane	0.0250	0.0229	0.0241	91.5	96.2	59.0-136			4.98	20
1,2,3-Trichloropropane	0.0250	0.0202	0.0210	80.9	84.2	73.0-124			3.98	20
1,2,3-Trimethylbenzene	0.0250	0.0193	0.0205	77.1	82.0	76.0-120			6.13	20
1,2,4-Trimethylbenzene	0.0250	0.0194	0.0206	77.6	82.4	75.0-120			5.99	20
1,3,5-Trimethylbenzene	0.0250	0.0205	0.0223	82.1	89.1	75.0-120			8.17	20
Vinyl acetate	0.125	0.111	0.110	88.8	88.4	58.0-156			0.510	20
Vinyl chloride	0.0250	0.0199	0.0211	79.7	84.2	63.0-134			5.52	20
Xylenes, Total	0.0750	0.0683	0.0740	91.1	98.7	77.0-120			8.01	20
<i>(S) Toluene-d8</i>										
				106	109	80.0-120				
<i>(S) Dibromofluoromethane</i>										
				92.7	90.8	74.0-131				
<i>(S) 4-Bromofluorobenzene</i>										
				87.9	87.3	64.0-132				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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- 2 Tc
- 3 Ss
- 4 Cn
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Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

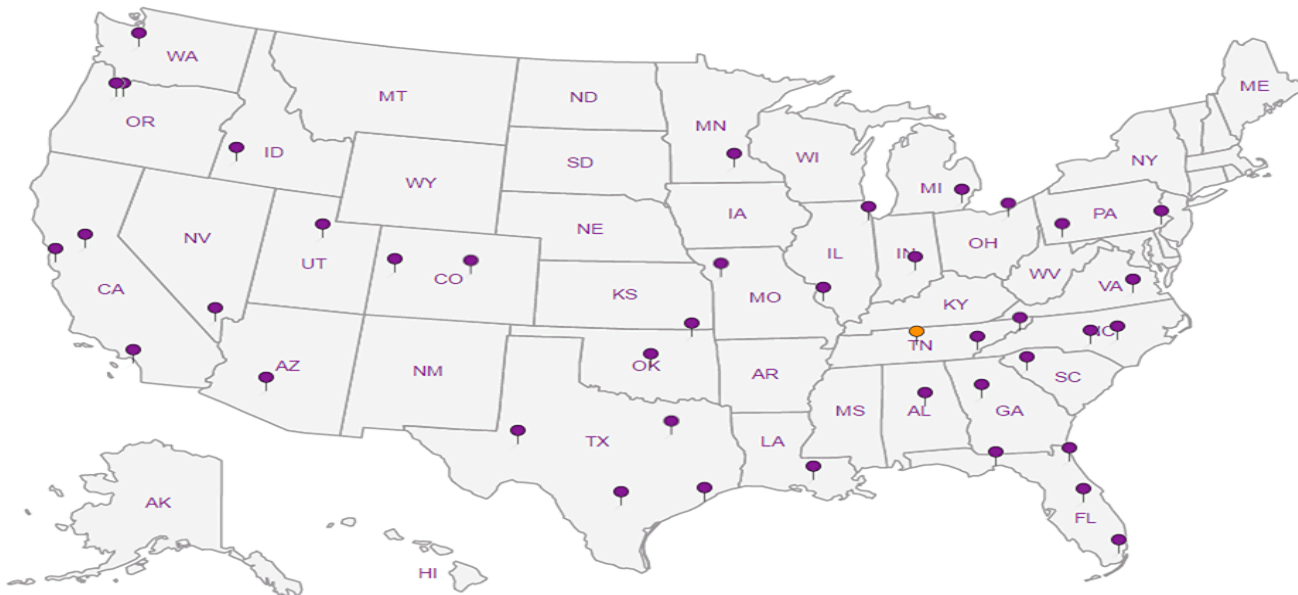
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1
Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Gl

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Al

9
Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeman

Email To: bhaldeman@pesenv.com

Project Description: **American Linen Project**

City/State Collected: **SEATTLE, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #: **1413.001.02.602**

Lab Project #: **PESENVSWA-ALP**

Collected by (print): **SHANNON MCKERMAN**

Site/Facility ID #: **1413.001.02.602**

P.O. #

Collected by (signature): *[Signature]*

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on Ice N Y X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of Ctr's

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Ctr's

Analysis / Container / Preservative

Temp

°C

Bottles Received:

Hold:

Condition:

B-212-065

GRAB

SS

05

9/8/17

1230

5

NWTPHGX 2ozClr-NoPres

5

39

0845

01

01

B-212-75

SS

75

1350

5

TS 4ozClr-NoPres

5

39

0845

02

02

B-214-065

SS

65

1030

48

V8260C 40ml/NaHSO4/Syr/MeOH

5

39

0845

03

03

B-214-75

SS

75

1110

48

V8260C 40ml/NaHSO4/Syr/MeOH

5

39

0845

04

04

B-214-85

SS

85

1155

48

V8260C 40ml/NaHSO4/Syr/MeOH

5

39

0845

05

05

B-908-100

SS

100

1230

48

V8260C 40ml/NaHSO4/Syr/MeOH

5

39

0845

06

06

B-214-95

SS

95

1310

48

V8260C 40ml/NaHSO4/Syr/MeOH

5

39

0845

07

07

B-214-105

SS

105

1400

48

V8260C 40ml/NaHSO4/Syr/MeOH

5

39

0845

08

08

B-907-25

SS

25

0930

5

V8260C 40ml/NaHSO4/Syr/MeOH

5

39

0845

09

09

TRIPBLANK-090817

NA

NA

NA

5/10/17

NA

V8260C 40ml/NaHSO4/Syr/MeOH

1

39

0845

10

10

Matrix:

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks:

Sample returned via:

UPS FedEx Courier

Tracking # **9474 0921 0968**

Received by: (Signature)

Trip Blank Received: (Yes/No)

pH _____ Temp _____

Flow _____ Other _____

Sample Receipt Checklist

COC Seal Present/Intact:
COC Signed/Accurate:
Bottles arrive intact:
Correct bottles used:
Sufficient volume used:
If Applicable

VQA Zero Headspace:
preservation correct/checked:

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Condition: NCF COX



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-367-5859
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L# **1935266**

Table # **B184**

Account: **PESENVSWA**

Template: **T126584**

Prelogin: **P615998**

TSR: **110 - Brian Ford**

PR: **8.31.17 CM**

Shipped Via: **FedEx Ground**

Remarks: **Sample 8 (lab only)**

September 20, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L936064
Samples Received: 09/13/2017
Project Number: 141-001-02-602
Description: American Linen Project
Site: 1413-001-02-602
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



B-212-85 L936064-01 Solid

Collected by Shannon McKernan
Collected date/time 09/11/17 11:00
Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1020572	1	09/11/17 11:00	09/15/17 00:57	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020560	1	09/11/17 11:00	09/14/17 21:58	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020560	25	09/11/17 11:00	09/15/17 14:05	ACG

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

B-214-115 L936064-02 Solid

Collected by Shannon McKernan
Collected date/time 09/11/17 11:10
Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021103	1	09/16/17 10:22	09/16/17 10:30	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020560	1	09/11/17 11:10	09/14/17 22:15	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020560	1	09/11/17 11:10	09/15/17 14:25	ACG

B-214-120 L936064-03 Solid

Collected by Shannon McKernan
Collected date/time 09/11/17 11:20
Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021103	1	09/16/17 10:22	09/16/17 10:30	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/11/17 11:20	09/18/17 16:01	JHH

B-212-95 L936064-04 Solid

Collected by Shannon McKernan
Collected date/time 09/11/17 12:00
Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1020572	1	09/11/17 12:00	09/15/17 01:19	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1.05	09/11/17 12:00	09/14/17 16:15	ACG

B-212-100 L936064-05 Solid

Collected by Shannon McKernan
Collected date/time 09/11/17 12:40
Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1020572	1	09/11/17 12:40	09/15/17 01:41	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/11/17 12:40	09/14/17 16:36	ACG

MW-138-15 L936064-06 Solid

Collected by Shannon McKernan
Collected date/time 09/12/17 10:15
Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 10:15	09/14/17 16:56	ACG

B-215-15 L936064-07 Solid

Collected by Shannon McKernan
Collected date/time 09/12/17 10:30
Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 10:30	09/14/17 17:17	ACG



MW-138-25 L936064-08 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 11:15
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021103	1	09/16/17 10:22	09/16/17 10:30	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 11:15	09/14/17 17:38	ACG

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

B-215-25 L936064-09 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 11:25
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 11:25	09/14/17 17:58	ACG

B-215-35 L936064-10 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 11:40
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 11:40	09/18/17 16:20	JHH

MW-138-35 L936064-11 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 11:40
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 11:40	09/14/17 18:40	ACG

B-215-45 L936064-12 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 12:05
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021488	1	09/19/17 07:24	09/19/17 07:43	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 12:05	09/14/17 19:00	ACG

B-215-55 L936064-13 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 12:50
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021489	1	09/19/17 08:43	09/19/17 09:14	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 12:50	09/14/17 19:21	ACG

MW-138-45 L936064-14 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 12:55
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021489	1	09/19/17 08:43	09/19/17 09:14	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 12:55	09/14/17 19:41	ACG



MW-138-56 L936064-15 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 13:35
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021489	1	09/19/17 08:43	09/19/17 09:14	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 13:35	09/14/17 20:02	ACG

1 Cp

2 Tc

3 Ss

B-215-65 L936064-16 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 13:50
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021489	1	09/19/17 08:43	09/19/17 09:14	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	25	09/12/17 13:50	09/14/17 20:43	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	250	09/12/17 13:50	09/18/17 16:40	JHH

4 Cn

5 Sr

6 Qc

B-215-75 L936064-17 Solid

Collected by Shannon McKernan
 Collected date/time 09/12/17 14:00
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021489	1	09/19/17 08:43	09/19/17 09:14	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020390	1	09/12/17 14:00	09/14/17 20:23	ACG

7 Gl

8 Al

9 Sc

TRIP BLANK-091217 L936064-18 GW

Collected by Shannon McKernan
 Collected date/time 09/12/17 00:00
 Received date/time 09/13/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020322	1	09/14/17 12:47	09/14/17 12:47	BMB



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.1		1	09/19/2017 07:43	WG1021488

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0385	0.113	1	09/15/2017 00:57	WG1020572
(S) a,a,a-Trifluorotoluene(FID)	90.9			77.0-120		09/15/2017 00:57	WG1020572

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0113	0.0567	1	09/14/2017 21:58	WG1020560
Acrylonitrile	U		0.00203	0.0113	1	09/14/2017 21:58	WG1020560
Benzene	U		0.000306	0.00113	1	09/14/2017 21:58	WG1020560
Bromobenzene	U		0.000322	0.00113	1	09/14/2017 21:58	WG1020560
Bromodichloromethane	U		0.000288	0.00113	1	09/14/2017 21:58	WG1020560
Bromochloromethane	U		0.000443	0.00567	1	09/14/2017 21:58	WG1020560
Bromoform	U	<u>JO</u>	0.000481	0.00113	1	09/14/2017 21:58	WG1020560
Bromomethane	U		0.00152	0.00567	1	09/14/2017 21:58	WG1020560
n-Butylbenzene	U		0.000293	0.00113	1	09/14/2017 21:58	WG1020560
sec-Butylbenzene	U		0.000228	0.00113	1	09/14/2017 21:58	WG1020560
tert-Butylbenzene	U		0.000234	0.00113	1	09/14/2017 21:58	WG1020560
Carbon disulfide	0.000454	<u>J</u>	0.000251	0.00113	1	09/14/2017 21:58	WG1020560
Carbon tetrachloride	U		0.000372	0.00113	1	09/14/2017 21:58	WG1020560
Chlorobenzene	U		0.000241	0.00113	1	09/14/2017 21:58	WG1020560
Chlorodibromomethane	U		0.000423	0.00113	1	09/14/2017 21:58	WG1020560
Chloroethane	U		0.00107	0.00567	1	09/14/2017 21:58	WG1020560
Chloroform	U		0.000260	0.00567	1	09/14/2017 21:58	WG1020560
Chloromethane	U		0.000425	0.00284	1	09/14/2017 21:58	WG1020560
2-Chlorotoluene	U		0.000342	0.00113	1	09/14/2017 21:58	WG1020560
4-Chlorotoluene	U		0.000272	0.00113	1	09/14/2017 21:58	WG1020560
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00567	1	09/14/2017 21:58	WG1020560
1,2-Dibromoethane	U		0.000389	0.00113	1	09/14/2017 21:58	WG1020560
Dibromomethane	U		0.000433	0.00113	1	09/14/2017 21:58	WG1020560
1,2-Dichlorobenzene	U		0.000346	0.00113	1	09/14/2017 21:58	WG1020560
1,3-Dichlorobenzene	U		0.000271	0.00113	1	09/14/2017 21:58	WG1020560
1,4-Dichlorobenzene	U		0.000256	0.00113	1	09/14/2017 21:58	WG1020560
Dichlorodifluoromethane	U		0.000809	0.00567	1	09/14/2017 21:58	WG1020560
1,1-Dichloroethane	U		0.000226	0.00113	1	09/14/2017 21:58	WG1020560
1,2-Dichloroethane	U		0.000301	0.00113	1	09/14/2017 21:58	WG1020560
1,1-Dichloroethene	U		0.000344	0.00113	1	09/14/2017 21:58	WG1020560
cis-1,2-Dichloroethene	U		0.000267	0.00113	1	09/14/2017 21:58	WG1020560
trans-1,2-Dichloroethene	U		0.000300	0.00113	1	09/14/2017 21:58	WG1020560
1,2-Dichloropropane	U		0.000406	0.00113	1	09/14/2017 21:58	WG1020560
1,1-Dichloropropene	U		0.000360	0.00113	1	09/14/2017 21:58	WG1020560
1,3-Dichloropropane	U		0.000235	0.00113	1	09/14/2017 21:58	WG1020560
cis-1,3-Dichloropropene	U		0.000297	0.00113	1	09/14/2017 21:58	WG1020560
trans-1,3-Dichloropropene	U		0.000303	0.00113	1	09/14/2017 21:58	WG1020560
trans-1,4-Dichloro-2-butene	U		0.000883	0.00284	1	09/14/2017 21:58	WG1020560
2,2-Dichloropropane	U		0.000317	0.00113	1	09/14/2017 21:58	WG1020560
Di-isopropyl ether	U		0.000281	0.00113	1	09/14/2017 21:58	WG1020560
Ethylbenzene	U		0.000337	0.00113	1	09/14/2017 21:58	WG1020560
Hexachloro-1,3-butadiene	U		0.00970	0.0284	25	09/15/2017 14:05	WG1020560
2-Hexanone	U		0.00155	0.0113	1	09/14/2017 21:58	WG1020560
n-Hexane	U		0.000329	0.0113	1	09/14/2017 21:58	WG1020560

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/11/17 11:00

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00287	0.0113	1	09/14/2017 21:58	WG1020560
Isopropylbenzene	U		0.000276	0.00113	1	09/14/2017 21:58	WG1020560
p-Isopropyltoluene	U		0.000231	0.00113	1	09/14/2017 21:58	WG1020560
2-Butanone (MEK)	U	JO	0.00531	0.0113	1	09/14/2017 21:58	WG1020560
Methylene Chloride	U		0.00113	0.00567	1	09/14/2017 21:58	WG1020560
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	09/14/2017 21:58	WG1020560
Methyl tert-butyl ether	U		0.000241	0.00113	1	09/14/2017 21:58	WG1020560
Naphthalene	U		0.00113	0.00567	1	09/14/2017 21:58	WG1020560
n-Propylbenzene	U		0.000234	0.00113	1	09/14/2017 21:58	WG1020560
Styrene	U		0.000266	0.00113	1	09/14/2017 21:58	WG1020560
1,1,1-Tetrachloroethane	U		0.000300	0.00113	1	09/14/2017 21:58	WG1020560
1,1,2-Tetrachloroethane	U		0.000414	0.00113	1	09/14/2017 21:58	WG1020560
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	09/14/2017 21:58	WG1020560
Tetrachloroethene	U		0.000313	0.00113	1	09/14/2017 21:58	WG1020560
Toluene	U		0.000492	0.00567	1	09/14/2017 21:58	WG1020560
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	09/14/2017 21:58	WG1020560
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	09/14/2017 21:58	WG1020560
1,1,1-Trichloroethane	U		0.000325	0.00113	1	09/14/2017 21:58	WG1020560
1,1,2-Trichloroethane	U		0.000314	0.00113	1	09/14/2017 21:58	WG1020560
Trichloroethene	U		0.000317	0.00113	1	09/14/2017 21:58	WG1020560
Trichlorofluoromethane	U		0.000433	0.00567	1	09/14/2017 21:58	WG1020560
1,2,3-Trichloropropane	U		0.000841	0.00284	1	09/14/2017 21:58	WG1020560
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	09/14/2017 21:58	WG1020560
1,2,3-Trimethylbenzene	U		0.000326	0.00113	1	09/14/2017 21:58	WG1020560
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	09/14/2017 21:58	WG1020560
Vinyl acetate	U		0.00271	0.0113	1	09/14/2017 21:58	WG1020560
Vinyl chloride	U		0.000330	0.00113	1	09/14/2017 21:58	WG1020560
Xylenes, Total	U		0.000792	0.00340	1	09/14/2017 21:58	WG1020560
(S) Toluene-d8	94.3			80.0-120		09/14/2017 21:58	WG1020560
(S) Toluene-d8	94.2			80.0-120		09/15/2017 14:05	WG1020560
(S) Dibromofluoromethane	94.7			74.0-131		09/15/2017 14:05	WG1020560
(S) Dibromofluoromethane	109			74.0-131		09/14/2017 21:58	WG1020560
(S) 4-Bromofluorobenzene	98.0			64.0-132		09/14/2017 21:58	WG1020560
(S) 4-Bromofluorobenzene	103			64.0-132		09/15/2017 14:05	WG1020560

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L936064-01 WG1020560: Elevated RL. Reported from MEOH vial. Bisulfates used in previous runs.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.0		1	09/16/2017 10:30	WG1021103

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.0122	0.0610	1	09/14/2017 22:15	WG1020560
Acrylonitrile	U		0.00218	0.0122	1	09/14/2017 22:15	WG1020560
Benzene	U		0.000329	0.00122	1	09/14/2017 22:15	WG1020560
Bromobenzene	U		0.000346	0.00122	1	09/14/2017 22:15	WG1020560
Bromodichloromethane	U		0.000310	0.00122	1	09/14/2017 22:15	WG1020560
Bromochloromethane	U		0.000476	0.00610	1	09/14/2017 22:15	WG1020560
Bromoform	U	JO	0.000517	0.00122	1	09/14/2017 22:15	WG1020560
Bromomethane	U		0.00163	0.00610	1	09/14/2017 22:15	WG1020560
n-Butylbenzene	U		0.000315	0.00122	1	09/14/2017 22:15	WG1020560
sec-Butylbenzene	U		0.000245	0.00122	1	09/14/2017 22:15	WG1020560
tert-Butylbenzene	U		0.000251	0.00122	1	09/14/2017 22:15	WG1020560
Carbon disulfide	U		0.000270	0.00122	1	09/14/2017 22:15	WG1020560
Carbon tetrachloride	U		0.000400	0.00122	1	09/14/2017 22:15	WG1020560
Chlorobenzene	U		0.000259	0.00122	1	09/14/2017 22:15	WG1020560
Chlorodibromomethane	U		0.000455	0.00122	1	09/14/2017 22:15	WG1020560
Chloroethane	U		0.00115	0.00610	1	09/14/2017 22:15	WG1020560
Chloroform	U		0.000279	0.00610	1	09/14/2017 22:15	WG1020560
Chloromethane	U		0.000457	0.00305	1	09/14/2017 22:15	WG1020560
2-Chlorotoluene	U		0.000367	0.00122	1	09/14/2017 22:15	WG1020560
4-Chlorotoluene	U		0.000293	0.00122	1	09/14/2017 22:15	WG1020560
1,2-Dibromo-3-Chloropropane	U		0.00128	0.00610	1	09/14/2017 22:15	WG1020560
1,2-Dibromoethane	U		0.000418	0.00122	1	09/14/2017 22:15	WG1020560
Dibromomethane	U		0.000466	0.00122	1	09/14/2017 22:15	WG1020560
1,2-Dichlorobenzene	U		0.000372	0.00122	1	09/14/2017 22:15	WG1020560
1,3-Dichlorobenzene	U		0.000292	0.00122	1	09/14/2017 22:15	WG1020560
1,4-Dichlorobenzene	U		0.000276	0.00122	1	09/14/2017 22:15	WG1020560
Dichlorodifluoromethane	U		0.000870	0.00610	1	09/14/2017 22:15	WG1020560
1,1-Dichloroethane	U		0.000243	0.00122	1	09/14/2017 22:15	WG1020560
1,2-Dichloroethane	U		0.000323	0.00122	1	09/14/2017 22:15	WG1020560
1,1-Dichloroethene	U		0.000370	0.00122	1	09/14/2017 22:15	WG1020560
cis-1,2-Dichloroethene	U		0.000287	0.00122	1	09/14/2017 22:15	WG1020560
trans-1,2-Dichloroethene	U		0.000322	0.00122	1	09/14/2017 22:15	WG1020560
1,2-Dichloropropane	U		0.000437	0.00122	1	09/14/2017 22:15	WG1020560
1,1-Dichloropropene	U		0.000387	0.00122	1	09/14/2017 22:15	WG1020560
1,3-Dichloropropane	U		0.000252	0.00122	1	09/14/2017 22:15	WG1020560
cis-1,3-Dichloropropene	U		0.000320	0.00122	1	09/14/2017 22:15	WG1020560
trans-1,3-Dichloropropene	U		0.000326	0.00122	1	09/14/2017 22:15	WG1020560
trans-1,4-Dichloro-2-butene	U		0.000949	0.00305	1	09/14/2017 22:15	WG1020560
2,2-Dichloropropane	U		0.000340	0.00122	1	09/14/2017 22:15	WG1020560
Di-isopropyl ether	U		0.000302	0.00122	1	09/14/2017 22:15	WG1020560
Ethylbenzene	U		0.000362	0.00122	1	09/14/2017 22:15	WG1020560
Hexachloro-1,3-butadiene	U		0.000417	0.00122	1	09/15/2017 14:25	WG1020560
2-Hexanone	U		0.00167	0.0122	1	09/14/2017 22:15	WG1020560
n-Hexane	U		0.000354	0.0122	1	09/14/2017 22:15	WG1020560
Iodomethane	U		0.00309	0.0122	1	09/14/2017 22:15	WG1020560
Isopropylbenzene	U		0.000296	0.00122	1	09/14/2017 22:15	WG1020560
p-Isopropyltoluene	U		0.000249	0.00122	1	09/14/2017 22:15	WG1020560
2-Butanone (MEK)	U	JO	0.00571	0.0122	1	09/14/2017 22:15	WG1020560
Methylene Chloride	U		0.00122	0.00610	1	09/14/2017 22:15	WG1020560
4-Methyl-2-pentanone (MIBK)	U		0.00229	0.0122	1	09/14/2017 22:15	WG1020560

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 09/11/17 11:10

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000259	0.00122	1	09/14/2017 22:15	WG1020560
Naphthalene	U		0.00122	0.00610	1	09/14/2017 22:15	WG1020560
n-Propylbenzene	U		0.000251	0.00122	1	09/14/2017 22:15	WG1020560
Styrene	U		0.000285	0.00122	1	09/14/2017 22:15	WG1020560
1,1,1-Tetrachloroethane	U		0.000322	0.00122	1	09/14/2017 22:15	WG1020560
1,1,2-Tetrachloroethane	U		0.000445	0.00122	1	09/14/2017 22:15	WG1020560
1,1,2-Trichlorotrifluoroethane	U		0.000445	0.00122	1	09/14/2017 22:15	WG1020560
Tetrachloroethene	U		0.000337	0.00122	1	09/14/2017 22:15	WG1020560
Toluene	U		0.000529	0.00610	1	09/14/2017 22:15	WG1020560
1,2,3-Trichlorobenzene	U		0.000373	0.00122	1	09/14/2017 22:15	WG1020560
1,2,4-Trichlorobenzene	U		0.000473	0.00122	1	09/14/2017 22:15	WG1020560
1,1,1-Trichloroethane	U		0.000349	0.00122	1	09/14/2017 22:15	WG1020560
1,1,2-Trichloroethane	U		0.000338	0.00122	1	09/14/2017 22:15	WG1020560
Trichloroethene	U		0.000340	0.00122	1	09/14/2017 22:15	WG1020560
Trichlorofluoromethane	U		0.000466	0.00610	1	09/14/2017 22:15	WG1020560
1,2,3-Trichloropropane	U		0.000904	0.00305	1	09/14/2017 22:15	WG1020560
1,2,4-Trimethylbenzene	U		0.000257	0.00122	1	09/14/2017 22:15	WG1020560
1,2,3-Trimethylbenzene	U		0.000350	0.00122	1	09/14/2017 22:15	WG1020560
1,3,5-Trimethylbenzene	U		0.000324	0.00122	1	09/14/2017 22:15	WG1020560
Vinyl acetate	U		0.00292	0.0122	1	09/14/2017 22:15	WG1020560
Vinyl chloride	U		0.000355	0.00122	1	09/14/2017 22:15	WG1020560
Xylenes, Total	U		0.000851	0.00366	1	09/14/2017 22:15	WG1020560
(S) Toluene-d8	95.3			80.0-120		09/14/2017 22:15	WG1020560
(S) Toluene-d8	107			80.0-120		09/15/2017 14:25	WG1020560
(S) Dibromofluoromethane	104			74.0-131		09/14/2017 22:15	WG1020560
(S) Dibromofluoromethane	92.5			74.0-131		09/15/2017 14:25	WG1020560
(S) 4-Bromofluorobenzene	103			64.0-132		09/15/2017 14:25	WG1020560
(S) 4-Bromofluorobenzene	96.5			64.0-132		09/14/2017 22:15	WG1020560

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.7		1	09/16/2017 10:30	WG1021103

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0118	0.0590	1	09/18/2017 16:01	WG1020390
Acrylonitrile	U		0.00211	0.0118	1	09/18/2017 16:01	WG1020390
Benzene	U		0.000319	0.00118	1	09/18/2017 16:01	WG1020390
Bromobenzene	U		0.000335	0.00118	1	09/18/2017 16:01	WG1020390
Bromodichloromethane	U		0.000300	0.00118	1	09/18/2017 16:01	WG1020390
Bromochloromethane	U		0.000461	0.00590	1	09/18/2017 16:01	WG1020390
Bromoform	U		0.000501	0.00118	1	09/18/2017 16:01	WG1020390
Bromomethane	U		0.00158	0.00590	1	09/18/2017 16:01	WG1020390
n-Butylbenzene	U		0.000305	0.00118	1	09/18/2017 16:01	WG1020390
sec-Butylbenzene	U		0.000237	0.00118	1	09/18/2017 16:01	WG1020390
tert-Butylbenzene	U		0.000243	0.00118	1	09/18/2017 16:01	WG1020390
Carbon disulfide	U		0.000261	0.00118	1	09/18/2017 16:01	WG1020390
Carbon tetrachloride	U		0.000387	0.00118	1	09/18/2017 16:01	WG1020390
Chlorobenzene	U		0.000250	0.00118	1	09/18/2017 16:01	WG1020390
Chlorodibromomethane	U		0.000440	0.00118	1	09/18/2017 16:01	WG1020390
Chloroethane	U		0.00112	0.00590	1	09/18/2017 16:01	WG1020390
Chloroform	U		0.000270	0.00590	1	09/18/2017 16:01	WG1020390
Chloromethane	U	JO	0.000443	0.00295	1	09/18/2017 16:01	WG1020390
2-Chlorotoluene	U		0.000355	0.00118	1	09/18/2017 16:01	WG1020390
4-Chlorotoluene	U		0.000283	0.00118	1	09/18/2017 16:01	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00590	1	09/18/2017 16:01	WG1020390
1,2-Dibromoethane	U		0.000405	0.00118	1	09/18/2017 16:01	WG1020390
Dibromomethane	U		0.000451	0.00118	1	09/18/2017 16:01	WG1020390
1,2-Dichlorobenzene	U		0.000360	0.00118	1	09/18/2017 16:01	WG1020390
1,3-Dichlorobenzene	U		0.000282	0.00118	1	09/18/2017 16:01	WG1020390
1,4-Dichlorobenzene	U		0.000267	0.00118	1	09/18/2017 16:01	WG1020390
Dichlorodifluoromethane	U		0.000842	0.00590	1	09/18/2017 16:01	WG1020390
1,1-Dichloroethane	U		0.000235	0.00118	1	09/18/2017 16:01	WG1020390
1,2-Dichloroethane	U		0.000313	0.00118	1	09/18/2017 16:01	WG1020390
1,1-Dichloroethene	U		0.000358	0.00118	1	09/18/2017 16:01	WG1020390
cis-1,2-Dichloroethene	U		0.000278	0.00118	1	09/18/2017 16:01	WG1020390
trans-1,2-Dichloroethene	U		0.000312	0.00118	1	09/18/2017 16:01	WG1020390
1,2-Dichloropropane	U		0.000423	0.00118	1	09/18/2017 16:01	WG1020390
1,1-Dichloropropene	U		0.000374	0.00118	1	09/18/2017 16:01	WG1020390
1,3-Dichloropropane	U		0.000244	0.00118	1	09/18/2017 16:01	WG1020390
cis-1,3-Dichloropropene	U		0.000309	0.00118	1	09/18/2017 16:01	WG1020390
trans-1,3-Dichloropropene	U		0.000315	0.00118	1	09/18/2017 16:01	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.000919	0.00295	1	09/18/2017 16:01	WG1020390
2,2-Dichloropropane	U		0.000329	0.00118	1	09/18/2017 16:01	WG1020390
Di-isopropyl ether	U	JO	0.000293	0.00118	1	09/18/2017 16:01	WG1020390
Ethylbenzene	U		0.000351	0.00118	1	09/18/2017 16:01	WG1020390
Hexachloro-1,3-butadiene	U		0.000404	0.00118	1	09/18/2017 16:01	WG1020390
2-Hexanone	U		0.00162	0.0118	1	09/18/2017 16:01	WG1020390
n-Hexane	U		0.000342	0.0118	1	09/18/2017 16:01	WG1020390
Iodomethane	U		0.00299	0.0118	1	09/18/2017 16:01	WG1020390
Isopropylbenzene	U		0.000287	0.00118	1	09/18/2017 16:01	WG1020390
p-Isopropyltoluene	U		0.000241	0.00118	1	09/18/2017 16:01	WG1020390
2-Butanone (MEK)	U		0.00553	0.0118	1	09/18/2017 16:01	WG1020390
Methylene Chloride	U		0.00118	0.00590	1	09/18/2017 16:01	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00222	0.0118	1	09/18/2017 16:01	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/11/17 11:20

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000250	0.00118	1	09/18/2017 16:01	WG1020390
Naphthalene	U		0.00118	0.00590	1	09/18/2017 16:01	WG1020390
n-Propylbenzene	U		0.000243	0.00118	1	09/18/2017 16:01	WG1020390
Styrene	U		0.000276	0.00118	1	09/18/2017 16:01	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000312	0.00118	1	09/18/2017 16:01	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000431	0.00118	1	09/18/2017 16:01	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000431	0.00118	1	09/18/2017 16:01	WG1020390
Tetrachloroethene	U		0.000326	0.00118	1	09/18/2017 16:01	WG1020390
Toluene	U		0.000513	0.00590	1	09/18/2017 16:01	WG1020390
1,2,3-Trichlorobenzene	U		0.000361	0.00118	1	09/18/2017 16:01	WG1020390
1,2,4-Trichlorobenzene	U		0.000458	0.00118	1	09/18/2017 16:01	WG1020390
1,1,1-Trichloroethane	U		0.000338	0.00118	1	09/18/2017 16:01	WG1020390
1,1,2-Trichloroethane	U		0.000327	0.00118	1	09/18/2017 16:01	WG1020390
Trichloroethene	U		0.000329	0.00118	1	09/18/2017 16:01	WG1020390
Trichlorofluoromethane	U		0.000451	0.00590	1	09/18/2017 16:01	WG1020390
1,2,3-Trichloropropane	U		0.000875	0.00295	1	09/18/2017 16:01	WG1020390
1,2,4-Trimethylbenzene	U		0.000249	0.00118	1	09/18/2017 16:01	WG1020390
1,2,3-Trimethylbenzene	U		0.000339	0.00118	1	09/18/2017 16:01	WG1020390
1,3,5-Trimethylbenzene	U		0.000314	0.00118	1	09/18/2017 16:01	WG1020390
Vinyl acetate	U		0.00282	0.0118	1	09/18/2017 16:01	WG1020390
Vinyl chloride	U		0.000344	0.00118	1	09/18/2017 16:01	WG1020390
Xylenes, Total	U		0.000824	0.00354	1	09/18/2017 16:01	WG1020390
(S) Toluene-d8	106			80.0-120		09/18/2017 16:01	WG1020390
(S) Dibromofluoromethane	99.9			74.0-131		09/18/2017 16:01	WG1020390
(S) 4-Bromofluorobenzene	99.0			64.0-132		09/18/2017 16:01	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.3		1	09/19/2017 07:43	WG1021488

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0422	0.125	1	09/15/2017 01:19	WG1020572
(S) a,a,a-Trifluorotoluene(FID)	91.0			77.0-120		09/15/2017 01:19	WG1020572

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.0131	0.0654	1.05	09/14/2017 16:15	WG1020390
Acrylonitrile	U		0.00234	0.0131	1.05	09/14/2017 16:15	WG1020390
Benzene	U		0.000354	0.00131	1.05	09/14/2017 16:15	WG1020390
Bromobenzene	U	JO	0.000371	0.00131	1.05	09/14/2017 16:15	WG1020390
Bromodichloromethane	U		0.000333	0.00131	1.05	09/14/2017 16:15	WG1020390
Bromochloromethane	U		0.000511	0.00654	1.05	09/14/2017 16:15	WG1020390
Bromoform	U		0.000554	0.00131	1.05	09/14/2017 16:15	WG1020390
Bromomethane	U		0.00176	0.00654	1.05	09/14/2017 16:15	WG1020390
n-Butylbenzene	U		0.000337	0.00131	1.05	09/14/2017 16:15	WG1020390
sec-Butylbenzene	U		0.000263	0.00131	1.05	09/14/2017 16:15	WG1020390
tert-Butylbenzene	U		0.000269	0.00131	1.05	09/14/2017 16:15	WG1020390
Carbon disulfide	U		0.000289	0.00131	1.05	09/14/2017 16:15	WG1020390
Carbon tetrachloride	U		0.000428	0.00131	1.05	09/14/2017 16:15	WG1020390
Chlorobenzene	U		0.000278	0.00131	1.05	09/14/2017 16:15	WG1020390
Chlorodibromomethane	U		0.000488	0.00131	1.05	09/14/2017 16:15	WG1020390
Chloroethane	U	JO	0.00124	0.00654	1.05	09/14/2017 16:15	WG1020390
Chloroform	U		0.000299	0.00654	1.05	09/14/2017 16:15	WG1020390
Chloromethane	U	JO	0.000491	0.00327	1.05	09/14/2017 16:15	WG1020390
2-Chlorotoluene	U		0.000394	0.00131	1.05	09/14/2017 16:15	WG1020390
4-Chlorotoluene	U		0.000314	0.00131	1.05	09/14/2017 16:15	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00137	0.00654	1.05	09/14/2017 16:15	WG1020390
1,2-Dibromoethane	U		0.000448	0.00131	1.05	09/14/2017 16:15	WG1020390
Dibromomethane	U		0.000499	0.00131	1.05	09/14/2017 16:15	WG1020390
1,2-Dichlorobenzene	U		0.000399	0.00131	1.05	09/14/2017 16:15	WG1020390
1,3-Dichlorobenzene	U		0.000313	0.00131	1.05	09/14/2017 16:15	WG1020390
1,4-Dichlorobenzene	U		0.000295	0.00131	1.05	09/14/2017 16:15	WG1020390
Dichlorodifluoromethane	U		0.000933	0.00654	1.05	09/14/2017 16:15	WG1020390
1,1-Dichloroethane	U		0.000260	0.00131	1.05	09/14/2017 16:15	WG1020390
1,2-Dichloroethane	U		0.000346	0.00131	1.05	09/14/2017 16:15	WG1020390
1,1-Dichloroethene	U		0.000396	0.00131	1.05	09/14/2017 16:15	WG1020390
cis-1,2-Dichloroethene	U		0.000308	0.00131	1.05	09/14/2017 16:15	WG1020390
trans-1,2-Dichloroethene	U		0.000345	0.00131	1.05	09/14/2017 16:15	WG1020390
1,2-Dichloropropane	U		0.000468	0.00131	1.05	09/14/2017 16:15	WG1020390
1,1-Dichloropropene	U		0.000415	0.00131	1.05	09/14/2017 16:15	WG1020390
1,3-Dichloropropane	U		0.000270	0.00131	1.05	09/14/2017 16:15	WG1020390
cis-1,3-Dichloropropene	U		0.000342	0.00131	1.05	09/14/2017 16:15	WG1020390
trans-1,3-Dichloropropene	U		0.000349	0.00131	1.05	09/14/2017 16:15	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.00102	0.00327	1.05	09/14/2017 16:15	WG1020390
2,2-Dichloropropane	U		0.000365	0.00131	1.05	09/14/2017 16:15	WG1020390
Di-isopropyl ether	U		0.000324	0.00131	1.05	09/14/2017 16:15	WG1020390
Ethylbenzene	U		0.000389	0.00131	1.05	09/14/2017 16:15	WG1020390
Hexachloro-1,3-butadiene	U		0.000447	0.00131	1.05	09/14/2017 16:15	WG1020390
2-Hexanone	U		0.00179	0.0131	1.05	09/14/2017 16:15	WG1020390
n-Hexane	U	JO	0.000379	0.0131	1.05	09/14/2017 16:15	WG1020390

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/11/17 12:00

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00331	0.0131	1.05	09/14/2017 16:15	WG1020390
Isopropylbenzene	U		0.000318	0.00131	1.05	09/14/2017 16:15	WG1020390
p-Isopropyltoluene	U		0.000267	0.00131	1.05	09/14/2017 16:15	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00611	0.0131	1.05	09/14/2017 16:15	WG1020390
Methylene Chloride	U		0.00131	0.00654	1.05	09/14/2017 16:15	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00245	0.0131	1.05	09/14/2017 16:15	WG1020390
Methyl tert-butyl ether	U		0.000278	0.00131	1.05	09/14/2017 16:15	WG1020390
Naphthalene	U		0.00131	0.00654	1.05	09/14/2017 16:15	WG1020390
n-Propylbenzene	U		0.000269	0.00131	1.05	09/14/2017 16:15	WG1020390
Styrene	U		0.000306	0.00131	1.05	09/14/2017 16:15	WG1020390
1,1,1-Tetrachloroethane	U		0.000345	0.00131	1.05	09/14/2017 16:15	WG1020390
1,1,2-Tetrachloroethane	U		0.000477	0.00131	1.05	09/14/2017 16:15	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000477	0.00131	1.05	09/14/2017 16:15	WG1020390
Tetrachloroethene	U		0.000361	0.00131	1.05	09/14/2017 16:15	WG1020390
Toluene	U		0.000568	0.00654	1.05	09/14/2017 16:15	WG1020390
1,2,3-Trichlorobenzene	U		0.000400	0.00131	1.05	09/14/2017 16:15	WG1020390
1,2,4-Trichlorobenzene	U		0.000507	0.00131	1.05	09/14/2017 16:15	WG1020390
1,1,1-Trichloroethane	U		0.000374	0.00131	1.05	09/14/2017 16:15	WG1020390
1,1,2-Trichloroethane	U		0.000362	0.00131	1.05	09/14/2017 16:15	WG1020390
Trichloroethene	U		0.000365	0.00131	1.05	09/14/2017 16:15	WG1020390
Trichlorofluoromethane	U		0.000499	0.00654	1.05	09/14/2017 16:15	WG1020390
1,2,3-Trichloropropane	U		0.000969	0.00327	1.05	09/14/2017 16:15	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000276	0.00131	1.05	09/14/2017 16:15	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000375	0.00131	1.05	09/14/2017 16:15	WG1020390
1,3,5-Trimethylbenzene	U		0.000347	0.00131	1.05	09/14/2017 16:15	WG1020390
Vinyl acetate	U		0.00313	0.0131	1.05	09/14/2017 16:15	WG1020390
Vinyl chloride	U		0.000381	0.00131	1.05	09/14/2017 16:15	WG1020390
Xylenes, Total	U		0.000913	0.00392	1.05	09/14/2017 16:15	WG1020390
(S) Toluene-d8	94.9			80.0-120		09/14/2017 16:15	WG1020390
(S) Dibromofluoromethane	101			74.0-131		09/14/2017 16:15	WG1020390
(S) 4-Bromofluorobenzene	89.2			64.0-132		09/14/2017 16:15	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	82.9		1	09/19/2017 07:43	WG1021488

1 Cp

2 Tc

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		0.0409	0.121	1	09/15/2017 01:41	WG1020572
(S) a,a,a-Trifluorotoluene(FID)	90.8			77.0-120		09/15/2017 01:41	WG1020572

3 Ss

4 Cn

5 Sr

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.0121	0.0603	1	09/14/2017 16:36	WG1020390
Acrylonitrile	U		0.00216	0.0121	1	09/14/2017 16:36	WG1020390
Benzene	U		0.000326	0.00121	1	09/14/2017 16:36	WG1020390
Bromobenzene	U	JO	0.000343	0.00121	1	09/14/2017 16:36	WG1020390
Bromodichloromethane	U		0.000307	0.00121	1	09/14/2017 16:36	WG1020390
Bromochloromethane	U		0.000471	0.00603	1	09/14/2017 16:36	WG1020390
Bromoform	U		0.000512	0.00121	1	09/14/2017 16:36	WG1020390
Bromomethane	U		0.00162	0.00603	1	09/14/2017 16:36	WG1020390
n-Butylbenzene	U		0.000311	0.00121	1	09/14/2017 16:36	WG1020390
sec-Butylbenzene	U		0.000243	0.00121	1	09/14/2017 16:36	WG1020390
tert-Butylbenzene	U		0.000249	0.00121	1	09/14/2017 16:36	WG1020390
Carbon disulfide	U		0.000267	0.00121	1	09/14/2017 16:36	WG1020390
Carbon tetrachloride	U		0.000396	0.00121	1	09/14/2017 16:36	WG1020390
Chlorobenzene	U		0.000256	0.00121	1	09/14/2017 16:36	WG1020390
Chlorodibromomethane	U		0.000450	0.00121	1	09/14/2017 16:36	WG1020390
Chloroethane	U	JO	0.00114	0.00603	1	09/14/2017 16:36	WG1020390
Chloroform	U		0.000276	0.00603	1	09/14/2017 16:36	WG1020390
Chloromethane	U	JO	0.000453	0.00302	1	09/14/2017 16:36	WG1020390
2-Chlorotoluene	U		0.000363	0.00121	1	09/14/2017 16:36	WG1020390
4-Chlorotoluene	U		0.000290	0.00121	1	09/14/2017 16:36	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00127	0.00603	1	09/14/2017 16:36	WG1020390
1,2-Dibromoethane	U		0.000414	0.00121	1	09/14/2017 16:36	WG1020390
Dibromomethane	U		0.000461	0.00121	1	09/14/2017 16:36	WG1020390
1,2-Dichlorobenzene	U		0.000368	0.00121	1	09/14/2017 16:36	WG1020390
1,3-Dichlorobenzene	U		0.000288	0.00121	1	09/14/2017 16:36	WG1020390
1,4-Dichlorobenzene	U		0.000273	0.00121	1	09/14/2017 16:36	WG1020390
Dichlorodifluoromethane	U		0.000860	0.00603	1	09/14/2017 16:36	WG1020390
1,1-Dichloroethane	U		0.000240	0.00121	1	09/14/2017 16:36	WG1020390
1,2-Dichloroethane	U		0.000320	0.00121	1	09/14/2017 16:36	WG1020390
1,1-Dichloroethene	U		0.000366	0.00121	1	09/14/2017 16:36	WG1020390
cis-1,2-Dichloroethene	U		0.000284	0.00121	1	09/14/2017 16:36	WG1020390
trans-1,2-Dichloroethene	U		0.000319	0.00121	1	09/14/2017 16:36	WG1020390
1,2-Dichloropropane	U		0.000432	0.00121	1	09/14/2017 16:36	WG1020390
1,1-Dichloropropene	U		0.000383	0.00121	1	09/14/2017 16:36	WG1020390
1,3-Dichloropropane	U		0.000250	0.00121	1	09/14/2017 16:36	WG1020390
cis-1,3-Dichloropropene	U		0.000316	0.00121	1	09/14/2017 16:36	WG1020390
trans-1,3-Dichloropropene	U		0.000322	0.00121	1	09/14/2017 16:36	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.000939	0.00302	1	09/14/2017 16:36	WG1020390
2,2-Dichloropropane	U		0.000337	0.00121	1	09/14/2017 16:36	WG1020390
Di-isopropyl ether	U		0.000299	0.00121	1	09/14/2017 16:36	WG1020390
Ethylbenzene	U		0.000358	0.00121	1	09/14/2017 16:36	WG1020390
Hexachloro-1,3-butadiene	U		0.000413	0.00121	1	09/14/2017 16:36	WG1020390
2-Hexanone	U		0.00165	0.0121	1	09/14/2017 16:36	WG1020390
n-Hexane	U	JO	0.000350	0.0121	1	09/14/2017 16:36	WG1020390

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/11/17 12:40

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Iodomethane	U		0.00305	0.0121	1	09/14/2017 16:36	WG1020390
Isopropylbenzene	U		0.000293	0.00121	1	09/14/2017 16:36	WG1020390
p-Isopropyltoluene	U		0.000246	0.00121	1	09/14/2017 16:36	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00565	0.0121	1	09/14/2017 16:36	WG1020390
Methylene Chloride	U		0.00121	0.00603	1	09/14/2017 16:36	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00227	0.0121	1	09/14/2017 16:36	WG1020390
Methyl tert-butyl ether	U		0.000256	0.00121	1	09/14/2017 16:36	WG1020390
Naphthalene	U		0.00121	0.00603	1	09/14/2017 16:36	WG1020390
n-Propylbenzene	U		0.000249	0.00121	1	09/14/2017 16:36	WG1020390
Styrene	U		0.000282	0.00121	1	09/14/2017 16:36	WG1020390
1,1,1-Tetrachloroethane	U		0.000319	0.00121	1	09/14/2017 16:36	WG1020390
1,1,2-Tetrachloroethane	U		0.000440	0.00121	1	09/14/2017 16:36	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000440	0.00121	1	09/14/2017 16:36	WG1020390
Tetrachloroethene	U		0.000333	0.00121	1	09/14/2017 16:36	WG1020390
Toluene	U		0.000524	0.00603	1	09/14/2017 16:36	WG1020390
1,2,3-Trichlorobenzene	U		0.000369	0.00121	1	09/14/2017 16:36	WG1020390
1,2,4-Trichlorobenzene	U		0.000468	0.00121	1	09/14/2017 16:36	WG1020390
1,1,1-Trichloroethane	U		0.000345	0.00121	1	09/14/2017 16:36	WG1020390
1,1,2-Trichloroethane	U		0.000334	0.00121	1	09/14/2017 16:36	WG1020390
Trichloroethene	U		0.000337	0.00121	1	09/14/2017 16:36	WG1020390
Trichlorofluoromethane	U		0.000461	0.00603	1	09/14/2017 16:36	WG1020390
1,2,3-Trichloropropane	U		0.000894	0.00302	1	09/14/2017 16:36	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000255	0.00121	1	09/14/2017 16:36	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000346	0.00121	1	09/14/2017 16:36	WG1020390
1,3,5-Trimethylbenzene	U		0.000321	0.00121	1	09/14/2017 16:36	WG1020390
Vinyl acetate	U		0.00288	0.0121	1	09/14/2017 16:36	WG1020390
Vinyl chloride	U		0.000351	0.00121	1	09/14/2017 16:36	WG1020390
Xylenes, Total	U		0.000842	0.00362	1	09/14/2017 16:36	WG1020390
(S) Toluene-d8	99.0			80.0-120		09/14/2017 16:36	WG1020390
(S) Dibromofluoromethane	97.6			74.0-131		09/14/2017 16:36	WG1020390
(S) 4-Bromofluorobenzene	83.9			64.0-132		09/14/2017 16:36	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.1		1	09/19/2017 07:43	WG1021488

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0119	0.0594	1	09/14/2017 16:56	WG1020390
Acrylonitrile	U		0.00213	0.0119	1	09/14/2017 16:56	WG1020390
Benzene	U		0.000321	0.00119	1	09/14/2017 16:56	WG1020390
Bromobenzene	U	<u>JO</u>	0.000338	0.00119	1	09/14/2017 16:56	WG1020390
Bromodichloromethane	U		0.000302	0.00119	1	09/14/2017 16:56	WG1020390
Bromochloromethane	U		0.000464	0.00594	1	09/14/2017 16:56	WG1020390
Bromoform	U		0.000504	0.00119	1	09/14/2017 16:56	WG1020390
Bromomethane	U		0.00159	0.00594	1	09/14/2017 16:56	WG1020390
n-Butylbenzene	U		0.000307	0.00119	1	09/14/2017 16:56	WG1020390
sec-Butylbenzene	U		0.000239	0.00119	1	09/14/2017 16:56	WG1020390
tert-Butylbenzene	U		0.000245	0.00119	1	09/14/2017 16:56	WG1020390
Carbon disulfide	U		0.000263	0.00119	1	09/14/2017 16:56	WG1020390
Carbon tetrachloride	U		0.000390	0.00119	1	09/14/2017 16:56	WG1020390
Chlorobenzene	U		0.000252	0.00119	1	09/14/2017 16:56	WG1020390
Chlorodibromomethane	U		0.000443	0.00119	1	09/14/2017 16:56	WG1020390
Chloroethane	U	<u>JO</u>	0.00112	0.00594	1	09/14/2017 16:56	WG1020390
Chloroform	U		0.000272	0.00594	1	09/14/2017 16:56	WG1020390
Chloromethane	U	<u>JO</u>	0.000446	0.00297	1	09/14/2017 16:56	WG1020390
2-Chlorotoluene	U		0.000358	0.00119	1	09/14/2017 16:56	WG1020390
4-Chlorotoluene	U		0.000285	0.00119	1	09/14/2017 16:56	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00125	0.00594	1	09/14/2017 16:56	WG1020390
1,2-Dibromoethane	U		0.000408	0.00119	1	09/14/2017 16:56	WG1020390
Dibromomethane	U		0.000454	0.00119	1	09/14/2017 16:56	WG1020390
1,2-Dichlorobenzene	U		0.000363	0.00119	1	09/14/2017 16:56	WG1020390
1,3-Dichlorobenzene	U		0.000284	0.00119	1	09/14/2017 16:56	WG1020390
1,4-Dichlorobenzene	U		0.000269	0.00119	1	09/14/2017 16:56	WG1020390
Dichlorodifluoromethane	U		0.000848	0.00594	1	09/14/2017 16:56	WG1020390
1,1-Dichloroethane	U		0.000237	0.00119	1	09/14/2017 16:56	WG1020390
1,2-Dichloroethane	U		0.000315	0.00119	1	09/14/2017 16:56	WG1020390
1,1-Dichloroethene	U		0.000360	0.00119	1	09/14/2017 16:56	WG1020390
cis-1,2-Dichloroethene	U		0.000279	0.00119	1	09/14/2017 16:56	WG1020390
trans-1,2-Dichloroethene	U		0.000314	0.00119	1	09/14/2017 16:56	WG1020390
1,2-Dichloropropane	U		0.000426	0.00119	1	09/14/2017 16:56	WG1020390
1,1-Dichloropropene	U		0.000377	0.00119	1	09/14/2017 16:56	WG1020390
1,3-Dichloropropane	U		0.000246	0.00119	1	09/14/2017 16:56	WG1020390
cis-1,3-Dichloropropene	U		0.000311	0.00119	1	09/14/2017 16:56	WG1020390
trans-1,3-Dichloropropene	U		0.000317	0.00119	1	09/14/2017 16:56	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000925	0.00297	1	09/14/2017 16:56	WG1020390
2,2-Dichloropropane	U		0.000332	0.00119	1	09/14/2017 16:56	WG1020390
Di-isopropyl ether	U		0.000295	0.00119	1	09/14/2017 16:56	WG1020390
Ethylbenzene	U		0.000353	0.00119	1	09/14/2017 16:56	WG1020390
Hexachloro-1,3-butadiene	U		0.000407	0.00119	1	09/14/2017 16:56	WG1020390
2-Hexanone	U		0.00163	0.0119	1	09/14/2017 16:56	WG1020390
n-Hexane	U	<u>JO</u>	0.000345	0.0119	1	09/14/2017 16:56	WG1020390
Iodomethane	U		0.00301	0.0119	1	09/14/2017 16:56	WG1020390
Isopropylbenzene	U		0.000289	0.00119	1	09/14/2017 16:56	WG1020390
p-Isopropyltoluene	U		0.000243	0.00119	1	09/14/2017 16:56	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00556	0.0119	1	09/14/2017 16:56	WG1020390
Methylene Chloride	U		0.00119	0.00594	1	09/14/2017 16:56	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00223	0.0119	1	09/14/2017 16:56	WG1020390

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 09/12/17 10:15

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000252	0.00119	1	09/14/2017 16:56	WG1020390
Naphthalene	U		0.00119	0.00594	1	09/14/2017 16:56	WG1020390
n-Propylbenzene	U		0.000245	0.00119	1	09/14/2017 16:56	WG1020390
Styrene	U		0.000278	0.00119	1	09/14/2017 16:56	WG1020390
1,1,1-Tetrachloroethane	U		0.000314	0.00119	1	09/14/2017 16:56	WG1020390
1,1,2-Tetrachloroethane	U		0.000434	0.00119	1	09/14/2017 16:56	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000434	0.00119	1	09/14/2017 16:56	WG1020390
Tetrachloroethene	U		0.000328	0.00119	1	09/14/2017 16:56	WG1020390
Toluene	U		0.000516	0.00594	1	09/14/2017 16:56	WG1020390
1,2,3-Trichlorobenzene	U		0.000364	0.00119	1	09/14/2017 16:56	WG1020390
1,2,4-Trichlorobenzene	U		0.000461	0.00119	1	09/14/2017 16:56	WG1020390
1,1,1-Trichloroethane	U		0.000340	0.00119	1	09/14/2017 16:56	WG1020390
1,1,2-Trichloroethane	U		0.000329	0.00119	1	09/14/2017 16:56	WG1020390
Trichloroethene	U		0.000332	0.00119	1	09/14/2017 16:56	WG1020390
Trichlorofluoromethane	U		0.000454	0.00594	1	09/14/2017 16:56	WG1020390
1,2,3-Trichloropropane	U		0.000881	0.00297	1	09/14/2017 16:56	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000251	0.00119	1	09/14/2017 16:56	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000341	0.00119	1	09/14/2017 16:56	WG1020390
1,3,5-Trimethylbenzene	U		0.000316	0.00119	1	09/14/2017 16:56	WG1020390
Vinyl acetate	U		0.00284	0.0119	1	09/14/2017 16:56	WG1020390
Vinyl chloride	U		0.000346	0.00119	1	09/14/2017 16:56	WG1020390
Xylenes, Total	U		0.000830	0.00357	1	09/14/2017 16:56	WG1020390
(S) Toluene-d8	101			80.0-120		09/14/2017 16:56	WG1020390
(S) Dibromofluoromethane	97.2			74.0-131		09/14/2017 16:56	WG1020390
(S) 4-Bromofluorobenzene	84.8			64.0-132		09/14/2017 16:56	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.2		1	09/19/2017 07:43	WG1021488

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.0108	0.0542	1	09/14/2017 17:17	WG1020390
Acrylonitrile	U		0.00194	0.0108	1	09/14/2017 17:17	WG1020390
Benzene	U		0.000293	0.00108	1	09/14/2017 17:17	WG1020390
Bromobenzene	U	JO	0.000308	0.00108	1	09/14/2017 17:17	WG1020390
Bromodichloromethane	U		0.000275	0.00108	1	09/14/2017 17:17	WG1020390
Bromochloromethane	U		0.000423	0.00542	1	09/14/2017 17:17	WG1020390
Bromoform	U		0.000460	0.00108	1	09/14/2017 17:17	WG1020390
Bromomethane	U		0.00145	0.00542	1	09/14/2017 17:17	WG1020390
n-Butylbenzene	U		0.000280	0.00108	1	09/14/2017 17:17	WG1020390
sec-Butylbenzene	U		0.000218	0.00108	1	09/14/2017 17:17	WG1020390
tert-Butylbenzene	U		0.000223	0.00108	1	09/14/2017 17:17	WG1020390
Carbon disulfide	U		0.000240	0.00108	1	09/14/2017 17:17	WG1020390
Carbon tetrachloride	U		0.000356	0.00108	1	09/14/2017 17:17	WG1020390
Chlorobenzene	U		0.000230	0.00108	1	09/14/2017 17:17	WG1020390
Chlorodibromomethane	U		0.000405	0.00108	1	09/14/2017 17:17	WG1020390
Chloroethane	U	JO	0.00103	0.00542	1	09/14/2017 17:17	WG1020390
Chloroform	U		0.000248	0.00542	1	09/14/2017 17:17	WG1020390
Chloromethane	U	JO	0.000407	0.00271	1	09/14/2017 17:17	WG1020390
2-Chlorotoluene	U		0.000326	0.00108	1	09/14/2017 17:17	WG1020390
4-Chlorotoluene	U		0.000260	0.00108	1	09/14/2017 17:17	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00542	1	09/14/2017 17:17	WG1020390
1,2-Dibromoethane	U		0.000372	0.00108	1	09/14/2017 17:17	WG1020390
Dibromomethane	U		0.000414	0.00108	1	09/14/2017 17:17	WG1020390
1,2-Dichlorobenzene	U		0.000331	0.00108	1	09/14/2017 17:17	WG1020390
1,3-Dichlorobenzene	U		0.000259	0.00108	1	09/14/2017 17:17	WG1020390
1,4-Dichlorobenzene	U		0.000245	0.00108	1	09/14/2017 17:17	WG1020390
Dichlorodifluoromethane	U		0.000773	0.00542	1	09/14/2017 17:17	WG1020390
1,1-Dichloroethane	U		0.000216	0.00108	1	09/14/2017 17:17	WG1020390
1,2-Dichloroethane	U		0.000287	0.00108	1	09/14/2017 17:17	WG1020390
1,1-Dichloroethene	U		0.000329	0.00108	1	09/14/2017 17:17	WG1020390
cis-1,2-Dichloroethene	U		0.000255	0.00108	1	09/14/2017 17:17	WG1020390
trans-1,2-Dichloroethene	U		0.000286	0.00108	1	09/14/2017 17:17	WG1020390
1,2-Dichloropropane	U		0.000388	0.00108	1	09/14/2017 17:17	WG1020390
1,1-Dichloropropene	U		0.000344	0.00108	1	09/14/2017 17:17	WG1020390
1,3-Dichloropropane	U		0.000224	0.00108	1	09/14/2017 17:17	WG1020390
cis-1,3-Dichloropropene	U		0.000284	0.00108	1	09/14/2017 17:17	WG1020390
trans-1,3-Dichloropropene	U		0.000290	0.00108	1	09/14/2017 17:17	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.000844	0.00271	1	09/14/2017 17:17	WG1020390
2,2-Dichloropropane	U		0.000303	0.00108	1	09/14/2017 17:17	WG1020390
Di-isopropyl ether	U		0.000269	0.00108	1	09/14/2017 17:17	WG1020390
Ethylbenzene	U		0.000322	0.00108	1	09/14/2017 17:17	WG1020390
Hexachloro-1,3-butadiene	U		0.000371	0.00108	1	09/14/2017 17:17	WG1020390
2-Hexanone	U		0.00149	0.0108	1	09/14/2017 17:17	WG1020390
n-Hexane	0.000333	J JO	0.000314	0.0108	1	09/14/2017 17:17	WG1020390
Iodomethane	U		0.00274	0.0108	1	09/14/2017 17:17	WG1020390
Isopropylbenzene	U		0.000264	0.00108	1	09/14/2017 17:17	WG1020390
p-Isopropyltoluene	U		0.000221	0.00108	1	09/14/2017 17:17	WG1020390
2-Butanone (MEK)	U	JO	0.00508	0.0108	1	09/14/2017 17:17	WG1020390
Methylene Chloride	U		0.00108	0.00542	1	09/14/2017 17:17	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0108	1	09/14/2017 17:17	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 10:30

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00108	1	09/14/2017 17:17	WG1020390
Naphthalene	U		0.00108	0.00542	1	09/14/2017 17:17	WG1020390
n-Propylbenzene	U		0.000223	0.00108	1	09/14/2017 17:17	WG1020390
Styrene	U		0.000254	0.00108	1	09/14/2017 17:17	WG1020390
1,1,1-Tetrachloroethane	U		0.000286	0.00108	1	09/14/2017 17:17	WG1020390
1,1,2-Tetrachloroethane	U		0.000396	0.00108	1	09/14/2017 17:17	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00108	1	09/14/2017 17:17	WG1020390
Tetrachloroethene	U		0.000299	0.00108	1	09/14/2017 17:17	WG1020390
Toluene	U		0.000471	0.00542	1	09/14/2017 17:17	WG1020390
1,2,3-Trichlorobenzene	U		0.000332	0.00108	1	09/14/2017 17:17	WG1020390
1,2,4-Trichlorobenzene	U		0.000421	0.00108	1	09/14/2017 17:17	WG1020390
1,1,1-Trichloroethane	U		0.000310	0.00108	1	09/14/2017 17:17	WG1020390
1,1,2-Trichloroethane	U		0.000300	0.00108	1	09/14/2017 17:17	WG1020390
Trichloroethene	U		0.000303	0.00108	1	09/14/2017 17:17	WG1020390
Trichlorofluoromethane	U		0.000414	0.00542	1	09/14/2017 17:17	WG1020390
1,2,3-Trichloropropane	U		0.000804	0.00271	1	09/14/2017 17:17	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000229	0.00108	1	09/14/2017 17:17	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000311	0.00108	1	09/14/2017 17:17	WG1020390
1,3,5-Trimethylbenzene	U		0.000288	0.00108	1	09/14/2017 17:17	WG1020390
Vinyl acetate	U		0.00259	0.0108	1	09/14/2017 17:17	WG1020390
Vinyl chloride	U		0.000316	0.00108	1	09/14/2017 17:17	WG1020390
Xylenes, Total	U		0.000757	0.00325	1	09/14/2017 17:17	WG1020390
(S) Toluene-d8	98.8			80.0-120		09/14/2017 17:17	WG1020390
(S) Dibromofluoromethane	99.1			74.0-131		09/14/2017 17:17	WG1020390
(S) 4-Bromofluorobenzene	84.6			64.0-132		09/14/2017 17:17	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	09/16/2017 10:30	WG1021103

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.0115	0.0576	1	09/14/2017 17:38	WG1020390
Acrylonitrile	U		0.00206	0.0115	1	09/14/2017 17:38	WG1020390
Benzene	U		0.000311	0.00115	1	09/14/2017 17:38	WG1020390
Bromobenzene	U	JO	0.000327	0.00115	1	09/14/2017 17:38	WG1020390
Bromodichloromethane	U		0.000292	0.00115	1	09/14/2017 17:38	WG1020390
Bromochloromethane	U		0.000449	0.00576	1	09/14/2017 17:38	WG1020390
Bromoform	U		0.000488	0.00115	1	09/14/2017 17:38	WG1020390
Bromomethane	U		0.00154	0.00576	1	09/14/2017 17:38	WG1020390
n-Butylbenzene	U		0.000297	0.00115	1	09/14/2017 17:38	WG1020390
sec-Butylbenzene	U		0.000231	0.00115	1	09/14/2017 17:38	WG1020390
tert-Butylbenzene	U		0.000237	0.00115	1	09/14/2017 17:38	WG1020390
Carbon disulfide	U		0.000254	0.00115	1	09/14/2017 17:38	WG1020390
Carbon tetrachloride	U		0.000378	0.00115	1	09/14/2017 17:38	WG1020390
Chlorobenzene	U		0.000244	0.00115	1	09/14/2017 17:38	WG1020390
Chlorodibromomethane	U		0.000429	0.00115	1	09/14/2017 17:38	WG1020390
Chloroethane	U	JO	0.00109	0.00576	1	09/14/2017 17:38	WG1020390
Chloroform	U		0.000264	0.00576	1	09/14/2017 17:38	WG1020390
Chloromethane	U	JO	0.000432	0.00288	1	09/14/2017 17:38	WG1020390
2-Chlorotoluene	U		0.000347	0.00115	1	09/14/2017 17:38	WG1020390
4-Chlorotoluene	U		0.000276	0.00115	1	09/14/2017 17:38	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00576	1	09/14/2017 17:38	WG1020390
1,2-Dibromoethane	U		0.000395	0.00115	1	09/14/2017 17:38	WG1020390
Dibromomethane	U		0.000440	0.00115	1	09/14/2017 17:38	WG1020390
1,2-Dichlorobenzene	U		0.000351	0.00115	1	09/14/2017 17:38	WG1020390
1,3-Dichlorobenzene	U		0.000275	0.00115	1	09/14/2017 17:38	WG1020390
1,4-Dichlorobenzene	U		0.000260	0.00115	1	09/14/2017 17:38	WG1020390
Dichlorodifluoromethane	U		0.000821	0.00576	1	09/14/2017 17:38	WG1020390
1,1-Dichloroethane	U		0.000229	0.00115	1	09/14/2017 17:38	WG1020390
1,2-Dichloroethane	U		0.000305	0.00115	1	09/14/2017 17:38	WG1020390
1,1-Dichloroethene	U		0.000349	0.00115	1	09/14/2017 17:38	WG1020390
cis-1,2-Dichloroethene	U		0.000271	0.00115	1	09/14/2017 17:38	WG1020390
trans-1,2-Dichloroethene	U		0.000304	0.00115	1	09/14/2017 17:38	WG1020390
1,2-Dichloropropane	U		0.000412	0.00115	1	09/14/2017 17:38	WG1020390
1,1-Dichloropropene	U		0.000365	0.00115	1	09/14/2017 17:38	WG1020390
1,3-Dichloropropane	U		0.000238	0.00115	1	09/14/2017 17:38	WG1020390
cis-1,3-Dichloropropene	U		0.000302	0.00115	1	09/14/2017 17:38	WG1020390
trans-1,3-Dichloropropene	U		0.000307	0.00115	1	09/14/2017 17:38	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.000896	0.00288	1	09/14/2017 17:38	WG1020390
2,2-Dichloropropane	U		0.000321	0.00115	1	09/14/2017 17:38	WG1020390
Di-isopropyl ether	U		0.000285	0.00115	1	09/14/2017 17:38	WG1020390
Ethylbenzene	U		0.000342	0.00115	1	09/14/2017 17:38	WG1020390
Hexachloro-1,3-butadiene	U		0.000394	0.00115	1	09/14/2017 17:38	WG1020390
2-Hexanone	U		0.00158	0.0115	1	09/14/2017 17:38	WG1020390
n-Hexane	U	JO	0.000334	0.0115	1	09/14/2017 17:38	WG1020390
Iodomethane	U		0.00291	0.0115	1	09/14/2017 17:38	WG1020390
Isopropylbenzene	U		0.000280	0.00115	1	09/14/2017 17:38	WG1020390
p-Isopropyltoluene	U		0.000235	0.00115	1	09/14/2017 17:38	WG1020390
2-Butanone (MEK)	U	JO	0.00539	0.0115	1	09/14/2017 17:38	WG1020390
Methylene Chloride	U		0.00115	0.00576	1	09/14/2017 17:38	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	09/14/2017 17:38	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 11:15

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000244	0.00115	1	09/14/2017 17:38	WG1020390
Naphthalene	U		0.00115	0.00576	1	09/14/2017 17:38	WG1020390
n-Propylbenzene	U		0.000237	0.00115	1	09/14/2017 17:38	WG1020390
Styrene	U		0.000269	0.00115	1	09/14/2017 17:38	WG1020390
1,1,1-Tetrachloroethane	U		0.000304	0.00115	1	09/14/2017 17:38	WG1020390
1,1,2-Tetrachloroethane	U		0.000420	0.00115	1	09/14/2017 17:38	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000420	0.00115	1	09/14/2017 17:38	WG1020390
Tetrachloroethene	U		0.000318	0.00115	1	09/14/2017 17:38	WG1020390
Toluene	U		0.000500	0.00576	1	09/14/2017 17:38	WG1020390
1,2,3-Trichlorobenzene	U		0.000352	0.00115	1	09/14/2017 17:38	WG1020390
1,2,4-Trichlorobenzene	U		0.000447	0.00115	1	09/14/2017 17:38	WG1020390
1,1,1-Trichloroethane	U		0.000329	0.00115	1	09/14/2017 17:38	WG1020390
1,1,2-Trichloroethane	U		0.000319	0.00115	1	09/14/2017 17:38	WG1020390
Trichloroethene	U		0.000321	0.00115	1	09/14/2017 17:38	WG1020390
Trichlorofluoromethane	U		0.000440	0.00576	1	09/14/2017 17:38	WG1020390
1,2,3-Trichloropropane	U		0.000853	0.00288	1	09/14/2017 17:38	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000243	0.00115	1	09/14/2017 17:38	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000330	0.00115	1	09/14/2017 17:38	WG1020390
1,3,5-Trimethylbenzene	U		0.000306	0.00115	1	09/14/2017 17:38	WG1020390
Vinyl acetate	U		0.00275	0.0115	1	09/14/2017 17:38	WG1020390
Vinyl chloride	U		0.000335	0.00115	1	09/14/2017 17:38	WG1020390
Xylenes, Total	U		0.000804	0.00345	1	09/14/2017 17:38	WG1020390
(S) Toluene-d8	102			80.0-120		09/14/2017 17:38	WG1020390
(S) Dibromofluoromethane	90.4			74.0-131		09/14/2017 17:38	WG1020390
(S) 4-Bromofluorobenzene	88.5			64.0-132		09/14/2017 17:38	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.4		1	09/19/2017 07:43	WG1021488

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0107	0.0535	1	09/14/2017 17:58	WG1020390
Acrylonitrile	U		0.00192	0.0107	1	09/14/2017 17:58	WG1020390
Benzene	U		0.000289	0.00107	1	09/14/2017 17:58	WG1020390
Bromobenzene	U	<u>JO</u>	0.000304	0.00107	1	09/14/2017 17:58	WG1020390
Bromodichloromethane	U		0.000272	0.00107	1	09/14/2017 17:58	WG1020390
Bromochloromethane	U		0.000417	0.00535	1	09/14/2017 17:58	WG1020390
Bromoform	U		0.000454	0.00107	1	09/14/2017 17:58	WG1020390
Bromomethane	U		0.00143	0.00535	1	09/14/2017 17:58	WG1020390
n-Butylbenzene	U		0.000276	0.00107	1	09/14/2017 17:58	WG1020390
sec-Butylbenzene	U		0.000215	0.00107	1	09/14/2017 17:58	WG1020390
tert-Butylbenzene	U		0.000220	0.00107	1	09/14/2017 17:58	WG1020390
Carbon disulfide	U		0.000237	0.00107	1	09/14/2017 17:58	WG1020390
Carbon tetrachloride	U		0.000351	0.00107	1	09/14/2017 17:58	WG1020390
Chlorobenzene	U		0.000227	0.00107	1	09/14/2017 17:58	WG1020390
Chlorodibromomethane	U		0.000399	0.00107	1	09/14/2017 17:58	WG1020390
Chloroethane	U	<u>JO</u>	0.00101	0.00535	1	09/14/2017 17:58	WG1020390
Chloroform	U		0.000245	0.00535	1	09/14/2017 17:58	WG1020390
Chloromethane	U	<u>JO</u>	0.000401	0.00268	1	09/14/2017 17:58	WG1020390
2-Chlorotoluene	U		0.000322	0.00107	1	09/14/2017 17:58	WG1020390
4-Chlorotoluene	U		0.000257	0.00107	1	09/14/2017 17:58	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00535	1	09/14/2017 17:58	WG1020390
1,2-Dibromoethane	U		0.000367	0.00107	1	09/14/2017 17:58	WG1020390
Dibromomethane	U		0.000409	0.00107	1	09/14/2017 17:58	WG1020390
1,2-Dichlorobenzene	U		0.000326	0.00107	1	09/14/2017 17:58	WG1020390
1,3-Dichlorobenzene	U		0.000256	0.00107	1	09/14/2017 17:58	WG1020390
1,4-Dichlorobenzene	U		0.000242	0.00107	1	09/14/2017 17:58	WG1020390
Dichlorodifluoromethane	U		0.000763	0.00535	1	09/14/2017 17:58	WG1020390
1,1-Dichloroethane	U		0.000213	0.00107	1	09/14/2017 17:58	WG1020390
1,2-Dichloroethane	U		0.000284	0.00107	1	09/14/2017 17:58	WG1020390
1,1-Dichloroethene	U		0.000324	0.00107	1	09/14/2017 17:58	WG1020390
cis-1,2-Dichloroethene	U		0.000252	0.00107	1	09/14/2017 17:58	WG1020390
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	09/14/2017 17:58	WG1020390
1,2-Dichloropropane	U		0.000383	0.00107	1	09/14/2017 17:58	WG1020390
1,1-Dichloropropene	U		0.000339	0.00107	1	09/14/2017 17:58	WG1020390
1,3-Dichloropropane	U		0.000222	0.00107	1	09/14/2017 17:58	WG1020390
cis-1,3-Dichloropropene	U		0.000280	0.00107	1	09/14/2017 17:58	WG1020390
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	09/14/2017 17:58	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000833	0.00268	1	09/14/2017 17:58	WG1020390
2,2-Dichloropropane	U		0.000299	0.00107	1	09/14/2017 17:58	WG1020390
Di-isopropyl ether	U		0.000265	0.00107	1	09/14/2017 17:58	WG1020390
Ethylbenzene	U		0.000318	0.00107	1	09/14/2017 17:58	WG1020390
Hexachloro-1,3-butadiene	U		0.000366	0.00107	1	09/14/2017 17:58	WG1020390
2-Hexanone	U		0.00147	0.0107	1	09/14/2017 17:58	WG1020390
n-Hexane	U	<u>JO</u>	0.000310	0.0107	1	09/14/2017 17:58	WG1020390
Iodomethane	U		0.00271	0.0107	1	09/14/2017 17:58	WG1020390
Isopropylbenzene	U		0.000260	0.00107	1	09/14/2017 17:58	WG1020390
p-Isopropyltoluene	U		0.000218	0.00107	1	09/14/2017 17:58	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00501	0.0107	1	09/14/2017 17:58	WG1020390
Methylene Chloride	U		0.00107	0.00535	1	09/14/2017 17:58	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	09/14/2017 17:58	WG1020390

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 09/12/17 11:25

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/14/2017 17:58	WG1020390
Naphthalene	U		0.00107	0.00535	1	09/14/2017 17:58	WG1020390
n-Propylbenzene	U		0.000220	0.00107	1	09/14/2017 17:58	WG1020390
Styrene	U		0.000250	0.00107	1	09/14/2017 17:58	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	09/14/2017 17:58	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	09/14/2017 17:58	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	09/14/2017 17:58	WG1020390
Tetrachloroethene	0.00480		0.000295	0.00107	1	09/14/2017 17:58	WG1020390
Toluene	U		0.000464	0.00535	1	09/14/2017 17:58	WG1020390
1,2,3-Trichlorobenzene	U		0.000327	0.00107	1	09/14/2017 17:58	WG1020390
1,2,4-Trichlorobenzene	U		0.000415	0.00107	1	09/14/2017 17:58	WG1020390
1,1,1-Trichloroethane	U		0.000306	0.00107	1	09/14/2017 17:58	WG1020390
1,1,2-Trichloroethane	U		0.000296	0.00107	1	09/14/2017 17:58	WG1020390
Trichloroethene	U		0.000299	0.00107	1	09/14/2017 17:58	WG1020390
Trichlorofluoromethane	U		0.000409	0.00535	1	09/14/2017 17:58	WG1020390
1,2,3-Trichloropropane	U		0.000793	0.00268	1	09/14/2017 17:58	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000226	0.00107	1	09/14/2017 17:58	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000307	0.00107	1	09/14/2017 17:58	WG1020390
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	09/14/2017 17:58	WG1020390
Vinyl acetate	U		0.00256	0.0107	1	09/14/2017 17:58	WG1020390
Vinyl chloride	U		0.000311	0.00107	1	09/14/2017 17:58	WG1020390
Xylenes, Total	U		0.000747	0.00321	1	09/14/2017 17:58	WG1020390
(S) Toluene-d8	101			80.0-120		09/14/2017 17:58	WG1020390
(S) Dibromofluoromethane	102			74.0-131		09/14/2017 17:58	WG1020390
(S) 4-Bromofluorobenzene	84.6			64.0-132		09/14/2017 17:58	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.8		1	09/19/2017 07:43	WG1021488

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0118	0.0589	1	09/18/2017 16:20	WG1020390
Acrylonitrile	U		0.00211	0.0118	1	09/18/2017 16:20	WG1020390
Benzene	U		0.000318	0.00118	1	09/18/2017 16:20	WG1020390
Bromobenzene	U		0.000335	0.00118	1	09/18/2017 16:20	WG1020390
Bromodichloromethane	U		0.000299	0.00118	1	09/18/2017 16:20	WG1020390
Bromochloromethane	U		0.000460	0.00589	1	09/18/2017 16:20	WG1020390
Bromoform	U		0.000500	0.00118	1	09/18/2017 16:20	WG1020390
Bromomethane	U		0.00158	0.00589	1	09/18/2017 16:20	WG1020390
n-Butylbenzene	U		0.000304	0.00118	1	09/18/2017 16:20	WG1020390
sec-Butylbenzene	U		0.000237	0.00118	1	09/18/2017 16:20	WG1020390
tert-Butylbenzene	U		0.000243	0.00118	1	09/18/2017 16:20	WG1020390
Carbon disulfide	U		0.000261	0.00118	1	09/18/2017 16:20	WG1020390
Carbon tetrachloride	U		0.000387	0.00118	1	09/18/2017 16:20	WG1020390
Chlorobenzene	U		0.000250	0.00118	1	09/18/2017 16:20	WG1020390
Chlorodibromomethane	U		0.000440	0.00118	1	09/18/2017 16:20	WG1020390
Chloroethane	U		0.00112	0.00589	1	09/18/2017 16:20	WG1020390
Chloroform	U		0.000270	0.00589	1	09/18/2017 16:20	WG1020390
Chloromethane	U	JO	0.000442	0.00295	1	09/18/2017 16:20	WG1020390
2-Chlorotoluene	U		0.000355	0.00118	1	09/18/2017 16:20	WG1020390
4-Chlorotoluene	U		0.000283	0.00118	1	09/18/2017 16:20	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00589	1	09/18/2017 16:20	WG1020390
1,2-Dibromoethane	U		0.000404	0.00118	1	09/18/2017 16:20	WG1020390
Dibromomethane	U		0.000450	0.00118	1	09/18/2017 16:20	WG1020390
1,2-Dichlorobenzene	U		0.000360	0.00118	1	09/18/2017 16:20	WG1020390
1,3-Dichlorobenzene	U		0.000282	0.00118	1	09/18/2017 16:20	WG1020390
1,4-Dichlorobenzene	U		0.000266	0.00118	1	09/18/2017 16:20	WG1020390
Dichlorodifluoromethane	U		0.000841	0.00589	1	09/18/2017 16:20	WG1020390
1,1-Dichloroethane	U		0.000235	0.00118	1	09/18/2017 16:20	WG1020390
1,2-Dichloroethane	U		0.000312	0.00118	1	09/18/2017 16:20	WG1020390
1,1-Dichloroethene	U		0.000357	0.00118	1	09/18/2017 16:20	WG1020390
cis-1,2-Dichloroethene	0.0620		0.000277	0.00118	1	09/18/2017 16:20	WG1020390
trans-1,2-Dichloroethene	U		0.000311	0.00118	1	09/18/2017 16:20	WG1020390
1,2-Dichloropropane	U		0.000422	0.00118	1	09/18/2017 16:20	WG1020390
1,1-Dichloropropene	U		0.000374	0.00118	1	09/18/2017 16:20	WG1020390
1,3-Dichloropropane	U		0.000244	0.00118	1	09/18/2017 16:20	WG1020390
cis-1,3-Dichloropropene	U		0.000309	0.00118	1	09/18/2017 16:20	WG1020390
trans-1,3-Dichloropropene	U		0.000315	0.00118	1	09/18/2017 16:20	WG1020390
trans-1,4-Dichloro-2-butene	U	JO	0.000917	0.00295	1	09/18/2017 16:20	WG1020390
2,2-Dichloropropane	U		0.000329	0.00118	1	09/18/2017 16:20	WG1020390
Di-isopropyl ether	U	JO	0.000292	0.00118	1	09/18/2017 16:20	WG1020390
Ethylbenzene	U		0.000350	0.00118	1	09/18/2017 16:20	WG1020390
Hexachloro-1,3-butadiene	U		0.000403	0.00118	1	09/18/2017 16:20	WG1020390
2-Hexanone	U		0.00162	0.0118	1	09/18/2017 16:20	WG1020390
n-Hexane	0.000447	J	0.000342	0.0118	1	09/18/2017 16:20	WG1020390
Iodomethane	U		0.00298	0.0118	1	09/18/2017 16:20	WG1020390
Isopropylbenzene	U		0.000286	0.00118	1	09/18/2017 16:20	WG1020390
p-Isopropyltoluene	U		0.000241	0.00118	1	09/18/2017 16:20	WG1020390
2-Butanone (MEK)	U		0.00552	0.0118	1	09/18/2017 16:20	WG1020390
Methylene Chloride	U		0.00118	0.00589	1	09/18/2017 16:20	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00222	0.0118	1	09/18/2017 16:20	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 11:40

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000250	0.00118	1	09/18/2017 16:20	WG1020390
Naphthalene	U		0.00118	0.00589	1	09/18/2017 16:20	WG1020390
n-Propylbenzene	U		0.000243	0.00118	1	09/18/2017 16:20	WG1020390
Styrene	U		0.000276	0.00118	1	09/18/2017 16:20	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000311	0.00118	1	09/18/2017 16:20	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000430	0.00118	1	09/18/2017 16:20	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000430	0.00118	1	09/18/2017 16:20	WG1020390
Tetrachloroethene	0.0277		0.000325	0.00118	1	09/18/2017 16:20	WG1020390
Toluene	U		0.000512	0.00589	1	09/18/2017 16:20	WG1020390
1,2,3-Trichlorobenzene	U		0.000361	0.00118	1	09/18/2017 16:20	WG1020390
1,2,4-Trichlorobenzene	U		0.000457	0.00118	1	09/18/2017 16:20	WG1020390
1,1,1-Trichloroethane	U		0.000337	0.00118	1	09/18/2017 16:20	WG1020390
1,1,2-Trichloroethane	U		0.000327	0.00118	1	09/18/2017 16:20	WG1020390
Trichloroethene	0.00195		0.000329	0.00118	1	09/18/2017 16:20	WG1020390
Trichlorofluoromethane	U		0.000450	0.00589	1	09/18/2017 16:20	WG1020390
1,2,3-Trichloropropane	U		0.000874	0.00295	1	09/18/2017 16:20	WG1020390
1,2,4-Trimethylbenzene	U		0.000249	0.00118	1	09/18/2017 16:20	WG1020390
1,2,3-Trimethylbenzene	U		0.000338	0.00118	1	09/18/2017 16:20	WG1020390
1,3,5-Trimethylbenzene	U		0.000314	0.00118	1	09/18/2017 16:20	WG1020390
Vinyl acetate	U		0.00282	0.0118	1	09/18/2017 16:20	WG1020390
Vinyl chloride	U		0.000343	0.00118	1	09/18/2017 16:20	WG1020390
Xylenes, Total	U		0.000823	0.00354	1	09/18/2017 16:20	WG1020390
(S) Toluene-d8	107			80.0-120		09/18/2017 16:20	WG1020390
(S) Dibromofluoromethane	102			74.0-131		09/18/2017 16:20	WG1020390
(S) 4-Bromofluorobenzene	101			64.0-132		09/18/2017 16:20	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.6		1	09/19/2017 07:43	WG1021488

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0107	0.0534	1	09/14/2017 18:40	WG1020390
Acrylonitrile	U		0.00191	0.0107	1	09/14/2017 18:40	WG1020390
Benzene	U		0.000288	0.00107	1	09/14/2017 18:40	WG1020390
Bromobenzene	U	<u>JO</u>	0.000303	0.00107	1	09/14/2017 18:40	WG1020390
Bromodichloromethane	U		0.000271	0.00107	1	09/14/2017 18:40	WG1020390
Bromochloromethane	U		0.000417	0.00534	1	09/14/2017 18:40	WG1020390
Bromoform	U		0.000453	0.00107	1	09/14/2017 18:40	WG1020390
Bromomethane	U		0.00143	0.00534	1	09/14/2017 18:40	WG1020390
n-Butylbenzene	U		0.000276	0.00107	1	09/14/2017 18:40	WG1020390
sec-Butylbenzene	U		0.000215	0.00107	1	09/14/2017 18:40	WG1020390
tert-Butylbenzene	U		0.000220	0.00107	1	09/14/2017 18:40	WG1020390
Carbon disulfide	0.000435	<u>J</u>	0.000236	0.00107	1	09/14/2017 18:40	WG1020390
Carbon tetrachloride	U		0.000350	0.00107	1	09/14/2017 18:40	WG1020390
Chlorobenzene	U		0.000227	0.00107	1	09/14/2017 18:40	WG1020390
Chlorodibromomethane	U		0.000399	0.00107	1	09/14/2017 18:40	WG1020390
Chloroethane	U	<u>JO</u>	0.00101	0.00534	1	09/14/2017 18:40	WG1020390
Chloroform	U		0.000245	0.00534	1	09/14/2017 18:40	WG1020390
Chloromethane	U	<u>JO</u>	0.000401	0.00267	1	09/14/2017 18:40	WG1020390
2-Chlorotoluene	U		0.000322	0.00107	1	09/14/2017 18:40	WG1020390
4-Chlorotoluene	U		0.000256	0.00107	1	09/14/2017 18:40	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00534	1	09/14/2017 18:40	WG1020390
1,2-Dibromoethane	U		0.000366	0.00107	1	09/14/2017 18:40	WG1020390
Dibromomethane	U		0.000408	0.00107	1	09/14/2017 18:40	WG1020390
1,2-Dichlorobenzene	U		0.000326	0.00107	1	09/14/2017 18:40	WG1020390
1,3-Dichlorobenzene	U		0.000255	0.00107	1	09/14/2017 18:40	WG1020390
1,4-Dichlorobenzene	U		0.000241	0.00107	1	09/14/2017 18:40	WG1020390
Dichlorodifluoromethane	U		0.000762	0.00534	1	09/14/2017 18:40	WG1020390
1,1-Dichloroethane	U		0.000213	0.00107	1	09/14/2017 18:40	WG1020390
1,2-Dichloroethane	U		0.000283	0.00107	1	09/14/2017 18:40	WG1020390
1,1-Dichloroethene	U		0.000324	0.00107	1	09/14/2017 18:40	WG1020390
cis-1,2-Dichloroethene	U		0.000251	0.00107	1	09/14/2017 18:40	WG1020390
trans-1,2-Dichloroethene	U		0.000282	0.00107	1	09/14/2017 18:40	WG1020390
1,2-Dichloropropane	U		0.000383	0.00107	1	09/14/2017 18:40	WG1020390
1,1-Dichloropropene	U		0.000339	0.00107	1	09/14/2017 18:40	WG1020390
1,3-Dichloropropane	U		0.000221	0.00107	1	09/14/2017 18:40	WG1020390
cis-1,3-Dichloropropene	U		0.000280	0.00107	1	09/14/2017 18:40	WG1020390
trans-1,3-Dichloropropene	U		0.000285	0.00107	1	09/14/2017 18:40	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000831	0.00267	1	09/14/2017 18:40	WG1020390
2,2-Dichloropropane	U		0.000298	0.00107	1	09/14/2017 18:40	WG1020390
Di-isopropyl ether	U		0.000265	0.00107	1	09/14/2017 18:40	WG1020390
Ethylbenzene	U		0.000317	0.00107	1	09/14/2017 18:40	WG1020390
Hexachloro-1,3-butadiene	U		0.000365	0.00107	1	09/14/2017 18:40	WG1020390
2-Hexanone	U		0.00146	0.0107	1	09/14/2017 18:40	WG1020390
n-Hexane	U	<u>JO</u>	0.000310	0.0107	1	09/14/2017 18:40	WG1020390
Iodomethane	U		0.00270	0.0107	1	09/14/2017 18:40	WG1020390
Isopropylbenzene	U		0.000260	0.00107	1	09/14/2017 18:40	WG1020390
p-Isopropyltoluene	U		0.000218	0.00107	1	09/14/2017 18:40	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00500	0.0107	1	09/14/2017 18:40	WG1020390
Methylene Chloride	U		0.00107	0.00534	1	09/14/2017 18:40	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	09/14/2017 18:40	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 11:40

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/14/2017 18:40	WG1020390
Naphthalene	U		0.00107	0.00534	1	09/14/2017 18:40	WG1020390
n-Propylbenzene	U		0.000220	0.00107	1	09/14/2017 18:40	WG1020390
Styrene	U		0.000250	0.00107	1	09/14/2017 18:40	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000282	0.00107	1	09/14/2017 18:40	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000390	0.00107	1	09/14/2017 18:40	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000390	0.00107	1	09/14/2017 18:40	WG1020390
Tetrachloroethene	U		0.000295	0.00107	1	09/14/2017 18:40	WG1020390
Toluene	U		0.000464	0.00534	1	09/14/2017 18:40	WG1020390
1,2,3-Trichlorobenzene	U		0.000327	0.00107	1	09/14/2017 18:40	WG1020390
1,2,4-Trichlorobenzene	U		0.000415	0.00107	1	09/14/2017 18:40	WG1020390
1,1,1-Trichloroethane	U		0.000306	0.00107	1	09/14/2017 18:40	WG1020390
1,1,2-Trichloroethane	U		0.000296	0.00107	1	09/14/2017 18:40	WG1020390
Trichloroethene	U		0.000298	0.00107	1	09/14/2017 18:40	WG1020390
Trichlorofluoromethane	U		0.000408	0.00534	1	09/14/2017 18:40	WG1020390
1,2,3-Trichloropropane	U		0.000792	0.00267	1	09/14/2017 18:40	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000225	0.00107	1	09/14/2017 18:40	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000307	0.00107	1	09/14/2017 18:40	WG1020390
1,3,5-Trimethylbenzene	U		0.000284	0.00107	1	09/14/2017 18:40	WG1020390
Vinyl acetate	U		0.00255	0.0107	1	09/14/2017 18:40	WG1020390
Vinyl chloride	U		0.000311	0.00107	1	09/14/2017 18:40	WG1020390
Xylenes, Total	U		0.000746	0.00321	1	09/14/2017 18:40	WG1020390
(S) Toluene-d8	98.8			80.0-120		09/14/2017 18:40	WG1020390
(S) Dibromofluoromethane	98.9			74.0-131		09/14/2017 18:40	WG1020390
(S) 4-Bromofluorobenzene	86.5			64.0-132		09/14/2017 18:40	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.0		1	09/19/2017 07:43	WG1021488

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>JO</u>	0.0106	0.0532	1	09/14/2017 19:00	WG1020390
Acrylonitrile	U		0.00190	0.0106	1	09/14/2017 19:00	WG1020390
Benzene	U		0.000287	0.00106	1	09/14/2017 19:00	WG1020390
Bromobenzene	U	<u>JO</u>	0.000302	0.00106	1	09/14/2017 19:00	WG1020390
Bromodichloromethane	U		0.000270	0.00106	1	09/14/2017 19:00	WG1020390
Bromochloromethane	U		0.000415	0.00532	1	09/14/2017 19:00	WG1020390
Bromoform	U		0.000451	0.00106	1	09/14/2017 19:00	WG1020390
Bromomethane	U		0.00143	0.00532	1	09/14/2017 19:00	WG1020390
n-Butylbenzene	U		0.000275	0.00106	1	09/14/2017 19:00	WG1020390
sec-Butylbenzene	U		0.000214	0.00106	1	09/14/2017 19:00	WG1020390
tert-Butylbenzene	U		0.000219	0.00106	1	09/14/2017 19:00	WG1020390
Carbon disulfide	0.000807	<u>J</u>	0.000235	0.00106	1	09/14/2017 19:00	WG1020390
Carbon tetrachloride	U		0.000349	0.00106	1	09/14/2017 19:00	WG1020390
Chlorobenzene	U		0.000226	0.00106	1	09/14/2017 19:00	WG1020390
Chlorodibromomethane	U		0.000397	0.00106	1	09/14/2017 19:00	WG1020390
Chloroethane	U	<u>JO</u>	0.00101	0.00532	1	09/14/2017 19:00	WG1020390
Chloroform	U		0.000244	0.00532	1	09/14/2017 19:00	WG1020390
Chloromethane	U	<u>JO</u>	0.000399	0.00266	1	09/14/2017 19:00	WG1020390
2-Chlorotoluene	U		0.000320	0.00106	1	09/14/2017 19:00	WG1020390
4-Chlorotoluene	U		0.000255	0.00106	1	09/14/2017 19:00	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00532	1	09/14/2017 19:00	WG1020390
1,2-Dibromoethane	U		0.000365	0.00106	1	09/14/2017 19:00	WG1020390
Dibromomethane	U		0.000406	0.00106	1	09/14/2017 19:00	WG1020390
1,2-Dichlorobenzene	U		0.000325	0.00106	1	09/14/2017 19:00	WG1020390
1,3-Dichlorobenzene	U		0.000254	0.00106	1	09/14/2017 19:00	WG1020390
1,4-Dichlorobenzene	U		0.000240	0.00106	1	09/14/2017 19:00	WG1020390
Dichlorodifluoromethane	U		0.000759	0.00532	1	09/14/2017 19:00	WG1020390
1,1-Dichloroethane	U		0.000212	0.00106	1	09/14/2017 19:00	WG1020390
1,2-Dichloroethane	U		0.000282	0.00106	1	09/14/2017 19:00	WG1020390
1,1-Dichloroethene	U		0.000322	0.00106	1	09/14/2017 19:00	WG1020390
cis-1,2-Dichloroethene	U		0.000250	0.00106	1	09/14/2017 19:00	WG1020390
trans-1,2-Dichloroethene	U		0.000281	0.00106	1	09/14/2017 19:00	WG1020390
1,2-Dichloropropane	U		0.000381	0.00106	1	09/14/2017 19:00	WG1020390
1,1-Dichloropropene	U		0.000337	0.00106	1	09/14/2017 19:00	WG1020390
1,3-Dichloropropane	U		0.000220	0.00106	1	09/14/2017 19:00	WG1020390
cis-1,3-Dichloropropene	U		0.000279	0.00106	1	09/14/2017 19:00	WG1020390
trans-1,3-Dichloropropene	U		0.000284	0.00106	1	09/14/2017 19:00	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000828	0.00266	1	09/14/2017 19:00	WG1020390
2,2-Dichloropropane	U		0.000297	0.00106	1	09/14/2017 19:00	WG1020390
Di-isopropyl ether	U		0.000264	0.00106	1	09/14/2017 19:00	WG1020390
Ethylbenzene	U		0.000316	0.00106	1	09/14/2017 19:00	WG1020390
Hexachloro-1,3-butadiene	U		0.000364	0.00106	1	09/14/2017 19:00	WG1020390
2-Hexanone	U		0.00146	0.0106	1	09/14/2017 19:00	WG1020390
n-Hexane	0.00329	<u>J JO</u>	0.000309	0.0106	1	09/14/2017 19:00	WG1020390
Iodomethane	U		0.00269	0.0106	1	09/14/2017 19:00	WG1020390
Isopropylbenzene	U		0.000259	0.00106	1	09/14/2017 19:00	WG1020390
p-Isopropyltoluene	U		0.000217	0.00106	1	09/14/2017 19:00	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00498	0.0106	1	09/14/2017 19:00	WG1020390
Methylene Chloride	U		0.00106	0.00532	1	09/14/2017 19:00	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00200	0.0106	1	09/14/2017 19:00	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 12:05

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000226	0.00106	1	09/14/2017 19:00	WG1020390
Naphthalene	U		0.00106	0.00532	1	09/14/2017 19:00	WG1020390
n-Propylbenzene	U		0.000219	0.00106	1	09/14/2017 19:00	WG1020390
Styrene	U		0.000249	0.00106	1	09/14/2017 19:00	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000281	0.00106	1	09/14/2017 19:00	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000388	0.00106	1	09/14/2017 19:00	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000388	0.00106	1	09/14/2017 19:00	WG1020390
Tetrachloroethene	U		0.000294	0.00106	1	09/14/2017 19:00	WG1020390
Toluene	U		0.000462	0.00532	1	09/14/2017 19:00	WG1020390
1,2,3-Trichlorobenzene	U		0.000326	0.00106	1	09/14/2017 19:00	WG1020390
1,2,4-Trichlorobenzene	U		0.000413	0.00106	1	09/14/2017 19:00	WG1020390
1,1,1-Trichloroethane	U		0.000304	0.00106	1	09/14/2017 19:00	WG1020390
1,1,2-Trichloroethane	U		0.000295	0.00106	1	09/14/2017 19:00	WG1020390
Trichloroethene	U		0.000297	0.00106	1	09/14/2017 19:00	WG1020390
Trichlorofluoromethane	U		0.000406	0.00532	1	09/14/2017 19:00	WG1020390
1,2,3-Trichloropropane	U		0.000788	0.00266	1	09/14/2017 19:00	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000225	0.00106	1	09/14/2017 19:00	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000305	0.00106	1	09/14/2017 19:00	WG1020390
1,3,5-Trimethylbenzene	U		0.000283	0.00106	1	09/14/2017 19:00	WG1020390
Vinyl acetate	U		0.00254	0.0106	1	09/14/2017 19:00	WG1020390
Vinyl chloride	U		0.000310	0.00106	1	09/14/2017 19:00	WG1020390
Xylenes, Total	U		0.000743	0.00319	1	09/14/2017 19:00	WG1020390
(S) Toluene-d8	98.0			80.0-120		09/14/2017 19:00	WG1020390
(S) Dibromofluoromethane	98.0			74.0-131		09/14/2017 19:00	WG1020390
(S) 4-Bromofluorobenzene	85.7			64.0-132		09/14/2017 19:00	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.3		1	09/19/2017 09:14	WG1021489

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0111	0.0554	1	09/14/2017 19:21	WG1020390
Acrylonitrile	U		0.00198	0.0111	1	09/14/2017 19:21	WG1020390
Benzene	U		0.000299	0.00111	1	09/14/2017 19:21	WG1020390
Bromobenzene	U	<u>JO</u>	0.000315	0.00111	1	09/14/2017 19:21	WG1020390
Bromodichloromethane	U		0.000281	0.00111	1	09/14/2017 19:21	WG1020390
Bromochloromethane	U		0.000432	0.00554	1	09/14/2017 19:21	WG1020390
Bromoform	U		0.000470	0.00111	1	09/14/2017 19:21	WG1020390
Bromomethane	U		0.00148	0.00554	1	09/14/2017 19:21	WG1020390
n-Butylbenzene	U		0.000286	0.00111	1	09/14/2017 19:21	WG1020390
sec-Butylbenzene	U		0.000223	0.00111	1	09/14/2017 19:21	WG1020390
tert-Butylbenzene	U		0.000228	0.00111	1	09/14/2017 19:21	WG1020390
Carbon disulfide	0.000688	<u>J</u>	0.000245	0.00111	1	09/14/2017 19:21	WG1020390
Carbon tetrachloride	U		0.000363	0.00111	1	09/14/2017 19:21	WG1020390
Chlorobenzene	U		0.000235	0.00111	1	09/14/2017 19:21	WG1020390
Chlorodibromomethane	U		0.000413	0.00111	1	09/14/2017 19:21	WG1020390
Chloroethane	U	<u>JO</u>	0.00105	0.00554	1	09/14/2017 19:21	WG1020390
Chloroform	U		0.000254	0.00554	1	09/14/2017 19:21	WG1020390
Chloromethane	U	<u>JO</u>	0.000415	0.00277	1	09/14/2017 19:21	WG1020390
2-Chlorotoluene	U		0.000333	0.00111	1	09/14/2017 19:21	WG1020390
4-Chlorotoluene	U		0.000266	0.00111	1	09/14/2017 19:21	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00554	1	09/14/2017 19:21	WG1020390
1,2-Dibromoethane	U		0.000380	0.00111	1	09/14/2017 19:21	WG1020390
Dibromomethane	U		0.000423	0.00111	1	09/14/2017 19:21	WG1020390
1,2-Dichlorobenzene	U		0.000338	0.00111	1	09/14/2017 19:21	WG1020390
1,3-Dichlorobenzene	U		0.000265	0.00111	1	09/14/2017 19:21	WG1020390
1,4-Dichlorobenzene	U		0.000250	0.00111	1	09/14/2017 19:21	WG1020390
Dichlorodifluoromethane	U		0.000790	0.00554	1	09/14/2017 19:21	WG1020390
1,1-Dichloroethane	U		0.000220	0.00111	1	09/14/2017 19:21	WG1020390
1,2-Dichloroethane	U		0.000293	0.00111	1	09/14/2017 19:21	WG1020390
1,1-Dichloroethene	U		0.000336	0.00111	1	09/14/2017 19:21	WG1020390
cis-1,2-Dichloroethene	U		0.000260	0.00111	1	09/14/2017 19:21	WG1020390
trans-1,2-Dichloroethene	U		0.000292	0.00111	1	09/14/2017 19:21	WG1020390
1,2-Dichloropropane	U		0.000396	0.00111	1	09/14/2017 19:21	WG1020390
1,1-Dichloropropene	U		0.000351	0.00111	1	09/14/2017 19:21	WG1020390
1,3-Dichloropropane	U		0.000229	0.00111	1	09/14/2017 19:21	WG1020390
cis-1,3-Dichloropropene	U		0.000290	0.00111	1	09/14/2017 19:21	WG1020390
trans-1,3-Dichloropropene	U		0.000296	0.00111	1	09/14/2017 19:21	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000862	0.00277	1	09/14/2017 19:21	WG1020390
2,2-Dichloropropane	U		0.000309	0.00111	1	09/14/2017 19:21	WG1020390
Di-isopropyl ether	U		0.000275	0.00111	1	09/14/2017 19:21	WG1020390
Ethylbenzene	U		0.000329	0.00111	1	09/14/2017 19:21	WG1020390
Hexachloro-1,3-butadiene	U		0.000379	0.00111	1	09/14/2017 19:21	WG1020390
2-Hexanone	U		0.00152	0.0111	1	09/14/2017 19:21	WG1020390
n-Hexane	0.000446	<u>J JO</u>	0.000321	0.0111	1	09/14/2017 19:21	WG1020390
Iodomethane	U		0.00280	0.0111	1	09/14/2017 19:21	WG1020390
Isopropylbenzene	U		0.000269	0.00111	1	09/14/2017 19:21	WG1020390
p-Isopropyltoluene	U		0.000226	0.00111	1	09/14/2017 19:21	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00518	0.0111	1	09/14/2017 19:21	WG1020390
Methylene Chloride	U		0.00111	0.00554	1	09/14/2017 19:21	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00208	0.0111	1	09/14/2017 19:21	WG1020390

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 09/12/17 12:50

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000235	0.00111	1	09/14/2017 19:21	WG1020390
Naphthalene	U		0.00111	0.00554	1	09/14/2017 19:21	WG1020390
n-Propylbenzene	U		0.000228	0.00111	1	09/14/2017 19:21	WG1020390
Styrene	U		0.000259	0.00111	1	09/14/2017 19:21	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000292	0.00111	1	09/14/2017 19:21	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000404	0.00111	1	09/14/2017 19:21	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000404	0.00111	1	09/14/2017 19:21	WG1020390
Tetrachloroethene	U		0.000306	0.00111	1	09/14/2017 19:21	WG1020390
Toluene	U		0.000481	0.00554	1	09/14/2017 19:21	WG1020390
1,2,3-Trichlorobenzene	U		0.000339	0.00111	1	09/14/2017 19:21	WG1020390
1,2,4-Trichlorobenzene	U		0.000430	0.00111	1	09/14/2017 19:21	WG1020390
1,1,1-Trichloroethane	U		0.000317	0.00111	1	09/14/2017 19:21	WG1020390
1,1,2-Trichloroethane	U		0.000307	0.00111	1	09/14/2017 19:21	WG1020390
Trichloroethene	U		0.000309	0.00111	1	09/14/2017 19:21	WG1020390
Trichlorofluoromethane	U		0.000423	0.00554	1	09/14/2017 19:21	WG1020390
1,2,3-Trichloropropane	U		0.000821	0.00277	1	09/14/2017 19:21	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000234	0.00111	1	09/14/2017 19:21	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000318	0.00111	1	09/14/2017 19:21	WG1020390
1,3,5-Trimethylbenzene	U		0.000295	0.00111	1	09/14/2017 19:21	WG1020390
Vinyl acetate	U		0.00265	0.0111	1	09/14/2017 19:21	WG1020390
Vinyl chloride	U		0.000322	0.00111	1	09/14/2017 19:21	WG1020390
Xylenes, Total	U		0.000773	0.00332	1	09/14/2017 19:21	WG1020390
(S) Toluene-d8	100			80.0-120		09/14/2017 19:21	WG1020390
(S) Dibromofluoromethane	99.4			74.0-131		09/14/2017 19:21	WG1020390
(S) 4-Bromofluorobenzene	88.1			64.0-132		09/14/2017 19:21	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.6		1	09/19/2017 09:14	WG1021489

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0106	0.0529	1	09/14/2017 19:41	WG1020390
Acrylonitrile	U		0.00189	0.0106	1	09/14/2017 19:41	WG1020390
Benzene	U		0.000285	0.00106	1	09/14/2017 19:41	WG1020390
Bromobenzene	U	<u>JO</u>	0.000300	0.00106	1	09/14/2017 19:41	WG1020390
Bromodichloromethane	U		0.000268	0.00106	1	09/14/2017 19:41	WG1020390
Bromochloromethane	U		0.000412	0.00529	1	09/14/2017 19:41	WG1020390
Bromoform	U		0.000448	0.00106	1	09/14/2017 19:41	WG1020390
Bromomethane	U		0.00142	0.00529	1	09/14/2017 19:41	WG1020390
n-Butylbenzene	U		0.000273	0.00106	1	09/14/2017 19:41	WG1020390
sec-Butylbenzene	U		0.000212	0.00106	1	09/14/2017 19:41	WG1020390
tert-Butylbenzene	U		0.000218	0.00106	1	09/14/2017 19:41	WG1020390
Carbon disulfide	0.000913	<u>J</u>	0.000234	0.00106	1	09/14/2017 19:41	WG1020390
Carbon tetrachloride	U		0.000347	0.00106	1	09/14/2017 19:41	WG1020390
Chlorobenzene	U		0.000224	0.00106	1	09/14/2017 19:41	WG1020390
Chlorodibromomethane	U		0.000394	0.00106	1	09/14/2017 19:41	WG1020390
Chloroethane	U	<u>JO</u>	0.00100	0.00529	1	09/14/2017 19:41	WG1020390
Chloroform	U		0.000242	0.00529	1	09/14/2017 19:41	WG1020390
Chloromethane	U	<u>JO</u>	0.000396	0.00264	1	09/14/2017 19:41	WG1020390
2-Chlorotoluene	U		0.000318	0.00106	1	09/14/2017 19:41	WG1020390
4-Chlorotoluene	U		0.000254	0.00106	1	09/14/2017 19:41	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00111	0.00529	1	09/14/2017 19:41	WG1020390
1,2-Dibromoethane	U		0.000363	0.00106	1	09/14/2017 19:41	WG1020390
Dibromomethane	U		0.000404	0.00106	1	09/14/2017 19:41	WG1020390
1,2-Dichlorobenzene	U		0.000322	0.00106	1	09/14/2017 19:41	WG1020390
1,3-Dichlorobenzene	U		0.000253	0.00106	1	09/14/2017 19:41	WG1020390
1,4-Dichlorobenzene	U		0.000239	0.00106	1	09/14/2017 19:41	WG1020390
Dichlorodifluoromethane	U		0.000754	0.00529	1	09/14/2017 19:41	WG1020390
1,1-Dichloroethane	U		0.000210	0.00106	1	09/14/2017 19:41	WG1020390
1,2-Dichloroethane	U		0.000280	0.00106	1	09/14/2017 19:41	WG1020390
1,1-Dichloroethene	U		0.000320	0.00106	1	09/14/2017 19:41	WG1020390
cis-1,2-Dichloroethene	U		0.000248	0.00106	1	09/14/2017 19:41	WG1020390
trans-1,2-Dichloroethene	U		0.000279	0.00106	1	09/14/2017 19:41	WG1020390
1,2-Dichloropropane	U		0.000378	0.00106	1	09/14/2017 19:41	WG1020390
1,1-Dichloropropene	U		0.000335	0.00106	1	09/14/2017 19:41	WG1020390
1,3-Dichloropropane	U		0.000219	0.00106	1	09/14/2017 19:41	WG1020390
cis-1,3-Dichloropropene	U		0.000277	0.00106	1	09/14/2017 19:41	WG1020390
trans-1,3-Dichloropropene	U		0.000282	0.00106	1	09/14/2017 19:41	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000822	0.00264	1	09/14/2017 19:41	WG1020390
2,2-Dichloropropane	U		0.000295	0.00106	1	09/14/2017 19:41	WG1020390
Di-isopropyl ether	U		0.000262	0.00106	1	09/14/2017 19:41	WG1020390
Ethylbenzene	U		0.000314	0.00106	1	09/14/2017 19:41	WG1020390
Hexachloro-1,3-butadiene	U		0.000362	0.00106	1	09/14/2017 19:41	WG1020390
2-Hexanone	U		0.00145	0.0106	1	09/14/2017 19:41	WG1020390
n-Hexane	U	<u>JO</u>	0.000307	0.0106	1	09/14/2017 19:41	WG1020390
Iodomethane	U		0.00267	0.0106	1	09/14/2017 19:41	WG1020390
Isopropylbenzene	U		0.000257	0.00106	1	09/14/2017 19:41	WG1020390
p-Isopropyltoluene	U		0.000216	0.00106	1	09/14/2017 19:41	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00495	0.0106	1	09/14/2017 19:41	WG1020390
Methylene Chloride	U		0.00106	0.00529	1	09/14/2017 19:41	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0106	1	09/14/2017 19:41	WG1020390

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 09/12/17 12:55

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000224	0.00106	1	09/14/2017 19:41	WG1020390
Naphthalene	U		0.00106	0.00529	1	09/14/2017 19:41	WG1020390
n-Propylbenzene	U		0.000218	0.00106	1	09/14/2017 19:41	WG1020390
Styrene	U		0.000247	0.00106	1	09/14/2017 19:41	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000279	0.00106	1	09/14/2017 19:41	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000386	0.00106	1	09/14/2017 19:41	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000386	0.00106	1	09/14/2017 19:41	WG1020390
Tetrachloroethene	U		0.000292	0.00106	1	09/14/2017 19:41	WG1020390
Toluene	U		0.000459	0.00529	1	09/14/2017 19:41	WG1020390
1,2,3-Trichlorobenzene	U		0.000323	0.00106	1	09/14/2017 19:41	WG1020390
1,2,4-Trichlorobenzene	U		0.000410	0.00106	1	09/14/2017 19:41	WG1020390
1,1,1-Trichloroethane	U		0.000302	0.00106	1	09/14/2017 19:41	WG1020390
1,1,2-Trichloroethane	U		0.000293	0.00106	1	09/14/2017 19:41	WG1020390
Trichloroethene	U		0.000295	0.00106	1	09/14/2017 19:41	WG1020390
Trichlorofluoromethane	U		0.000404	0.00529	1	09/14/2017 19:41	WG1020390
1,2,3-Trichloropropane	U		0.000783	0.00264	1	09/14/2017 19:41	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000223	0.00106	1	09/14/2017 19:41	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000303	0.00106	1	09/14/2017 19:41	WG1020390
1,3,5-Trimethylbenzene	U		0.000281	0.00106	1	09/14/2017 19:41	WG1020390
Vinyl acetate	U		0.00253	0.0106	1	09/14/2017 19:41	WG1020390
Vinyl chloride	U		0.000308	0.00106	1	09/14/2017 19:41	WG1020390
Xylenes, Total	U		0.000738	0.00317	1	09/14/2017 19:41	WG1020390
(S) Toluene-d8	101			80.0-120		09/14/2017 19:41	WG1020390
(S) Dibromofluoromethane	95.4			74.0-131		09/14/2017 19:41	WG1020390
(S) 4-Bromofluorobenzene	87.0			64.0-132		09/14/2017 19:41	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 13:35

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.9		1	09/19/2017 09:14	WG1021489

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0112	0.0562	1	09/14/2017 20:02	WG1020390
Acrylonitrile	U		0.00201	0.0112	1	09/14/2017 20:02	WG1020390
Benzene	U		0.000304	0.00112	1	09/14/2017 20:02	WG1020390
Bromobenzene	U	<u>JO</u>	0.000319	0.00112	1	09/14/2017 20:02	WG1020390
Bromodichloromethane	U		0.000286	0.00112	1	09/14/2017 20:02	WG1020390
Bromochloromethane	U		0.000439	0.00562	1	09/14/2017 20:02	WG1020390
Bromoform	U		0.000477	0.00112	1	09/14/2017 20:02	WG1020390
Bromomethane	U		0.00151	0.00562	1	09/14/2017 20:02	WG1020390
n-Butylbenzene	U		0.000290	0.00112	1	09/14/2017 20:02	WG1020390
sec-Butylbenzene	U		0.000226	0.00112	1	09/14/2017 20:02	WG1020390
tert-Butylbenzene	U		0.000232	0.00112	1	09/14/2017 20:02	WG1020390
Carbon disulfide	0.00276		0.000249	0.00112	1	09/14/2017 20:02	WG1020390
Carbon tetrachloride	U		0.000369	0.00112	1	09/14/2017 20:02	WG1020390
Chlorobenzene	U		0.000238	0.00112	1	09/14/2017 20:02	WG1020390
Chlorodibromomethane	U		0.000420	0.00112	1	09/14/2017 20:02	WG1020390
Chloroethane	U	<u>JO</u>	0.00106	0.00562	1	09/14/2017 20:02	WG1020390
Chloroform	U		0.000258	0.00562	1	09/14/2017 20:02	WG1020390
Chloromethane	0.00179	<u>J JO</u>	0.000422	0.00281	1	09/14/2017 20:02	WG1020390
2-Chlorotoluene	U		0.000339	0.00112	1	09/14/2017 20:02	WG1020390
4-Chlorotoluene	U		0.000270	0.00112	1	09/14/2017 20:02	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00562	1	09/14/2017 20:02	WG1020390
1,2-Dibromoethane	U		0.000386	0.00112	1	09/14/2017 20:02	WG1020390
Dibromomethane	U		0.000430	0.00112	1	09/14/2017 20:02	WG1020390
1,2-Dichlorobenzene	U		0.000343	0.00112	1	09/14/2017 20:02	WG1020390
1,3-Dichlorobenzene	U		0.000269	0.00112	1	09/14/2017 20:02	WG1020390
1,4-Dichlorobenzene	U		0.000254	0.00112	1	09/14/2017 20:02	WG1020390
Dichlorodifluoromethane	U		0.000802	0.00562	1	09/14/2017 20:02	WG1020390
1,1-Dichloroethane	U		0.000224	0.00112	1	09/14/2017 20:02	WG1020390
1,2-Dichloroethane	U		0.000298	0.00112	1	09/14/2017 20:02	WG1020390
1,1-Dichloroethene	U		0.000341	0.00112	1	09/14/2017 20:02	WG1020390
cis-1,2-Dichloroethene	U		0.000264	0.00112	1	09/14/2017 20:02	WG1020390
trans-1,2-Dichloroethene	U		0.000297	0.00112	1	09/14/2017 20:02	WG1020390
1,2-Dichloropropane	U		0.000403	0.00112	1	09/14/2017 20:02	WG1020390
1,1-Dichloropropene	U		0.000357	0.00112	1	09/14/2017 20:02	WG1020390
1,3-Dichloropropane	U		0.000233	0.00112	1	09/14/2017 20:02	WG1020390
cis-1,3-Dichloropropene	U		0.000295	0.00112	1	09/14/2017 20:02	WG1020390
trans-1,3-Dichloropropene	U		0.000300	0.00112	1	09/14/2017 20:02	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000875	0.00281	1	09/14/2017 20:02	WG1020390
2,2-Dichloropropane	U		0.000314	0.00112	1	09/14/2017 20:02	WG1020390
Di-isopropyl ether	U		0.000279	0.00112	1	09/14/2017 20:02	WG1020390
Ethylbenzene	U		0.000334	0.00112	1	09/14/2017 20:02	WG1020390
Hexachloro-1,3-butadiene	U		0.000385	0.00112	1	09/14/2017 20:02	WG1020390
2-Hexanone	U		0.00154	0.0112	1	09/14/2017 20:02	WG1020390
n-Hexane	0.00365	<u>J JO</u>	0.000326	0.0112	1	09/14/2017 20:02	WG1020390
Iodomethane	U		0.00285	0.0112	1	09/14/2017 20:02	WG1020390
Isopropylbenzene	U		0.000273	0.00112	1	09/14/2017 20:02	WG1020390
p-Isopropyltoluene	U		0.000229	0.00112	1	09/14/2017 20:02	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00526	0.0112	1	09/14/2017 20:02	WG1020390
Methylene Chloride	U		0.00112	0.00562	1	09/14/2017 20:02	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00211	0.0112	1	09/14/2017 20:02	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 13:35

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000238	0.00112	1	09/14/2017 20:02	WG1020390
Naphthalene	U		0.00112	0.00562	1	09/14/2017 20:02	WG1020390
n-Propylbenzene	U		0.000232	0.00112	1	09/14/2017 20:02	WG1020390
Styrene	U		0.000263	0.00112	1	09/14/2017 20:02	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000297	0.00112	1	09/14/2017 20:02	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000411	0.00112	1	09/14/2017 20:02	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00112	1	09/14/2017 20:02	WG1020390
Tetrachloroethene	U		0.000310	0.00112	1	09/14/2017 20:02	WG1020390
Toluene	U		0.000488	0.00562	1	09/14/2017 20:02	WG1020390
1,2,3-Trichlorobenzene	U		0.000344	0.00112	1	09/14/2017 20:02	WG1020390
1,2,4-Trichlorobenzene	U		0.000436	0.00112	1	09/14/2017 20:02	WG1020390
1,1,1-Trichloroethane	U		0.000322	0.00112	1	09/14/2017 20:02	WG1020390
1,1,2-Trichloroethane	U		0.000312	0.00112	1	09/14/2017 20:02	WG1020390
Trichloroethene	U		0.000314	0.00112	1	09/14/2017 20:02	WG1020390
Trichlorofluoromethane	U		0.000430	0.00562	1	09/14/2017 20:02	WG1020390
1,2,3-Trichloropropane	U		0.000833	0.00281	1	09/14/2017 20:02	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000237	0.00112	1	09/14/2017 20:02	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000323	0.00112	1	09/14/2017 20:02	WG1020390
1,3,5-Trimethylbenzene	U		0.000299	0.00112	1	09/14/2017 20:02	WG1020390
Vinyl acetate	U		0.00269	0.0112	1	09/14/2017 20:02	WG1020390
Vinyl chloride	U		0.000327	0.00112	1	09/14/2017 20:02	WG1020390
Xylenes, Total	U		0.000785	0.00337	1	09/14/2017 20:02	WG1020390
(S) Toluene-d8	101			80.0-120		09/14/2017 20:02	WG1020390
(S) Dibromofluoromethane	98.6			74.0-131		09/14/2017 20:02	WG1020390
(S) 4-Bromofluorobenzene	84.3			64.0-132		09/14/2017 20:02	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.4		1	09/19/2017 09:14	WG1021489

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.286	1.43	25	09/14/2017 20:43	WG1020390
Acrylonitrile	U		0.0512	0.286	25	09/14/2017 20:43	WG1020390
Benzene	U		0.00772	0.0286	25	09/14/2017 20:43	WG1020390
Bromobenzene	U	<u>JO</u>	0.00812	0.0286	25	09/14/2017 20:43	WG1020390
Bromodichloromethane	U		0.00726	0.0286	25	09/14/2017 20:43	WG1020390
Bromochloromethane	U		0.0112	0.143	25	09/14/2017 20:43	WG1020390
Bromoform	U		0.0121	0.0286	25	09/14/2017 20:43	WG1020390
Bromomethane	U		0.0383	0.143	25	09/14/2017 20:43	WG1020390
n-Butylbenzene	U		0.00738	0.0286	25	09/14/2017 20:43	WG1020390
sec-Butylbenzene	U		0.00574	0.0286	25	09/14/2017 20:43	WG1020390
tert-Butylbenzene	U		0.00589	0.0286	25	09/14/2017 20:43	WG1020390
Carbon disulfide	U		0.00631	0.0286	25	09/14/2017 20:43	WG1020390
Carbon tetrachloride	U		0.00938	0.0286	25	09/14/2017 20:43	WG1020390
Chlorobenzene	U		0.00606	0.0286	25	09/14/2017 20:43	WG1020390
Chlorodibromomethane	U		0.0107	0.0286	25	09/14/2017 20:43	WG1020390
Chloroethane	U	<u>JO</u>	0.0270	0.143	25	09/14/2017 20:43	WG1020390
Chloroform	U		0.00654	0.143	25	09/14/2017 20:43	WG1020390
Chloromethane	U	<u>JO</u>	0.0107	0.0715	25	09/14/2017 20:43	WG1020390
2-Chlorotoluene	U		0.00860	0.0286	25	09/14/2017 20:43	WG1020390
4-Chlorotoluene	U		0.00686	0.0286	25	09/14/2017 20:43	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.0300	0.143	25	09/14/2017 20:43	WG1020390
1,2-Dibromoethane	U		0.00981	0.0286	25	09/14/2017 20:43	WG1020390
Dibromomethane	U		0.0109	0.0286	25	09/14/2017 20:43	WG1020390
1,2-Dichlorobenzene	U		0.00872	0.0286	25	09/14/2017 20:43	WG1020390
1,3-Dichlorobenzene	U		0.00684	0.0286	25	09/14/2017 20:43	WG1020390
1,4-Dichlorobenzene	U		0.00646	0.0286	25	09/14/2017 20:43	WG1020390
Dichlorodifluoromethane	U		0.0204	0.143	25	09/14/2017 20:43	WG1020390
1,1-Dichloroethane	U		0.00570	0.0286	25	09/14/2017 20:43	WG1020390
1,2-Dichloroethane	U		0.00757	0.0286	25	09/14/2017 20:43	WG1020390
1,1-Dichloroethene	0.0242	<u>J</u>	0.00867	0.0286	25	09/14/2017 20:43	WG1020390
cis-1,2-Dichloroethene	1.55		0.00673	0.0286	25	09/14/2017 20:43	WG1020390
trans-1,2-Dichloroethene	U		0.00755	0.0286	25	09/14/2017 20:43	WG1020390
1,2-Dichloropropane	U		0.0102	0.0286	25	09/14/2017 20:43	WG1020390
1,1-Dichloropropene	U		0.00906	0.0286	25	09/14/2017 20:43	WG1020390
1,3-Dichloropropane	U		0.00592	0.0286	25	09/14/2017 20:43	WG1020390
cis-1,3-Dichloropropene	U		0.00749	0.0286	25	09/14/2017 20:43	WG1020390
trans-1,3-Dichloropropene	U		0.00764	0.0286	25	09/14/2017 20:43	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.0222	0.0715	25	09/14/2017 20:43	WG1020390
2,2-Dichloropropane	U		0.00798	0.0286	25	09/14/2017 20:43	WG1020390
Di-isopropyl ether	U		0.00709	0.0286	25	09/14/2017 20:43	WG1020390
Ethylbenzene	U		0.00849	0.0286	25	09/14/2017 20:43	WG1020390
Hexachloro-1,3-butadiene	U		0.00978	0.0286	25	09/14/2017 20:43	WG1020390
2-Hexanone	U		0.0391	0.286	25	09/14/2017 20:43	WG1020390
n-Hexane	U	<u>JO</u>	0.00829	0.286	25	09/14/2017 20:43	WG1020390
Iodomethane	U		0.0723	0.286	25	09/14/2017 20:43	WG1020390
Isopropylbenzene	U		0.00695	0.0286	25	09/14/2017 20:43	WG1020390
p-Isopropyltoluene	U		0.00583	0.0286	25	09/14/2017 20:43	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.134	0.286	25	09/14/2017 20:43	WG1020390
Methylene Chloride	U		0.0286	0.143	25	09/14/2017 20:43	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.0538	0.286	25	09/14/2017 20:43	WG1020390

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/12/17 13:50

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00606	0.0286	25	09/14/2017 20:43	WG1020390
Naphthalene	U		0.0286	0.143	25	09/14/2017 20:43	WG1020390
n-Propylbenzene	U		0.00589	0.0286	25	09/14/2017 20:43	WG1020390
Styrene	U		0.00669	0.0286	25	09/14/2017 20:43	WG1020390
1,1,1-Tetrachloroethane	U		0.00755	0.0286	25	09/14/2017 20:43	WG1020390
1,1,2-Tetrachloroethane	U		0.0104	0.0286	25	09/14/2017 20:43	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.0104	0.0286	25	09/14/2017 20:43	WG1020390
Tetrachloroethene	11.1		0.0789	0.286	250	09/18/2017 16:40	WG1020390
Toluene	U		0.0124	0.143	25	09/14/2017 20:43	WG1020390
1,2,3-Trichlorobenzene	U		0.00875	0.0286	25	09/14/2017 20:43	WG1020390
1,2,4-Trichlorobenzene	U		0.0111	0.0286	25	09/14/2017 20:43	WG1020390
1,1,1-Trichloroethane	U		0.00818	0.0286	25	09/14/2017 20:43	WG1020390
1,1,2-Trichloroethane	U		0.00791	0.0286	25	09/14/2017 20:43	WG1020390
Trichloroethene	1.02		0.00798	0.0286	25	09/14/2017 20:43	WG1020390
Trichlorofluoromethane	U		0.0109	0.143	25	09/14/2017 20:43	WG1020390
1,2,3-Trichloropropane	U		0.0212	0.0715	25	09/14/2017 20:43	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.00604	0.0286	25	09/14/2017 20:43	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.00821	0.0286	25	09/14/2017 20:43	WG1020390
1,3,5-Trimethylbenzene	U		0.00761	0.0286	25	09/14/2017 20:43	WG1020390
Vinyl acetate	U		0.0684	0.286	25	09/14/2017 20:43	WG1020390
Vinyl chloride	U		0.00833	0.0286	25	09/14/2017 20:43	WG1020390
Xylenes, Total	U		0.0199	0.0858	25	09/14/2017 20:43	WG1020390
(S) Toluene-d8	104			80.0-120		09/14/2017 20:43	WG1020390
(S) Toluene-d8	111			80.0-120		09/18/2017 16:40	WG1020390
(S) Dibromofluoromethane	91.8			74.0-131		09/14/2017 20:43	WG1020390
(S) Dibromofluoromethane	95.0			74.0-131		09/18/2017 16:40	WG1020390
(S) 4-Bromofluorobenzene	101			64.0-132		09/18/2017 16:40	WG1020390
(S) 4-Bromofluorobenzene	90.9			64.0-132		09/14/2017 20:43	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	09/19/2017 09:14	WG1021489

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>JO</u>	0.0110	0.0551	1	09/14/2017 20:23	WG1020390
Acrylonitrile	U		0.00197	0.0110	1	09/14/2017 20:23	WG1020390
Benzene	U		0.000298	0.00110	1	09/14/2017 20:23	WG1020390
Bromobenzene	U	<u>JO</u>	0.000313	0.00110	1	09/14/2017 20:23	WG1020390
Bromodichloromethane	U		0.000280	0.00110	1	09/14/2017 20:23	WG1020390
Bromochloromethane	U		0.000430	0.00551	1	09/14/2017 20:23	WG1020390
Bromoform	U		0.000468	0.00110	1	09/14/2017 20:23	WG1020390
Bromomethane	U		0.00148	0.00551	1	09/14/2017 20:23	WG1020390
n-Butylbenzene	U		0.000285	0.00110	1	09/14/2017 20:23	WG1020390
sec-Butylbenzene	U		0.000222	0.00110	1	09/14/2017 20:23	WG1020390
tert-Butylbenzene	U		0.000227	0.00110	1	09/14/2017 20:23	WG1020390
Carbon disulfide	0.000331	<u>J</u>	0.000244	0.00110	1	09/14/2017 20:23	WG1020390
Carbon tetrachloride	U		0.000362	0.00110	1	09/14/2017 20:23	WG1020390
Chlorobenzene	U		0.000234	0.00110	1	09/14/2017 20:23	WG1020390
Chlorodibromomethane	U		0.000411	0.00110	1	09/14/2017 20:23	WG1020390
Chloroethane	U	<u>JO</u>	0.00104	0.00551	1	09/14/2017 20:23	WG1020390
Chloroform	U		0.000253	0.00551	1	09/14/2017 20:23	WG1020390
Chloromethane	U	<u>JO</u>	0.000414	0.00276	1	09/14/2017 20:23	WG1020390
2-Chlorotoluene	U		0.000332	0.00110	1	09/14/2017 20:23	WG1020390
4-Chlorotoluene	U		0.000265	0.00110	1	09/14/2017 20:23	WG1020390
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	09/14/2017 20:23	WG1020390
1,2-Dibromoethane	U		0.000378	0.00110	1	09/14/2017 20:23	WG1020390
Dibromomethane	U		0.000421	0.00110	1	09/14/2017 20:23	WG1020390
1,2-Dichlorobenzene	U		0.000336	0.00110	1	09/14/2017 20:23	WG1020390
1,3-Dichlorobenzene	U		0.000264	0.00110	1	09/14/2017 20:23	WG1020390
1,4-Dichlorobenzene	U		0.000249	0.00110	1	09/14/2017 20:23	WG1020390
Dichlorodifluoromethane	U		0.000786	0.00551	1	09/14/2017 20:23	WG1020390
1,1-Dichloroethane	U		0.000219	0.00110	1	09/14/2017 20:23	WG1020390
1,2-Dichloroethane	U		0.000292	0.00110	1	09/14/2017 20:23	WG1020390
1,1-Dichloroethene	U		0.000334	0.00110	1	09/14/2017 20:23	WG1020390
cis-1,2-Dichloroethene	U		0.000259	0.00110	1	09/14/2017 20:23	WG1020390
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	09/14/2017 20:23	WG1020390
1,2-Dichloropropane	U		0.000395	0.00110	1	09/14/2017 20:23	WG1020390
1,1-Dichloropropene	U		0.000350	0.00110	1	09/14/2017 20:23	WG1020390
1,3-Dichloropropane	U		0.000228	0.00110	1	09/14/2017 20:23	WG1020390
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	09/14/2017 20:23	WG1020390
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	09/14/2017 20:23	WG1020390
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000858	0.00276	1	09/14/2017 20:23	WG1020390
2,2-Dichloropropane	U		0.000308	0.00110	1	09/14/2017 20:23	WG1020390
Di-isopropyl ether	U		0.000273	0.00110	1	09/14/2017 20:23	WG1020390
Ethylbenzene	U		0.000328	0.00110	1	09/14/2017 20:23	WG1020390
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	09/14/2017 20:23	WG1020390
2-Hexanone	U		0.00151	0.0110	1	09/14/2017 20:23	WG1020390
n-Hexane	U	<u>JO</u>	0.000320	0.0110	1	09/14/2017 20:23	WG1020390
Iodomethane	U		0.00279	0.0110	1	09/14/2017 20:23	WG1020390
Isopropylbenzene	U		0.000268	0.00110	1	09/14/2017 20:23	WG1020390
p-Isopropyltoluene	U		0.000225	0.00110	1	09/14/2017 20:23	WG1020390
2-Butanone (MEK)	U	<u>JO</u>	0.00516	0.0110	1	09/14/2017 20:23	WG1020390
Methylene Chloride	U		0.00110	0.00551	1	09/14/2017 20:23	WG1020390
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	09/14/2017 20:23	WG1020390

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/12/17 14:00

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	09/14/2017 20:23	WG1020390
Naphthalene	U		0.00110	0.00551	1	09/14/2017 20:23	WG1020390
n-Propylbenzene	U		0.000227	0.00110	1	09/14/2017 20:23	WG1020390
Styrene	U		0.000258	0.00110	1	09/14/2017 20:23	WG1020390
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	09/14/2017 20:23	WG1020390
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	09/14/2017 20:23	WG1020390
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	09/14/2017 20:23	WG1020390
Tetrachloroethene	U		0.000304	0.00110	1	09/14/2017 20:23	WG1020390
Toluene	U		0.000479	0.00551	1	09/14/2017 20:23	WG1020390
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	09/14/2017 20:23	WG1020390
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	09/14/2017 20:23	WG1020390
1,1,1-Trichloroethane	U		0.000315	0.00110	1	09/14/2017 20:23	WG1020390
1,1,2-Trichloroethane	U		0.000305	0.00110	1	09/14/2017 20:23	WG1020390
Trichloroethene	U		0.000308	0.00110	1	09/14/2017 20:23	WG1020390
Trichlorofluoromethane	U		0.000421	0.00551	1	09/14/2017 20:23	WG1020390
1,2,3-Trichloropropane	U		0.000817	0.00276	1	09/14/2017 20:23	WG1020390
1,2,4-Trimethylbenzene	U	<u>JO</u>	0.000233	0.00110	1	09/14/2017 20:23	WG1020390
1,2,3-Trimethylbenzene	U	<u>JO</u>	0.000316	0.00110	1	09/14/2017 20:23	WG1020390
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	09/14/2017 20:23	WG1020390
Vinyl acetate	U		0.00264	0.0110	1	09/14/2017 20:23	WG1020390
Vinyl chloride	U		0.000321	0.00110	1	09/14/2017 20:23	WG1020390
Xylenes, Total	U		0.000770	0.00331	1	09/14/2017 20:23	WG1020390
(S) Toluene-d8	97.7			80.0-120		09/14/2017 20:23	WG1020390
(S) Dibromofluoromethane	104			74.0-131		09/14/2017 20:23	WG1020390
(S) 4-Bromofluorobenzene	89.1			64.0-132		09/14/2017 20:23	WG1020390

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/12/17 00:00

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/14/2017 12:47	WG1020322
Acrylonitrile	U		0.873	5.00	1	09/14/2017 12:47	WG1020322
Benzene	U		0.0896	0.500	1	09/14/2017 12:47	WG1020322
Bromobenzene	U		0.133	0.500	1	09/14/2017 12:47	WG1020322
Bromodichloromethane	U		0.0800	0.500	1	09/14/2017 12:47	WG1020322
Bromochloromethane	U		0.145	0.500	1	09/14/2017 12:47	WG1020322
Bromoform	U		0.186	0.500	1	09/14/2017 12:47	WG1020322
Bromomethane	U		0.157	2.50	1	09/14/2017 12:47	WG1020322
n-Butylbenzene	U		0.143	0.500	1	09/14/2017 12:47	WG1020322
sec-Butylbenzene	U		0.134	0.500	1	09/14/2017 12:47	WG1020322
tert-Butylbenzene	U		0.183	0.500	1	09/14/2017 12:47	WG1020322
Carbon disulfide	U		0.101	0.500	1	09/14/2017 12:47	WG1020322
Carbon tetrachloride	U		0.159	0.500	1	09/14/2017 12:47	WG1020322
Chlorobenzene	U		0.140	0.500	1	09/14/2017 12:47	WG1020322
Chlorodibromomethane	U		0.128	0.500	1	09/14/2017 12:47	WG1020322
Chloroethane	U		0.141	2.50	1	09/14/2017 12:47	WG1020322
Chloroform	U		0.0860	0.500	1	09/14/2017 12:47	WG1020322
Chloromethane	U		0.153	1.25	1	09/14/2017 12:47	WG1020322
2-Chlorotoluene	U		0.111	0.500	1	09/14/2017 12:47	WG1020322
4-Chlorotoluene	U		0.0972	0.500	1	09/14/2017 12:47	WG1020322
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/14/2017 12:47	WG1020322
1,2-Dibromoethane	U		0.193	0.500	1	09/14/2017 12:47	WG1020322
Dibromomethane	U		0.117	0.500	1	09/14/2017 12:47	WG1020322
1,2-Dichlorobenzene	U		0.101	0.500	1	09/14/2017 12:47	WG1020322
1,3-Dichlorobenzene	U		0.130	0.500	1	09/14/2017 12:47	WG1020322
1,4-Dichlorobenzene	U		0.121	0.500	1	09/14/2017 12:47	WG1020322
Dichlorodifluoromethane	U		0.127	2.50	1	09/14/2017 12:47	WG1020322
1,1-Dichloroethane	U		0.114	0.500	1	09/14/2017 12:47	WG1020322
1,2-Dichloroethane	U		0.108	0.500	1	09/14/2017 12:47	WG1020322
1,1-Dichloroethene	U		0.188	0.500	1	09/14/2017 12:47	WG1020322
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/14/2017 12:47	WG1020322
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/14/2017 12:47	WG1020322
1,2-Dichloropropane	U		0.190	0.500	1	09/14/2017 12:47	WG1020322
1,1-Dichloropropene	U		0.128	0.500	1	09/14/2017 12:47	WG1020322
1,3-Dichloropropane	U		0.147	1.00	1	09/14/2017 12:47	WG1020322
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/14/2017 12:47	WG1020322
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/14/2017 12:47	WG1020322
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/14/2017 12:47	WG1020322
2,2-Dichloropropane	U		0.0929	0.500	1	09/14/2017 12:47	WG1020322
Di-isopropyl ether	U		0.0924	0.500	1	09/14/2017 12:47	WG1020322
Ethylbenzene	U		0.158	0.500	1	09/14/2017 12:47	WG1020322
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/14/2017 12:47	WG1020322
2-Hexanone	U		0.757	5.00	1	09/14/2017 12:47	WG1020322
n-Hexane	U		0.305	5.00	1	09/14/2017 12:47	WG1020322
Iodomethane	U		0.377	10.0	1	09/14/2017 12:47	WG1020322
Isopropylbenzene	U		0.126	0.500	1	09/14/2017 12:47	WG1020322
p-Isopropyltoluene	U		0.138	0.500	1	09/14/2017 12:47	WG1020322
2-Butanone (MEK)	U		1.28	5.00	1	09/14/2017 12:47	WG1020322
Methylene Chloride	U		1.07	2.50	1	09/14/2017 12:47	WG1020322
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/14/2017 12:47	WG1020322
Methyl tert-butyl ether	U		0.102	0.500	1	09/14/2017 12:47	WG1020322
Naphthalene	U		0.174	2.50	1	09/14/2017 12:47	WG1020322
n-Propylbenzene	U		0.162	0.500	1	09/14/2017 12:47	WG1020322
Styrene	U		0.117	0.500	1	09/14/2017 12:47	WG1020322
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/14/2017 12:47	WG1020322
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/14/2017 12:47	WG1020322

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/12/17 00:00

L936064

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/14/2017 12:47	WG1020322
Tetrachloroethene	U		0.199	0.500	1	09/14/2017 12:47	WG1020322
Toluene	U		0.412	0.500	1	09/14/2017 12:47	WG1020322
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/14/2017 12:47	WG1020322
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/14/2017 12:47	WG1020322
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/14/2017 12:47	WG1020322
1,1,2-Trichloroethane	U		0.186	0.500	1	09/14/2017 12:47	WG1020322
Trichloroethene	U		0.153	0.500	1	09/14/2017 12:47	WG1020322
Trichlorofluoromethane	U		0.130	2.50	1	09/14/2017 12:47	WG1020322
1,2,3-Trichloropropane	U		0.247	2.50	1	09/14/2017 12:47	WG1020322
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/14/2017 12:47	WG1020322
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/14/2017 12:47	WG1020322
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/14/2017 12:47	WG1020322
Vinyl acetate	U		0.645	5.00	1	09/14/2017 12:47	WG1020322
Vinyl chloride	U		0.118	0.500	1	09/14/2017 12:47	WG1020322
Xylenes, Total	U		0.316	1.50	1	09/14/2017 12:47	WG1020322
(S) Toluene-d8	104			80.0-120		09/14/2017 12:47	WG1020322
(S) Dibromofluoromethane	99.6			76.0-123		09/14/2017 12:47	WG1020322
(S) 4-Bromofluorobenzene	100			80.0-120		09/14/2017 12:47	WG1020322

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

[L936064-02.03.08](#)

Method Blank (MB)

(MB) R3249931-1 09/16/17 10:30

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Total Solids 0.000100

L936064-02 Original Sample (OS) • Duplicate (DUP)

(OS) L936064-02 09/16/17 10:30 • (DUP) R3249931-3 09/16/17 10:30

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Total Solids 82.0 81.3 1 0.886 5

Laboratory Control Sample (LCS)

(LCS) R3249931-2 09/16/17 10:30

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	%

Total Solids 50.0 50.0 100 85.0-115

Public Review Draft

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc.- WA

141-001-02-602

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09/20/17 15:47

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Total Solids by Method 2540 G-2011

[L936064-01.04.05.06.07.09.10.11.12](#)

Method Blank (MB)

(MB) R3250542-1	09/19/17 07:43						
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL				
Analyte	%	%	%				
Total Solids	0.000800						

L936064-01 Original Sample (OS) • Duplicate (DUP)

(OS) L936064-01	09/19/17 07:43	• (DUP) R3250542-3	09/19/17 07:43				
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits		
Analyte	%	%	%		%		
Total Solids	88.1	87.6	1	0.576	5		

Laboratory Control Sample (LCS)

(LCS) R3250542-2	09/19/17 07:43						
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>			
Analyte	%	%	%				
Total Solids	50.0	50.0	100	85.0-115			

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Total Solids by Method 2540 G-2011

[L936064-13.14.15.16.17](#)

Method Blank (MB)

(MB) R3250549-1 09/19/17 09:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.00130	%	%	%

L936064-13 Original Sample (OS) • Duplicate (DUP)

(OS) L936064-13 09/19/17 09:14 • (DUP) R3250549-3 09/19/17 09:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	90.3	91.3	1	1.14	%	5

Laboratory Control Sample (LCS)

(LCS) R3250549-2 09/19/17 09:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L936064-01.04.05](#)

Method Blank (MB)

(MB) R3249641-3	09/14/17 23:50	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte		mg/kg		mg/kg	mg/kg
Gasoline Range Organics-NWTPH	U			0.0339	0.100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	93.4				77.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3249641-1	09/14/17 22:43	(LCSD) R3249641-2	09/14/17 23:05	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte				mg/kg	mg/kg	mg/kg	%	%				%	%
Gasoline Range Organics-NWTPH	5.50	5.18	5.22		94.3	94.9			70.0-133			0.640	20
^(S) <i>a,a</i> -Trifluorotoluene(FID)					108	109			77.0-120				

L936105-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L936105-01	09/15/17 07:16	(MS) R3249641-4	09/15/17 07:38	(MSD) R3249641-5	09/15/17 08:00	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte						mg/kg	mg/kg	mg/kg	mg/kg	%	%					%	%
Gasoline Range Organics-NWTPH	5.50	ND	92.3	96.5	44.9	47.9	25	10.0-146					10.0-146			4.37	30
^(S) <i>a,a</i> -Trifluorotoluene(FID)					95.5	95.5			77.0-120								

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3249454-5 09/14/17 10:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3249454-5 09/14/17 10:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
Methyl tert-butyl ether	U		0.102	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Naphthalene	U		0.174	2.50
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	102			76.0-123
(S) 4-Bromofluorobenzene	98.9			80.0-120

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3249454-1 09/14/17 08:51 • (LCSD) R3249454-2 09/14/17 09:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	129	113	103	90.3	10.0-160			13.3	23
Acrylonitrile	125	130	132	104	105	60.0-142			1.49	20
Bromobenzene	25.0	24.1	24.6	96.5	98.4	79.0-120			2.02	20
Bromodichloromethane	25.0	25.2	25.3	101	101	76.0-120			0.380	20
Bromochloromethane	25.0	25.5	25.8	102	103	76.0-122			1.40	20
Bromoform	25.0	26.0	26.0	104	104	67.0-132			0.0400	20
Bromomethane	25.0	23.7	25.2	94.8	101	18.0-160			6.08	20
n-Butylbenzene	25.0	27.3	28.1	109	113	72.0-126			3.05	20
sec-Butylbenzene	25.0	25.8	26.7	103	107	74.0-121			3.45	20
tert-Butylbenzene	25.0	25.7	26.3	103	105	75.0-122			2.06	20
Carbon disulfide	25.0	25.3	25.7	101	103	55.0-127			1.87	20
Carbon tetrachloride	25.0	24.5	24.9	98.0	99.7	63.0-122			1.70	20
Chlorobenzene	25.0	25.6	25.9	102	103	79.0-121			1.17	20
Chlorodibromomethane	25.0	26.4	26.5	106	106	75.0-125			0.480	20
Chloroethane	25.0	25.0	25.2	100	101	47.0-152			0.720	20
Chloroform	25.0	25.3	25.2	101	101	72.0-121			0.120	20
Chloromethane	25.0	22.5	22.8	89.9	91.2	48.0-139			1.48	20
2-Chlorotoluene	25.0	25.2	25.7	101	103	74.0-122			1.80	20
4-Chlorotoluene	25.0	25.1	25.4	100	102	79.0-120			1.22	20
1,2-Dibromo-3-Chloropropane	25.0	24.9	25.8	99.6	103	64.0-127			3.74	20
1,2-Dibromoethane	25.0	26.0	25.8	104	103	77.0-123			0.410	20
Dibromomethane	25.0	25.6	25.6	102	102	78.0-120			0.0300	20
1,2-Dichlorobenzene	25.0	25.8	26.0	103	104	80.0-120			0.590	20
1,3-Dichlorobenzene	25.0	25.7	26.1	103	104	72.0-123			1.46	20
1,4-Dichlorobenzene	25.0	25.1	25.5	101	102	77.0-120			1.43	20
Dichlorodifluoromethane	25.0	22.5	22.8	90.0	91.3	49.0-155			1.45	20
1,1-Dichloroethane	25.0	26.0	26.0	104	104	70.0-126			0.0800	20
1,2-Dichloroethane	25.0	25.7	25.5	103	102	67.0-126			0.810	20
1,1-Dichloroethene	25.0	26.0	26.6	104	106	64.0-129			2.08	20
cis-1,2-Dichloroethene	25.0	25.3	25.3	101	101	73.0-120			0.170	20
trans-1,2-Dichloroethene	25.0	25.6	26.1	103	104	71.0-121			1.71	20
1,2-Dichloropropane	25.0	26.6	26.7	106	107	75.0-125			0.160	20
1,1-Dichloropropene	25.0	26.1	26.3	104	105	71.0-129			0.880	20
1,3-Dichloropropene	25.0	25.6	25.6	103	102	80.0-121			0.200	20
cis-1,3-Dichloropropene	25.0	29.0	29.1	116	116	79.0-123			0.490	20
trans-1,3-Dichloropropene	25.0	28.1	28.4	112	114	74.0-127			1.18	20
Benzene	25.0	25.4	25.4	102	101	69.0-123			0.350	20
trans-1,4-Dichloro-2-butene	25.0	21.7	22.7	86.8	90.8	55.0-134			4.58	20
2,2-Dichloropropane	25.0	24.5	25.4	97.9	101	60.0-125			3.56	20
Diisopropyl ether	25.0	25.1	25.3	101	101	59.0-133			0.710	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3249454-1 09/14/17 08:51 • (LCSD) R3249454-2 09/14/17 09:11

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hexachloro-1,3-butadiene	25.0	27.9	27.5	112	110	64.0-131			1.47	20
2-Hexanone	125	137	138	110	110	58.0-147			0.490	20
n-Hexane	25.0	27.0	27.1	108	109	56.0-124			0.460	20
Iodomethane	125	131	133	105	106	57.0-140			1.30	20
Isopropylbenzene	25.0	25.2	26.0	101	104	75.0-120			3.17	20
p-Isopropyltoluene	25.0	27.0	27.8	108	111	74.0-126			2.90	20
2-Butanone (MEK)	125	109	109	87.5	87.3	37.0-158			0.200	20
Methylene Chloride	25.0	24.9	25.3	99.7	101	66.0-121			1.37	20
4-Methyl-2-pentanone (MIBK)	125	133	135	107	108	59.0-143			1.32	20
n-Propylbenzene	25.0	26.0	26.6	104	106	79.0-120			2.40	20
Styrene	25.0	26.1	26.7	104	107	78.0-124			2.16	20
1,1,1,2-Tetrachloroethane	25.0	25.4	26.0	101	104	75.0-122			2.34	20
1,1,2,2-Tetrachloroethane	25.0	26.4	27.2	106	109	71.0-122			2.88	20
1,1,2-Trichlorotrifluoroethane	25.0	26.2	26.7	105	107	61.0-136			1.62	20
Tetrachloroethene	25.0	25.7	25.8	103	103	70.0-127			0.590	20
1,2,3-Trichlorobenzene	25.0	27.6	27.4	110	110	61.0-133			0.610	20
1,2,4-Trichlorobenzene	25.0	28.1	27.2	112	109	69.0-129			3.12	20
1,1,1-Trichloroethane	25.0	25.3	26.2	101	105	68.0-122			3.68	20
1,1,2-Trichloroethane	25.0	26.0	26.0	104	104	78.0-120			0.0400	20
Trichloroethene	25.0	25.0	25.2	100	101	78.0-120			0.660	20
Trichlorofluoromethane	25.0	24.9	25.6	99.6	102	56.0-137			2.59	20
1,2,3-Trichloropropane	25.0	25.5	25.8	102	103	72.0-124			1.23	20
1,2,4-Trimethylbenzene	25.0	25.5	26.0	102	104	75.0-120			2.15	20
1,2,3-Trimethylbenzene	25.0	23.8	24.1	95.1	96.5	75.0-120			1.47	20
1,3,5-Trimethylbenzene	25.0	25.3	26.1	101	104	75.0-120			3.09	20
Vinyl acetate	125	169	168	135	135	46.0-160			0.200	20
Vinyl chloride	25.0	24.8	25.1	99.4	100	64.0-133			1.08	20
Ethylbenzene	25.0	25.4	25.7	101	103	77.0-120			1.54	20
Methyl tert-butyl ether	25.0	24.1	24.3	96.3	97.1	64.0-123			0.860	20
Naphthalene	25.0	24.8	25.6	99.2	102	62.0-128			3.25	20
Toluene	25.0	25.0	25.3	100	101	77.0-120			1.13	20
Xylenes, Total	75.0	76.6	77.5	102	103	77.0-120			1.17	20
(S) Toluene-d8				102	103	80.0-120				
(S) Dibromofluoromethane				101	101	76.0-123				
(S) 4-Bromofluorobenzene				100	101	80.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3250116-3 09/14/17 12:51

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropane	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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1 Cp
2 Tc
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Method Blank (MB)

(MB) R325016-3 09/14/17 12:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	107			80.0-120
(S) Dibromofluoromethane	92.1			74.0-131
(S) 4-Bromofluorobenzene	87.5			64.0-132

Public Review Draft

1 Cp
2 Tc
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4 Cn
5 Sr
6 Qc
7 Gl
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3250116-1 09/14/17 10:41 • (LCSD) R3250116-2 09/14/17 11:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0741	0.0814	59.3	65.1	11.0-160			9.34	23
Acrylonitrile	0.125	0.0983	0.0967	78.7	77.4	61.0-143			1.65	20
Benzene	0.0250	0.0209	0.0215	83.7	85.8	71.0-124			2.47	20
Bromobenzene	0.0250	0.0197	0.0210	78.9	83.8	78.0-120			6.08	20
Bromodichloromethane	0.0250	0.0221	0.0227	88.2	90.9	75.0-120			2.99	20
Bromochloromethane	0.0250	0.0231	0.0225	92.5	90.2	80.0-121			2.57	20
Bromoform	0.0250	0.0229	0.0240	91.5	95.8	65.0-133			4.63	20
Bromomethane	0.0250	0.0189	0.0203	75.4	81.2	26.0-160			7.35	20
n-Butylbenzene	0.0250	0.0211	0.0223	84.4	89.2	73.0-126			5.52	20
sec-Butylbenzene	0.0250	0.0210	0.0222	83.8	89.0	75.0-121			6.00	20
tert-Butylbenzene	0.0250	0.0210	0.0226	84.0	90.4	74.0-122			7.28	20
Carbon disulfide	0.0250	0.0193	0.0207	77.4	82.9	53.0-130			6.90	20
Carbon tetrachloride	0.0250	0.0212	0.0224	84.9	89.4	66.0-123			5.21	20
Chlorobenzene	0.0250	0.0248	0.0273	99.2	109	79.0-121			9.77	20
Chlorodibromomethane	0.0250	0.0245	0.0268	97.9	107	74.0-128			9.18	20
Chloroethane	0.0250	0.0173	0.0187	69.3	75.0	51.0-147			7.88	20
Chloroform	0.0250	0.0208	0.0219	83.1	87.4	73.0-123			5.00	20
Chloromethane	0.0250	0.0154	0.0166	61.8	66.3	51.0-138			7.08	20
2-Chlorotoluene	0.0250	0.0207	0.0220	82.7	87.8	72.0-124			5.97	20
4-Chlorotoluene	0.0250	0.0198	0.0213	79.3	85.2	78.0-120			7.23	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0225	0.0228	90.2	91.0	65.0-126			0.960	20
1,2-Dibromoethane	0.0250	0.0244	0.0259	97.8	104	78.0-122			5.86	20
Dibromomethane	0.0250	0.0219	0.0232	87.5	92.7	79.0-120			5.72	20
1,2-Dichlorobenzene	0.0250	0.0229	0.0244	91.4	97.4	80.0-120			6.39	20
1,3-Dichlorobenzene	0.0250	0.0232	0.0245	92.8	98.0	72.0-123			5.48	20
1,4-Dichlorobenzene	0.0250	0.0212	0.0224	84.9	89.8	77.0-120			5.57	20
trans-1,4-Dichloro-2-butene	0.0250	0.0213	0.0190	85.0	76.2	68.0-126			10.9	20
Dichlorodifluoromethane	0.0250	0.0186	0.0199	74.4	79.8	49.0-155			6.92	20
1,1-Dichloroethane	0.0250	0.0215	0.0215	85.9	86.0	70.0-128			0.120	20
1,2-Dichloroethane	0.0250	0.0219	0.0214	87.6	85.8	69.0-128			2.10	20
1,1-Dichloroethene	0.0250	0.0195	0.0211	77.9	84.4	63.0-131			8.00	20
cis-1,2-Dichloroethene	0.0250	0.0198	0.0206	79.1	82.2	74.0-123			3.81	20
trans-1,2-Dichloroethene	0.0250	0.0200	0.0208	79.9	83.2	72.0-122			4.04	20
1,2-Dichloropropane	0.0250	0.0220	0.0229	87.8	91.5	75.0-126			4.14	20
1,1-Dichloropropene	0.0250	0.0210	0.0215	84.0	86.0	72.0-130			2.31	20
1,3-Dichloropropene	0.0250	0.0243	0.0261	97.0	104	80.0-121			7.38	20
cis-1,3-Dichloropropene	0.0250	0.0259	0.0277	103	111	80.0-125			6.82	20
trans-1,3-Dichloropropene	0.0250	0.0261	0.0277	104	111	75.0-129			5.93	20
2,2-Dichloropropane	0.0250	0.0204	0.0212	81.7	84.6	60.0-129			3.54	20
Di-isopropyl ether	0.0250	0.0189	0.0191	75.6	76.5	62.0-133			1.13	20

Public Review Draft

1 Cp
2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3250116-1 09/14/17 10:41 • (LCSD) R3250116-2 09/14/17 11:02

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0231	0.0250	92.5	100	77.0-120			7.86	20
Hexachloro-1,3-butadiene	0.0250	0.0238	0.0254	95.4	101	68.0-128			6.11	20
2-Hexanone	0.125	0.109	0.112	87.2	89.3	61.0-143			2.28	20
n-Hexane	0.0250	0.0175	0.0188	70.0	75.2	57.0-125			7.13	20
Iodomethane	0.125	0.126	0.132	101	106	67.0-132			5.09	20
Isopropylbenzene	0.0250	0.0204	0.0218	81.6	87.0	75.0-120			6.42	20
p-Isopropyltoluene	0.0250	0.0218	0.0234	87.3	93.7	74.0-125			7.08	20
2-Butanone (MEK)	0.125	0.0952	0.0907	76.2	72.5	37.0-159			4.89	20
Methylene Chloride	0.0250	0.0189	0.0198	75.7	79.3	67.0-123			4.69	20
4-Methyl-2-pentanone (MIBK)	0.125	0.111	0.113	89.1	90.1	60.0-144			1.10	20
Methyl tert-butyl ether	0.0250	0.0196	0.0205	78.2	81.9	66.0-125			4.51	20
Naphthalene	0.0250	0.0204	0.0222	81.8	88.7	64.0-125			8.17	20
n-Propylbenzene	0.0250	0.0205	0.0220	82.1	88.0	78.0-120			6.95	20
Styrene	0.0250	0.0212	0.0226	84.9	90.5	78.0-124			6.43	20
1,1,1,2-Tetrachloroethane	0.0250	0.0237	0.0258	94.8	103	74.0-124			8.69	20
1,1,2,2-Tetrachloroethane	0.0250	0.0199	0.0209	79.4	83.6	73.0-120			5.08	20
Tetrachloroethene	0.0250	0.0268	0.0291	107	116	70.0-127			8.13	20
Toluene	0.0250	0.0223	0.0240	89.1	96.1	77.0-120			7.63	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0205	0.0219	82.1	87.6	64.0-135			6.48	20
1,2,3-Trichlorobenzene	0.0250	0.0233	0.0253	93.3	101	68.0-126			8.24	20
1,2,4-Trichlorobenzene	0.0250	0.0236	0.0249	94.3	99.7	70.0-127			5.59	20
1,1,1-Trichloroethane	0.0250	0.0207	0.0214	83.0	85.7	69.0-125			3.24	20
1,1,2-Trichloroethane	0.0250	0.0226	0.0243	90.3	97.1	78.0-120			7.23	20
Trichloroethene	0.0250	0.0238	0.0249	95.4	99.7	79.0-120			4.47	20
Trichlorofluoromethane	0.0250	0.0229	0.0241	91.5	96.2	59.0-136			4.98	20
1,2,3-Trichloropropane	0.0250	0.0202	0.0210	80.9	84.2	73.0-124			3.98	20
1,2,3-Trimethylbenzene	0.0250	0.0193	0.0205	77.1	82.0	76.0-120			6.13	20
1,2,4-Trimethylbenzene	0.0250	0.0194	0.0206	77.6	82.4	75.0-120			5.99	20
1,3,5-Trimethylbenzene	0.0250	0.0205	0.0223	82.1	89.1	75.0-120			8.17	20
Vinyl acetate	0.125	0.111	0.110	88.8	88.4	58.0-156			0.510	20
Vinyl chloride	0.0250	0.0199	0.0211	79.7	84.2	63.0-134			5.52	20
Xylenes, Total	0.0750	0.0683	0.0740	91.1	98.7	77.0-120			8.01	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										
				87.9	87.3	64.0-132				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
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9 Sc



Method Blank (MB)

(MB) R3249538-3 09/14/17 19:21

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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1 Cp
2 Tc
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Method Blank (MB)

(MB) R3249538-3 09/14/17 19:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
2-Hexanone	U		0.00137	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
n-Hexane	U		0.000290	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	105		80.0-120	
(S) Dibromofluoromethane	101		74.0-131	
(S) 4-Bromofluorobenzene	100		64.0-132	

1 Cp
2 Tc
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Public Review Draft



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3249538-1 09/14/17 18:29 • (LCSD) R3249538-2 09/14/17 18:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0709	0.0640	56.7	51.2	11.0-160			10.2	23
Acrylonitrile	0.125	0.123	0.122	98.7	97.6	61.0-143			1.12	20
Benzene	0.0250	0.0254	0.0259	102	104	71.0-124			1.74	20
Bromobenzene	0.0250	0.0241	0.0241	96.5	96.5	78.0-120			0.0500	20
Bromodichloromethane	0.0250	0.0214	0.0227	85.7	90.6	75.0-120			5.61	20
Bromoform	0.0250	0.0191	0.0198	76.5	79.1	65.0-133			3.33	20
Bromochloromethane	0.0250	0.0233	0.0250	93.1	100	80.0-121			7.31	20
Bromomethane	0.0250	0.0248	0.0244	99.3	97.5	26.0-160			1.88	20
n-Butylbenzene	0.0250	0.0244	0.0260	97.7	104	73.0-126			6.29	20
sec-Butylbenzene	0.0250	0.0241	0.0252	96.3	101	75.0-121			4.73	20
tert-Butylbenzene	0.0250	0.0236	0.0246	94.4	98.3	74.0-122			4.07	20
Carbon tetrachloride	0.0250	0.0244	0.0249	97.5	99.8	66.0-123			2.31	20
Carbon disulfide	0.0250	0.0224	0.0225	89.4	90.1	53.0-130			0.770	20
Chlorobenzene	0.0250	0.0235	0.0246	94.0	98.2	79.0-121			4.33	20
Chlorodibromomethane	0.0250	0.0216	0.0217	86.3	86.8	74.0-128			0.510	20
Chloroethane	0.0250	0.0245	0.0254	97.8	102	51.0-147			3.69	20
Chloroform	0.0250	0.0251	0.0253	101	101	73.0-123			0.460	20
Chloromethane	0.0250	0.0246	0.0245	98.5	97.9	51.0-138			0.640	20
2-Chlorotoluene	0.0250	0.0254	0.0262	102	105	72.0-124			3.05	20
4-Chlorotoluene	0.0250	0.0239	0.0248	95.6	99.1	78.0-120			3.55	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0194	0.0202	77.6	80.8	65.0-126			4.16	20
1,2-Dibromoethane	0.0250	0.0230	0.0232	91.8	92.9	78.0-122			1.14	20
Dibromomethane	0.0250	0.0218	0.0222	87.1	88.9	79.0-120			1.99	20
1,2-Dichlorobenzene	0.0250	0.0251	0.0262	100	105	80.0-120			4.14	20
1,3-Dichlorobenzene	0.0250	0.0254	0.0257	102	103	72.0-123			1.32	20
1,4-Dichlorobenzene	0.0250	0.0239	0.0245	95.5	97.8	77.0-120			2.45	20
Dichlorodifluoromethane	0.0250	0.0258	0.0258	103	103	49.0-155			0.0100	20
trans-1,4-Dichloro-2-butene	0.0250	0.0213	0.0207	85.3	82.9	68.0-126			2.90	20
1,1-Dichloroethane	0.0250	0.0259	0.0258	104	103	70.0-128			0.400	20
1,2-Dichloroethane	0.0250	0.0257	0.0254	103	101	69.0-128			1.39	20
1,1-Dichloroethene	0.0250	0.0245	0.0250	97.8	100	63.0-131			2.22	20
cis-1,2-Dichloroethene	0.0250	0.0232	0.0244	92.6	97.8	74.0-123			5.39	20
trans-1,2-Dichloroethene	0.0250	0.0243	0.0253	97.2	101	72.0-122			4.18	20
1,2-Dichloropropane	0.0250	0.0250	0.0258	99.9	103	75.0-126			3.20	20
1,1-Dichloropropene	0.0250	0.0247	0.0250	98.8	100	72.0-130			1.38	20
1,3-Dichloropropene	0.0250	0.0235	0.0242	94.0	96.9	80.0-121			3.04	20
cis-1,3-Dichloropropene	0.0250	0.0254	0.0262	102	105	80.0-125			3.03	20
trans-1,3-Dichloropropene	0.0250	0.0234	0.0251	93.6	100	75.0-129			6.79	20
2,2-Dichloropropane	0.0250	0.0231	0.0244	92.5	97.6	60.0-129			5.46	20
Di-isopropyl ether	0.0250	0.0257	0.0253	103	101	62.0-133			1.59	20

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3249538-1 09/14/17 18:29 • (LCSD) R3249538-2 09/14/17 18:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0227	0.0236	90.7	94.3	77.0-120			3.83	20
n-Hexane	0.0250	0.0223	0.0226	89.2	90.4	57.0-125			1.34	20
2-Hexanone	0.125	0.103	0.104	82.1	83.5	61.0-143			1.68	20
Isopropylbenzene	0.0250	0.0239	0.0244	95.5	97.5	75.0-120			2.11	20
Iodomethane	0.125	0.128	0.129	102	104	67.0-132			1.44	20
p-Isopropyltoluene	0.0250	0.0247	0.0261	99.0	104	74.0-125			5.21	20
2-Butanone (MEK)	0.125	0.0973	0.0946	77.8	75.7	37.0-159			2.73	20
Methylene Chloride	0.0250	0.0248	0.0249	99.3	99.6	67.0-123			0.330	20
4-Methyl-2-pentanone (MIBK)	0.125	0.120	0.123	95.9	98.7	60.0-144			2.89	20
Methyl tert-butyl ether	0.0250	0.0251	0.0256	100	102	66.0-125			2.05	20
Naphthalene	0.0250	0.0239	0.0243	95.7	97.1	64.0-125			1.48	20
n-Propylbenzene	0.0250	0.0244	0.0253	97.7	101	78.0-120			3.39	20
Styrene	0.0250	0.0250	0.0256	99.8	103	78.0-124			2.72	20
1,1,1,2-Tetrachloroethane	0.0250	0.0228	0.0243	91.3	97.2	74.0-124			6.25	20
1,1,2,2-Tetrachloroethane	0.0250	0.0251	0.0257	100	103	73.0-120			2.28	20
Tetrachloroethene	0.0250	0.0227	0.0238	90.9	95.2	70.0-127			4.65	20
Toluene	0.0250	0.0230	0.0240	92.0	95.8	77.0-120			4.07	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0235	0.0244	94.0	97.7	64.0-135			3.84	20
1,2,3-Trichlorobenzene	0.0250	0.0249	0.0248	99.6	99.1	68.0-126			0.540	20
1,2,4-Trichlorobenzene	0.0250	0.0237	0.0244	94.9	97.7	70.0-127			2.86	20
1,1,1-Trichloroethane	0.0250	0.0238	0.0241	95.1	96.3	69.0-125			1.21	20
1,1,2-Trichloroethane	0.0250	0.0226	0.0233	90.5	93.1	78.0-120			2.80	20
Trichloroethene	0.0250	0.0230	0.0233	92.1	93.4	79.0-120			1.35	20
Trichlorofluoromethane	0.0250	0.0250	0.0259	99.9	104	59.0-136			3.64	20
1,2,3-Trichloropropane	0.0250	0.0249	0.0266	99.5	106	73.0-124			6.58	20
1,2,3-Trimethylbenzene	0.0250	0.0229	0.0237	91.7	94.9	76.0-120			3.47	20
1,2,4-Trimethylbenzene	0.0250	0.0245	0.0254	97.9	102	75.0-120			3.81	20
1,3,5-Trimethylbenzene	0.0250	0.0242	0.0255	96.8	102	75.0-120			5.17	20
Vinyl chloride	0.0250	0.0254	0.0255	102	102	63.0-134			0.210	20
Xylenes, Total	0.0750	0.0701	0.0726	93.5	96.8	77.0-120			3.50	20
Vinyl acetate	0.125	0.144	0.142	115	114	58.0-156			0.890	20
(S) Toluene-d8				98.9	101	80.0-120				
(S) Dibromofluoromethane				104	103	74.0-131				
(S) 4-Bromofluorobenzene				96.8	99.0	64.0-132				

Public Review Draft

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L936096-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L936096-01 09/14/17 22:32 • (MS) R3249538-4 09/15/17 01:43 • (MSD) R3249538-5 09/15/17 02:01

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	mg/kg	%	%	%	%			%	%
Acetone	0.125	U	0.803	0.731	25.7	23.4	25	10.0-160			9.34	36
Acrylonitrile	0.125	U	1.93	1.82	61.7	58.2	25	14.0-160			5.71	33
Benzene	0.0250	U	0.446	0.450	71.3	71.9	25	13.0-146			0.910	27
Bromobenzene	0.0250	U	0.495	0.505	79.3	80.9	25	10.0-149			2.00	33
Bromodichloromethane	0.0250	U	0.415	0.413	66.4	66.1	25	15.0-142			0.380	28
Bromoform	0.0250	U	0.339	0.349	54.2	55.9	25	10.0-147			3.05	31
Bromomethane	0.0250	U	0.285	0.298	45.6	47.6	25	10.0-160			4.44	32
Bromochloromethane	0.0250	U	0.414	0.389	66.2	62.3	25	24.0-146			6.19	27
n-Butylbenzene	0.0250	U	0.522	0.526	83.6	84.1	25	10.0-154			0.620	37
sec-Butylbenzene	0.0250	U	0.511	0.518	81.8	82.9	25	10.0-151			1.32	36
tert-Butylbenzene	0.0250	U	0.513	0.535	82.0	85.6	25	10.0-152			4.24	35
Carbon tetrachloride	0.0250	U	0.398	0.400	63.6	63.9	25	13.0-140			0.470	30
Chlorobenzene	0.0250	U	0.479	0.471	76.7	75.4	25	10.0-149			1.66	31
Chlorodibromomethane	0.0250	U	0.402	0.392	64.4	62.7	25	12.0-147			2.58	29
Carbon disulfide	0.0250	U	0.105	0.106	16.8	16.9	25	10.0-141			0.490	30
Chloroethane	0.0250	U	0.187	0.181	29.9	28.9	25	10.0-159			3.55	33
Chloroform	0.0250	U	0.503	0.482	80.5	77.1	25	18.0-148			4.36	28
Chloromethane	0.0250	U	0.276	0.286	44.1	45.7	25	10.0-146			3.64	29
2-Chlorotoluene	0.0250	U	0.534	0.539	85.5	86.2	25	10.0-151			0.830	35
4-Chlorotoluene	0.0250	U	0.516	0.515	82.5	82.4	25	10.0-150			0.130	35
1,2-Dibromo-3-Chloropropane	0.0250	U	0.382	0.395	61.2	63.2	25	10.0-149			3.25	34
1,2-Dibromoethane	0.0250	U	0.443	0.438	70.8	70.0	25	14.0-145			1.12	28
Dibromomethane	0.0250	U	0.419	0.392	67.0	62.7	25	18.0-144			6.65	27
1,2-Dichlorobenzene	0.0250	U	0.545	0.531	87.2	84.9	25	10.0-153			2.57	34
1,3-Dichlorobenzene	0.0250	U	0.512	0.523	81.9	83.6	25	10.0-150			2.08	35
1,4-Dichlorobenzene	0.0250	U	0.511	0.499	81.8	79.8	25	10.0-148			2.37	34
Dichlorodifluoromethane	0.0250	U	0.387	0.394	61.9	63.0	25	10.0-160			1.85	30
1,1-Dichloroethane	0.0250	U	0.476	0.472	76.2	75.5	25	19.0-148			0.970	28
trans-1,4-Dichloro-2-butene	0.0250	U	0.482	0.471	77.2	75.4	25	17.0-147			2.34	27
1,1-Dichloroethene	0.0250	U	0.454	0.429	72.6	68.6	25	10.0-160			5.71	40
cis-1,2-Dichloroethene	0.0250	U	0.320	0.326	51.3	52.2	25	10.0-150			1.78	31
trans-1,2-Dichloroethene	0.0250	U	0.459	0.415	73.5	66.4	25	16.0-145			10.2	28
1,2-Dichloropropane	0.0250	U	0.376	0.364	60.2	58.3	25	11.0-142			3.28	29
1,1-Dichloropropene	0.0250	U	0.478	0.473	76.4	75.7	25	17.0-148			0.930	28
1,3-Dichloropropene	0.0250	U	0.414	0.422	66.2	67.5	25	10.0-150			1.97	30
cis-1,3-Dichloropropene	0.0250	U	0.479	0.462	76.7	73.9	25	16.0-148			3.61	27
trans-1,3-Dichloropropene	0.0250	U	0.490	0.477	78.4	76.3	25	13.0-150			2.77	28
2,2-Dichloropropane	0.0250	U	0.442	0.439	70.7	70.3	25	10.0-152			0.680	29
Di-isopropyl ether	0.0250	U	0.414	0.426	66.2	68.1	25	16.0-143			2.88	30
	0.0250	U	0.488	0.464	78.1	74.2	25	16.0-149			5.08	28

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L936096-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L936096-01 09/14/17 22:32 • (MS) R3249538-4 09/15/17 01:43 • (MSD) R3249538-5 09/15/17 02:01

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	U	0.462	0.444	73.9	71.0	25	10.0-147			4.08	31
Hexachloro-1,3-butadiene	0.0250	U	0.487	0.480	78.0	76.7	25	10.0-154			1.58	40
n-Hexane	0.0250	U	0.224	0.218	35.8	34.9	25	10.0-140			2.52	34
Isopropylbenzene	0.0250	U	0.483	0.496	77.3	79.4	25	10.0-147			2.58	33
2-Hexanone	0.125	U	2.08	2.02	66.5	64.5	25	12.0-158			2.97	30
p-Isopropyltoluene	0.0250	U	0.523	0.532	83.7	85.2	25	10.0-156			1.77	37
2-Butanone (MEK)	0.125	U	1.59	1.39	50.9	44.4	25	10.0-160			13.6	33
Iodomethane	0.125	U	1.93	1.87	61.9	59.8	25	10.0-157			3.36	34
Methylene Chloride	0.0250	U	0.440	0.395	70.4	63.3	25	16.0-139			10.7	29
4-Methyl-2-pentanone (MIBK)	0.125	U	2.49	2.36	79.5	75.7	25	12.0-160			4.98	32
Methyl tert-butyl ether	0.0250	U	0.437	0.398	69.9	63.7	25	21.0-145			9.30	29
Naphthalene	0.0250	U	0.503	0.499	80.5	79.8	25	10.0-153			0.830	36
n-Propylbenzene	0.0250	U	0.499	0.507	79.8	81.2	25	10.0-151			1.63	34
Styrene	0.0250	U	0.511	0.514	81.8	82.3	25	10.0-155			0.600	34
1,1,1,2-Tetrachloroethane	0.0250	U	0.493	0.478	78.9	76.5	25	10.0-147			3.20	30
1,1,2,2-Tetrachloroethane	0.0250	U	0.518	0.499	82.9	79.8	25	10.0-155			3.77	31
Tetrachloroethene	0.0250	U	0.376	0.378	60.2	60.5	25	10.0-144			0.380	32
Toluene	0.0250	U	0.442	0.434	70.7	69.5	25	10.0-144			1.75	28
1,1,2-Trichlorotrifluoroethane	0.0250	U	0.412	0.418	65.9	66.9	25	10.0-153			1.40	33
1,2,3-Trichlorobenzene	0.0250	U	0.536	0.517	85.8	82.7	25	10.0-153			3.75	40
1,2,4-Trichlorobenzene	0.0250	U	0.497	0.509	79.6	81.4	25	10.0-156			2.30	40
1,1,1-Trichloroethane	0.0250	U	0.429	0.417	68.7	66.7	25	18.0-145			3.02	29
1,1,2-Trichloroethane	0.0250	U	0.461	0.458	73.8	73.3	25	12.0-151			0.570	28
Trichloroethene	0.0250	U	0.402	0.423	64.3	67.7	25	11.0-148			5.09	29
Trichlorofluoromethane	0.0250	U	0.408	0.410	65.3	65.7	25	10.0-157			0.510	34
1,2,3-Trichloropropane	0.0250	U	0.537	0.528	85.9	84.4	25	10.0-154			1.71	32
1,2,3-Trimethylbenzene	0.0250	U	0.532	0.513	85.1	82.0	25	10.0-150			3.69	33
1,2,4-Trimethylbenzene	0.0250	U	0.530	0.527	84.7	84.3	25	10.0-151			0.520	34
1,3,5-Trimethylbenzene	0.0250	U	0.510	0.502	81.6	80.3	25	10.0-150			1.61	33
Vinyl chloride	0.0250	U	0.314	0.315	50.2	50.4	25	10.0-150			0.450	29
Xylenes, Total	0.0750	U	1.43	1.38	76.3	73.7	25	10.0-150			3.49	31
Vinyl acetate	0.125	U	2.51	2.49	80.3	79.7	25	10.0-160			0.840	40
<i>(S) Toluene-d8</i>												
<i>(S) Dibromofluoromethane</i>												
<i>(S) 4-Bromofluorobenzene</i>												
					95.5	99.9		64.0-132				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier Description

J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

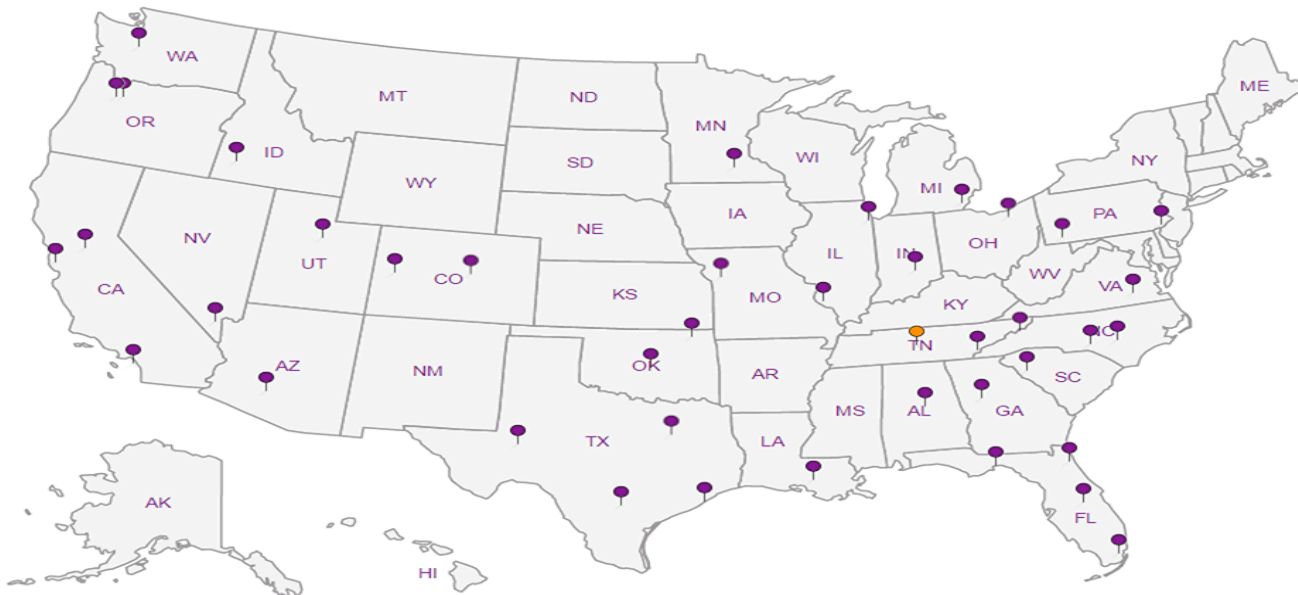
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



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6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeman

Email To: bhaldeman@pesenv.com

Project:
Description: **American Linen Project**

City/State
Collected: **SEATTLE, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413 001.02.602
Lab Project #
PESENWSWA-ALP

Collected by (print):
SHANNON MCKERNAN

Site/Facility ID #
1413.001.02.602

P.O. #

Rush? (Lab MUST Be Notified)

Quote #

Collected by (signature):
[Signature]

Immediately Packed on ice N Y X

Date Results Needed

No. of Ctrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Ctrs

NWTPHGX 2ozClr-NoPres
TS 4ozClr-NoPres / 2ozClr-NoPres.
V8260C 40ml/NaHSO4/Syr/MeOH

Analysis / Container / Preservative

Chain of Custody

Page 1 of 1

12065 Iakson Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



LAB - S.C.I.E.N.C.E.S
a subsidiary of



L# **1936064**
E151

Actnum: **PESEN**
Template: **1126584**
Prelogin: **P615998**
TSR: **110 - Brian Ford**
PCM 8-31-17
Shipped Via: **FedEx Ground**

Remarks | Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Ctrs	No. of Ctrs	Analysis / Container / Preservative
B-212-85	GRAB	SS	85	9/11/17	1100	5	5	NWTPHGX 2ozClr-NoPres
B-214-115			115		1110	4	4	TS 4ozClr-NoPres / 2ozClr-NoPres.
B-212-95			120		1120	3	4	V8260C 40ml/NaHSO4/Syr/MeOH
B-212-100			95		1200	5	5	
MW-138-15			100		1240	5	5	
B-215-15			15	9/12/17	1015	5	5	
MW-138-25			15		1030	5	5	
B-215-25			25		1115	4	4	
B-215-35			25		1125	5	5	
B-215-35			35		1140	5	5	

Remarks:

Mw

Samples returned via:

UPS FedEx Courier

Tracking #

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: NP Y N
Bottles arrive intact: NP Y N
Correct bottle used: NP Y N
Sufficient volume sent: NP Y N
IT Applicable: NP Y N
VOA zero headspace: NP Y N
Preservation Correct/Checked: NP Y N

Reinquinshed by: (Signature)
[Signature]

Date: 9/12/17

Time: 1410

Received by: (Signature)
[Signature]

Trip Blank Received: Yes / No
HCL / MeOH

If preservation required by Login: Date/Time

Relinquished by: (Signature)
[Signature]

Date: 9/12/17

Time: 1410

Received by: (Signature)
[Signature]

Temp: 3.3 ^{m/c} 55 ^{°C} Bottle Received: Yes / No
TBR

Condition: NCF / OK

Relinquished by: (Signature)
[Signature]

Date: 9/13/17

Time: 0845

Received for lab by: (Signature)
[Signature]

Date: 9-13-17

Condition: NCF / OK

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Bill Haldeaman

Email To: bhaldeaman@pesenv.com

Project
Description: **American Linen Project**

City/State
Collected: **SEATTLE, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.02.602

Lab Project #
PESENVSWA-ALP

Collected by (print):
Karin Springer

Site/Facility ID #
1413.001.02.602

P.O. #

Collected by (Signature):
[Signature]

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on Ice N Y X

Same Day Five Day
Next Day 5 Day (Rud Only)
Two Day 10 Day (Rud Only)
Three Day

Date Results Needed

No. of

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Ents
MW-138-35	GRAB	SS	3.5	9/12/17	1440	5
B-215-45		SS	4.5		1205	5
B-215-55		SS	5.5		1250	5
MW-138-45		SS	4.5		1255	5
MW-138-50		SS	3.5		1335	5
B-215-105		SS	0.5		1350	5
TRIP BLANK-09/12		SS	7.5		1400	5
TRIP BLANK-09/12/17		SS	NA	3/12/17	NA	5

Remarks:

Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other _____

Notes:
Samples returned via:
UPS FedEx Courier _____

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist:
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles airtight/Intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
VQA zero headspace: Y N
Preservation correct/checked: Y N
IL Application: Y N

Relinquished by: (Signature)
[Signature]

Date: **9-12-17**

Time: **1410**

Received by: (Signature)
[Signature]

Temp: **3.3** °C
33 °C
56 °C

Bottles received: **8**

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)
[Signature]

Date: **9-13-17**

Time: **0845**

Hold: NCE / OK

Analysis / Container / Preservative

Analysis / Container / Preservative	Pres	Chk
NWTPHGX 40mlAmb HCl		
TS 2ozClr-NoPres	X	X
V8260C 40ml/NaHSO4/Syr/MeOH	X	X
V8260C 40mlAmb-HCl	X	X
VOCs Screen 2ozClr-NoPres	X	X

Chain of Custody Page 2 of 2

ESC
L.A.B. S.C.I.E.N.C.E.S

12065 Lebanon Rd
Mount Airy, TN 37112
Phone: 615-758-8858
Phone: 800-793-8859
Fax: 615-758-3859

YOUR LAB OF CHOICE

L# **L9360621**

Table #

Account: **PESENVSWA**
Template: **T122259**
Prelogin: **P596188**
TSR: **110 - Brian Ford**
PB:

Shipped Via: **FedEx Ground**

Remarks: _____ Sample # (lab only)

September 21, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L936401
Samples Received: 09/14/2017
Project Number: 1413.001.02.602
Description: American Linen Project
Site: 1413.001.02.602
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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B-910-90 L936401-01 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 09:30
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 09:30	09/15/17 15:04	ACG

1 Cp

2 Tc

3 Ss

B-215-85 L936401-02 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 10:15
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 10:15	09/15/17 15:24	ACG

4 Cn

5 Sr

6 Qc

MW-138-65 L936401-03 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 10:30
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 10:30	09/15/17 15:43	ACG

7 Gl

8 Al

9 Sc

B-909-115 L936401-04 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 11:30
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 11:30	09/20/17 15:30	DWR

MW-138-75 L936401-05 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 11:15
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 11:15	09/15/17 16:23	ACG

MW-138-85 L936401-06 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 11:40
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 11:40	09/15/17 16:42	ACG

MW-138-95 L936401-07 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 13:05
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 13:05	09/15/17 17:02	ACG



MW-138-105 L936401-08 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 12:55
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 12:55	09/15/17 17:22	ACG

¹ Cp

² Tc

³ Ss

B-215-95 L936401-09 Solid

Collected by Karsten Springstead
 Collected date/time 09/13/17 10:50
 Received date/time 09/14/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1021766	1	09/19/17 12:48	09/19/17 13:04	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1020800	1	09/13/17 10:50	09/15/17 17:41	ACG

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.3		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0116	0.0579	1	09/15/2017 15:04	WG1020800
Acrylonitrile	U		0.00207	0.0116	1	09/15/2017 15:04	WG1020800
Benzene	U		0.000313	0.00116	1	09/15/2017 15:04	WG1020800
Bromobenzene	U		0.000329	0.00116	1	09/15/2017 15:04	WG1020800
Bromodichloromethane	U		0.000294	0.00116	1	09/15/2017 15:04	WG1020800
Bromochloromethane	U	J6	0.000452	0.00579	1	09/15/2017 15:04	WG1020800
Bromoform	U		0.000491	0.00116	1	09/15/2017 15:04	WG1020800
Bromomethane	U	J6	0.00155	0.00579	1	09/15/2017 15:04	WG1020800
n-Butylbenzene	U		0.000299	0.00116	1	09/15/2017 15:04	WG1020800
sec-Butylbenzene	U		0.000233	0.00116	1	09/15/2017 15:04	WG1020800
tert-Butylbenzene	U		0.000239	0.00116	1	09/15/2017 15:04	WG1020800
Carbon disulfide	0.000476	J J6	0.000256	0.00116	1	09/15/2017 15:04	WG1020800
Carbon tetrachloride	U		0.000380	0.00116	1	09/15/2017 15:04	WG1020800
Chlorobenzene	U		0.000246	0.00116	1	09/15/2017 15:04	WG1020800
Chlorodibromomethane	U		0.000432	0.00116	1	09/15/2017 15:04	WG1020800
Chloroethane	U	J6	0.00110	0.00579	1	09/15/2017 15:04	WG1020800
Chloroform	U		0.000265	0.00579	1	09/15/2017 15:04	WG1020800
Chloromethane	U	J6	0.000435	0.00290	1	09/15/2017 15:04	WG1020800
2-Chlorotoluene	U		0.000349	0.00116	1	09/15/2017 15:04	WG1020800
4-Chlorotoluene	U		0.000278	0.00116	1	09/15/2017 15:04	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00579	1	09/15/2017 15:04	WG1020800
1,2-Dibromoethane	U	J4	0.000397	0.00116	1	09/15/2017 15:04	WG1020800
Dibromomethane	U		0.000443	0.00116	1	09/15/2017 15:04	WG1020800
1,2-Dichlorobenzene	U		0.000353	0.00116	1	09/15/2017 15:04	WG1020800
1,3-Dichlorobenzene	U		0.000277	0.00116	1	09/15/2017 15:04	WG1020800
1,4-Dichlorobenzene	U		0.000262	0.00116	1	09/15/2017 15:04	WG1020800
Dichlorodifluoromethane	U	J3 J6	0.000826	0.00579	1	09/15/2017 15:04	WG1020800
1,1-Dichloroethane	U		0.000231	0.00116	1	09/15/2017 15:04	WG1020800
1,2-Dichloroethane	U		0.000307	0.00116	1	09/15/2017 15:04	WG1020800
1,1-Dichloroethene	U	J6	0.000351	0.00116	1	09/15/2017 15:04	WG1020800
cis-1,2-Dichloroethene	U		0.000272	0.00116	1	09/15/2017 15:04	WG1020800
trans-1,2-Dichloroethene	U	J6	0.000306	0.00116	1	09/15/2017 15:04	WG1020800
1,2-Dichloropropane	U		0.000415	0.00116	1	09/15/2017 15:04	WG1020800
1,1-Dichloropropene	U	J6	0.000367	0.00116	1	09/15/2017 15:04	WG1020800
1,3-Dichloropropane	U		0.000240	0.00116	1	09/15/2017 15:04	WG1020800
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	09/15/2017 15:04	WG1020800
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	09/15/2017 15:04	WG1020800
trans-1,4-Dichloro-2-butene	U	J0	0.000901	0.00290	1	09/15/2017 15:04	WG1020800
2,2-Dichloropropane	U		0.000323	0.00116	1	09/15/2017 15:04	WG1020800
Di-isopropyl ether	U		0.000287	0.00116	1	09/15/2017 15:04	WG1020800
Ethylbenzene	U		0.000344	0.00116	1	09/15/2017 15:04	WG1020800
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	09/15/2017 15:04	WG1020800
2-Hexanone	U		0.00159	0.0116	1	09/15/2017 15:04	WG1020800
n-Hexane	0.000629	J J3 J6	0.000336	0.0116	1	09/15/2017 15:04	WG1020800
Iodomethane	U	J6	0.00293	0.0116	1	09/15/2017 15:04	WG1020800
Isopropylbenzene	U		0.000282	0.00116	1	09/15/2017 15:04	WG1020800
p-Isopropyltoluene	U		0.000236	0.00116	1	09/15/2017 15:04	WG1020800
2-Butanone (MEK)	U		0.00542	0.0116	1	09/15/2017 15:04	WG1020800
Methylene Chloride	U	J6	0.00116	0.00579	1	09/15/2017 15:04	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	09/15/2017 15:04	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 09:30

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	09/15/2017 15:04	WG1020800
Naphthalene	U		0.00116	0.00579	1	09/15/2017 15:04	WG1020800
n-Propylbenzene	U		0.000239	0.00116	1	09/15/2017 15:04	WG1020800
Styrene	U		0.000271	0.00116	1	09/15/2017 15:04	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	09/15/2017 15:04	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000423	0.00116	1	09/15/2017 15:04	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000423	0.00116	1	09/15/2017 15:04	WG1020800
Tetrachloroethene	U		0.000320	0.00116	1	09/15/2017 15:04	WG1020800
Toluene	U		0.000503	0.00579	1	09/15/2017 15:04	WG1020800
1,2,3-Trichlorobenzene	U		0.000355	0.00116	1	09/15/2017 15:04	WG1020800
1,2,4-Trichlorobenzene	U		0.000450	0.00116	1	09/15/2017 15:04	WG1020800
1,1,1-Trichloroethane	U		0.000331	0.00116	1	09/15/2017 15:04	WG1020800
1,1,2-Trichloroethane	U	J4	0.000321	0.00116	1	09/15/2017 15:04	WG1020800
Trichloroethene	U		0.000323	0.00116	1	09/15/2017 15:04	WG1020800
Trichlorofluoromethane	U		0.000443	0.00579	1	09/15/2017 15:04	WG1020800
1,2,3-Trichloropropane	U	J4	0.000859	0.00290	1	09/15/2017 15:04	WG1020800
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	09/15/2017 15:04	WG1020800
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	09/15/2017 15:04	WG1020800
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	09/15/2017 15:04	WG1020800
Vinyl acetate	U		0.00277	0.0116	1	09/15/2017 15:04	WG1020800
Vinyl chloride	U	J6	0.000337	0.00116	1	09/15/2017 15:04	WG1020800
Xylenes, Total	U		0.000809	0.00348	1	09/15/2017 15:04	WG1020800
(S) Toluene-d8	103			80.0-120		09/15/2017 15:04	WG1020800
(S) Dibromofluoromethane	97.8			74.0-131		09/15/2017 15:04	WG1020800
(S) 4-Bromofluorobenzene	109			64.0-132		09/15/2017 15:04	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.0		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0121	0.0603	1	09/15/2017 15:24	WG1020800
Acrylonitrile	U		0.00216	0.0121	1	09/15/2017 15:24	WG1020800
Benzene	U		0.000325	0.00121	1	09/15/2017 15:24	WG1020800
Bromobenzene	U		0.000342	0.00121	1	09/15/2017 15:24	WG1020800
Bromodichloromethane	U		0.000306	0.00121	1	09/15/2017 15:24	WG1020800
Bromochloromethane	U		0.000470	0.00603	1	09/15/2017 15:24	WG1020800
Bromoform	U		0.000511	0.00121	1	09/15/2017 15:24	WG1020800
Bromomethane	U		0.00162	0.00603	1	09/15/2017 15:24	WG1020800
n-Butylbenzene	U		0.000311	0.00121	1	09/15/2017 15:24	WG1020800
sec-Butylbenzene	U		0.000242	0.00121	1	09/15/2017 15:24	WG1020800
tert-Butylbenzene	U		0.000248	0.00121	1	09/15/2017 15:24	WG1020800
Carbon disulfide	U		0.000266	0.00121	1	09/15/2017 15:24	WG1020800
Carbon tetrachloride	U		0.000395	0.00121	1	09/15/2017 15:24	WG1020800
Chlorobenzene	U		0.000256	0.00121	1	09/15/2017 15:24	WG1020800
Chlorodibromomethane	U		0.000450	0.00121	1	09/15/2017 15:24	WG1020800
Chloroethane	U		0.00114	0.00603	1	09/15/2017 15:24	WG1020800
Chloroform	U		0.000276	0.00603	1	09/15/2017 15:24	WG1020800
Chloromethane	U		0.000452	0.00301	1	09/15/2017 15:24	WG1020800
2-Chlorotoluene	U		0.000363	0.00121	1	09/15/2017 15:24	WG1020800
4-Chlorotoluene	U		0.000289	0.00121	1	09/15/2017 15:24	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00127	0.00603	1	09/15/2017 15:24	WG1020800
1,2-Dibromoethane	U	<u>J4</u>	0.000413	0.00121	1	09/15/2017 15:24	WG1020800
Dibromomethane	U		0.000461	0.00121	1	09/15/2017 15:24	WG1020800
1,2-Dichlorobenzene	U		0.000368	0.00121	1	09/15/2017 15:24	WG1020800
1,3-Dichlorobenzene	U		0.000288	0.00121	1	09/15/2017 15:24	WG1020800
1,4-Dichlorobenzene	U		0.000272	0.00121	1	09/15/2017 15:24	WG1020800
Dichlorodifluoromethane	U		0.000860	0.00603	1	09/15/2017 15:24	WG1020800
1,1-Dichloroethane	U		0.000240	0.00121	1	09/15/2017 15:24	WG1020800
1,2-Dichloroethane	U		0.000319	0.00121	1	09/15/2017 15:24	WG1020800
1,1-Dichloroethene	U		0.000365	0.00121	1	09/15/2017 15:24	WG1020800
cis-1,2-Dichloroethene	U		0.000283	0.00121	1	09/15/2017 15:24	WG1020800
trans-1,2-Dichloroethene	U		0.000318	0.00121	1	09/15/2017 15:24	WG1020800
1,2-Dichloropropane	U		0.000432	0.00121	1	09/15/2017 15:24	WG1020800
1,1-Dichloropropene	U		0.000382	0.00121	1	09/15/2017 15:24	WG1020800
1,3-Dichloropropane	U		0.000250	0.00121	1	09/15/2017 15:24	WG1020800
cis-1,3-Dichloropropene	U		0.000316	0.00121	1	09/15/2017 15:24	WG1020800
trans-1,3-Dichloropropene	U		0.000322	0.00121	1	09/15/2017 15:24	WG1020800
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000938	0.00301	1	09/15/2017 15:24	WG1020800
2,2-Dichloropropane	U		0.000336	0.00121	1	09/15/2017 15:24	WG1020800
Di-isopropyl ether	U		0.000299	0.00121	1	09/15/2017 15:24	WG1020800
Ethylbenzene	U		0.000358	0.00121	1	09/15/2017 15:24	WG1020800
Hexachloro-1,3-butadiene	U		0.000412	0.00121	1	09/15/2017 15:24	WG1020800
2-Hexanone	U		0.00165	0.0121	1	09/15/2017 15:24	WG1020800
n-Hexane	U		0.000350	0.0121	1	09/15/2017 15:24	WG1020800
Iodomethane	U		0.00305	0.0121	1	09/15/2017 15:24	WG1020800
Isopropylbenzene	U		0.000293	0.00121	1	09/15/2017 15:24	WG1020800
p-Isopropyltoluene	U		0.000246	0.00121	1	09/15/2017 15:24	WG1020800
2-Butanone (MEK)	U		0.00564	0.0121	1	09/15/2017 15:24	WG1020800
Methylene Chloride	U		0.00121	0.00603	1	09/15/2017 15:24	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00227	0.0121	1	09/15/2017 15:24	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 10:15

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000256	0.00121	1	09/15/2017 15:24	WG1020800
Naphthalene	U		0.00121	0.00603	1	09/15/2017 15:24	WG1020800
n-Propylbenzene	U		0.000248	0.00121	1	09/15/2017 15:24	WG1020800
Styrene	U		0.000282	0.00121	1	09/15/2017 15:24	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000318	0.00121	1	09/15/2017 15:24	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000440	0.00121	1	09/15/2017 15:24	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000440	0.00121	1	09/15/2017 15:24	WG1020800
Tetrachloroethene	U		0.000333	0.00121	1	09/15/2017 15:24	WG1020800
Toluene	U		0.000523	0.00603	1	09/15/2017 15:24	WG1020800
1,2,3-Trichlorobenzene	U		0.000369	0.00121	1	09/15/2017 15:24	WG1020800
1,2,4-Trichlorobenzene	U		0.000468	0.00121	1	09/15/2017 15:24	WG1020800
1,1,1-Trichloroethane	U		0.000345	0.00121	1	09/15/2017 15:24	WG1020800
1,1,2-Trichloroethane	U	J4	0.000334	0.00121	1	09/15/2017 15:24	WG1020800
Trichloroethene	U		0.000336	0.00121	1	09/15/2017 15:24	WG1020800
Trichlorofluoromethane	U		0.000461	0.00603	1	09/15/2017 15:24	WG1020800
1,2,3-Trichloropropane	U	J4	0.000893	0.00301	1	09/15/2017 15:24	WG1020800
1,2,4-Trimethylbenzene	U		0.000254	0.00121	1	09/15/2017 15:24	WG1020800
1,2,3-Trimethylbenzene	U		0.000346	0.00121	1	09/15/2017 15:24	WG1020800
1,3,5-Trimethylbenzene	U		0.000321	0.00121	1	09/15/2017 15:24	WG1020800
Vinyl acetate	U		0.00288	0.0121	1	09/15/2017 15:24	WG1020800
Vinyl chloride	U		0.000351	0.00121	1	09/15/2017 15:24	WG1020800
Xylenes, Total	U		0.000841	0.00362	1	09/15/2017 15:24	WG1020800
(S) Toluene-d8	104			80.0-120		09/15/2017 15:24	WG1020800
(S) Dibromofluoromethane	101			74.0-131		09/15/2017 15:24	WG1020800
(S) 4-Bromofluorobenzene	106			64.0-132		09/15/2017 15:24	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	92.5		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0108	0.0541	1	09/15/2017 15:43	WG1020800
Acrylonitrile	U		0.00194	0.0108	1	09/15/2017 15:43	WG1020800
Benzene	U		0.000292	0.00108	1	09/15/2017 15:43	WG1020800
Bromobenzene	U		0.000307	0.00108	1	09/15/2017 15:43	WG1020800
Bromodichloromethane	U		0.000275	0.00108	1	09/15/2017 15:43	WG1020800
Bromochloromethane	U		0.000422	0.00541	1	09/15/2017 15:43	WG1020800
Bromoform	U		0.000459	0.00108	1	09/15/2017 15:43	WG1020800
Bromomethane	U		0.00145	0.00541	1	09/15/2017 15:43	WG1020800
n-Butylbenzene	U		0.000279	0.00108	1	09/15/2017 15:43	WG1020800
sec-Butylbenzene	U		0.000217	0.00108	1	09/15/2017 15:43	WG1020800
tert-Butylbenzene	U		0.000223	0.00108	1	09/15/2017 15:43	WG1020800
Carbon disulfide	0.000333	J	0.000239	0.00108	1	09/15/2017 15:43	WG1020800
Carbon tetrachloride	U		0.000355	0.00108	1	09/15/2017 15:43	WG1020800
Chlorobenzene	U		0.000229	0.00108	1	09/15/2017 15:43	WG1020800
Chlorodibromomethane	U		0.000403	0.00108	1	09/15/2017 15:43	WG1020800
Chloroethane	U		0.00102	0.00541	1	09/15/2017 15:43	WG1020800
Chloroform	U		0.000248	0.00541	1	09/15/2017 15:43	WG1020800
Chloromethane	U		0.000406	0.00270	1	09/15/2017 15:43	WG1020800
2-Chlorotoluene	U		0.000326	0.00108	1	09/15/2017 15:43	WG1020800
4-Chlorotoluene	U		0.000260	0.00108	1	09/15/2017 15:43	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00541	1	09/15/2017 15:43	WG1020800
1,2-Dibromoethane	U	J4	0.000371	0.00108	1	09/15/2017 15:43	WG1020800
Dibromomethane	U		0.000413	0.00108	1	09/15/2017 15:43	WG1020800
1,2-Dichlorobenzene	U		0.000330	0.00108	1	09/15/2017 15:43	WG1020800
1,3-Dichlorobenzene	U		0.000258	0.00108	1	09/15/2017 15:43	WG1020800
1,4-Dichlorobenzene	U		0.000244	0.00108	1	09/15/2017 15:43	WG1020800
Dichlorodifluoromethane	U		0.000771	0.00541	1	09/15/2017 15:43	WG1020800
1,1-Dichloroethane	U		0.000215	0.00108	1	09/15/2017 15:43	WG1020800
1,2-Dichloroethane	U		0.000287	0.00108	1	09/15/2017 15:43	WG1020800
1,1-Dichloroethene	U		0.000328	0.00108	1	09/15/2017 15:43	WG1020800
cis-1,2-Dichloroethene	U		0.000254	0.00108	1	09/15/2017 15:43	WG1020800
trans-1,2-Dichloroethene	U		0.000286	0.00108	1	09/15/2017 15:43	WG1020800
1,2-Dichloropropane	U		0.000387	0.00108	1	09/15/2017 15:43	WG1020800
1,1-Dichloropropene	U		0.000343	0.00108	1	09/15/2017 15:43	WG1020800
1,3-Dichloropropane	U		0.000224	0.00108	1	09/15/2017 15:43	WG1020800
cis-1,3-Dichloropropene	U		0.000283	0.00108	1	09/15/2017 15:43	WG1020800
trans-1,3-Dichloropropene	U		0.000289	0.00108	1	09/15/2017 15:43	WG1020800
trans-1,4-Dichloro-2-butene	U	JO	0.000841	0.00270	1	09/15/2017 15:43	WG1020800
2,2-Dichloropropane	U		0.000302	0.00108	1	09/15/2017 15:43	WG1020800
Di-isopropyl ether	U		0.000268	0.00108	1	09/15/2017 15:43	WG1020800
Ethylbenzene	U		0.000321	0.00108	1	09/15/2017 15:43	WG1020800
Hexachloro-1,3-butadiene	U		0.000370	0.00108	1	09/15/2017 15:43	WG1020800
2-Hexanone	U		0.00148	0.0108	1	09/15/2017 15:43	WG1020800
n-Hexane	0.000387	J	0.000314	0.0108	1	09/15/2017 15:43	WG1020800
Iodomethane	U		0.00274	0.0108	1	09/15/2017 15:43	WG1020800
Isopropylbenzene	U		0.000263	0.00108	1	09/15/2017 15:43	WG1020800
p-Isopropyltoluene	U		0.000221	0.00108	1	09/15/2017 15:43	WG1020800
2-Butanone (MEK)	U		0.00506	0.0108	1	09/15/2017 15:43	WG1020800
Methylene Chloride	U		0.00108	0.00541	1	09/15/2017 15:43	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00203	0.0108	1	09/15/2017 15:43	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 10:30

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000229	0.00108	1	09/15/2017 15:43	WG1020800
Naphthalene	U		0.00108	0.00541	1	09/15/2017 15:43	WG1020800
n-Propylbenzene	U		0.000223	0.00108	1	09/15/2017 15:43	WG1020800
Styrene	U		0.000253	0.00108	1	09/15/2017 15:43	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000286	0.00108	1	09/15/2017 15:43	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000395	0.00108	1	09/15/2017 15:43	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000395	0.00108	1	09/15/2017 15:43	WG1020800
Tetrachloroethene	U		0.000299	0.00108	1	09/15/2017 15:43	WG1020800
Toluene	U		0.000469	0.00541	1	09/15/2017 15:43	WG1020800
1,2,3-Trichlorobenzene	U		0.000331	0.00108	1	09/15/2017 15:43	WG1020800
1,2,4-Trichlorobenzene	U		0.000420	0.00108	1	09/15/2017 15:43	WG1020800
1,1,1-Trichloroethane	U		0.000309	0.00108	1	09/15/2017 15:43	WG1020800
1,1,2-Trichloroethane	U	J4	0.000300	0.00108	1	09/15/2017 15:43	WG1020800
Trichloroethene	U		0.000302	0.00108	1	09/15/2017 15:43	WG1020800
Trichlorofluoromethane	U		0.000413	0.00541	1	09/15/2017 15:43	WG1020800
1,2,3-Trichloropropane	U	J4	0.000801	0.00270	1	09/15/2017 15:43	WG1020800
1,2,4-Trimethylbenzene	U		0.000228	0.00108	1	09/15/2017 15:43	WG1020800
1,2,3-Trimethylbenzene	U		0.000310	0.00108	1	09/15/2017 15:43	WG1020800
1,3,5-Trimethylbenzene	U		0.000288	0.00108	1	09/15/2017 15:43	WG1020800
Vinyl acetate	U		0.00258	0.0108	1	09/15/2017 15:43	WG1020800
Vinyl chloride	U		0.000315	0.00108	1	09/15/2017 15:43	WG1020800
Xylenes, Total	U		0.000755	0.00324	1	09/15/2017 15:43	WG1020800
(S) Toluene-d8	109			80.0-120		09/15/2017 15:43	WG1020800
(S) Dibromofluoromethane	100			74.0-131		09/15/2017 15:43	WG1020800
(S) 4-Bromofluorobenzene	108			64.0-132		09/15/2017 15:43	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.2		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0112	0.0560	1	09/20/2017 15:30	WG1020800
Acrylonitrile	U	<u>JO</u>	0.00201	0.0112	1	09/20/2017 15:30	WG1020800
Benzene	U		0.000303	0.00112	1	09/20/2017 15:30	WG1020800
Bromobenzene	U		0.000318	0.00112	1	09/20/2017 15:30	WG1020800
Bromodichloromethane	U		0.000285	0.00112	1	09/20/2017 15:30	WG1020800
Bromochloromethane	U		0.000437	0.00560	1	09/20/2017 15:30	WG1020800
Bromoform	U		0.000475	0.00112	1	09/20/2017 15:30	WG1020800
Bromomethane	U		0.00150	0.00560	1	09/20/2017 15:30	WG1020800
n-Butylbenzene	U		0.000289	0.00112	1	09/20/2017 15:30	WG1020800
sec-Butylbenzene	U		0.000225	0.00112	1	09/20/2017 15:30	WG1020800
tert-Butylbenzene	U		0.000231	0.00112	1	09/20/2017 15:30	WG1020800
Carbon disulfide	0.000492	<u>J</u>	0.000248	0.00112	1	09/20/2017 15:30	WG1020800
Carbon tetrachloride	U		0.000368	0.00112	1	09/20/2017 15:30	WG1020800
Chlorobenzene	U		0.000238	0.00112	1	09/20/2017 15:30	WG1020800
Chlorodibromomethane	U		0.000418	0.00112	1	09/20/2017 15:30	WG1020800
Chloroethane	U		0.00106	0.00560	1	09/20/2017 15:30	WG1020800
Chloroform	U		0.000257	0.00560	1	09/20/2017 15:30	WG1020800
Chloromethane	U		0.000420	0.00280	1	09/20/2017 15:30	WG1020800
2-Chlorotoluene	U		0.000337	0.00112	1	09/20/2017 15:30	WG1020800
4-Chlorotoluene	U		0.000269	0.00112	1	09/20/2017 15:30	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00560	1	09/20/2017 15:30	WG1020800
1,2-Dibromoethane	U	<u>J4</u>	0.000384	0.00112	1	09/20/2017 15:30	WG1020800
Dibromomethane	U		0.000428	0.00112	1	09/20/2017 15:30	WG1020800
1,2-Dichlorobenzene	U		0.000342	0.00112	1	09/20/2017 15:30	WG1020800
1,3-Dichlorobenzene	U		0.000268	0.00112	1	09/20/2017 15:30	WG1020800
1,4-Dichlorobenzene	U		0.000253	0.00112	1	09/20/2017 15:30	WG1020800
Dichlorodifluoromethane	U		0.000799	0.00560	1	09/20/2017 15:30	WG1020800
1,1-Dichloroethane	U		0.000223	0.00112	1	09/20/2017 15:30	WG1020800
1,2-Dichloroethane	U		0.000297	0.00112	1	09/20/2017 15:30	WG1020800
1,1-Dichloroethene	U		0.000340	0.00112	1	09/20/2017 15:30	WG1020800
cis-1,2-Dichloroethene	U		0.000263	0.00112	1	09/20/2017 15:30	WG1020800
trans-1,2-Dichloroethene	U		0.000296	0.00112	1	09/20/2017 15:30	WG1020800
1,2-Dichloropropane	U		0.000401	0.00112	1	09/20/2017 15:30	WG1020800
1,1-Dichloropropene	U		0.000355	0.00112	1	09/20/2017 15:30	WG1020800
1,3-Dichloropropane	U		0.000232	0.00112	1	09/20/2017 15:30	WG1020800
cis-1,3-Dichloropropene	U		0.000294	0.00112	1	09/20/2017 15:30	WG1020800
trans-1,3-Dichloropropene	U		0.000299	0.00112	1	09/20/2017 15:30	WG1020800
trans-1,4-Dichloro-2-butene	U		0.000872	0.00280	1	09/20/2017 15:30	WG1020800
2,2-Dichloropropane	U		0.000313	0.00112	1	09/20/2017 15:30	WG1020800
Di-isopropyl ether	U		0.000278	0.00112	1	09/20/2017 15:30	WG1020800
Ethylbenzene	U		0.000333	0.00112	1	09/20/2017 15:30	WG1020800
Hexachloro-1,3-butadiene	U		0.000383	0.00112	1	09/20/2017 15:30	WG1020800
2-Hexanone	U		0.00154	0.0112	1	09/20/2017 15:30	WG1020800
n-Hexane	0.000472	<u>J</u>	0.000325	0.0112	1	09/20/2017 15:30	WG1020800
Iodomethane	U		0.00283	0.0112	1	09/20/2017 15:30	WG1020800
Isopropylbenzene	U		0.000272	0.00112	1	09/20/2017 15:30	WG1020800
p-Isopropyltoluene	U		0.000229	0.00112	1	09/20/2017 15:30	WG1020800
2-Butanone (MEK)	U		0.00524	0.0112	1	09/20/2017 15:30	WG1020800
Methylene Chloride	U		0.00112	0.00560	1	09/20/2017 15:30	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00211	0.0112	1	09/20/2017 15:30	WG1020800

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 09/13/17 11:30

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000238	0.00112	1	09/20/2017 15:30	WG1020800
Naphthalene	U		0.00112	0.00560	1	09/20/2017 15:30	WG1020800
n-Propylbenzene	U		0.000231	0.00112	1	09/20/2017 15:30	WG1020800
Styrene	U		0.000262	0.00112	1	09/20/2017 15:30	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000296	0.00112	1	09/20/2017 15:30	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000409	0.00112	1	09/20/2017 15:30	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000409	0.00112	1	09/20/2017 15:30	WG1020800
Tetrachloroethene	U		0.000309	0.00112	1	09/20/2017 15:30	WG1020800
Toluene	U		0.000486	0.00560	1	09/20/2017 15:30	WG1020800
1,2,3-Trichlorobenzene	U		0.000343	0.00112	1	09/20/2017 15:30	WG1020800
1,2,4-Trichlorobenzene	U		0.000435	0.00112	1	09/20/2017 15:30	WG1020800
1,1,1-Trichloroethane	U		0.000320	0.00112	1	09/20/2017 15:30	WG1020800
1,1,2-Trichloroethane	U	J4	0.000310	0.00112	1	09/20/2017 15:30	WG1020800
Trichloroethene	U		0.000313	0.00112	1	09/20/2017 15:30	WG1020800
Trichlorofluoromethane	U		0.000428	0.00560	1	09/20/2017 15:30	WG1020800
1,2,3-Trichloropropane	U	J4	0.000830	0.00280	1	09/20/2017 15:30	WG1020800
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	09/20/2017 15:30	WG1020800
1,2,3-Trimethylbenzene	U		0.000322	0.00112	1	09/20/2017 15:30	WG1020800
1,3,5-Trimethylbenzene	U		0.000298	0.00112	1	09/20/2017 15:30	WG1020800
Vinyl acetate	U		0.00268	0.0112	1	09/20/2017 15:30	WG1020800
Vinyl chloride	U		0.000326	0.00112	1	09/20/2017 15:30	WG1020800
Xylenes, Total	U		0.000782	0.00336	1	09/20/2017 15:30	WG1020800
(S) Toluene-d8	107			80.0-120		09/20/2017 15:30	WG1020800
(S) Dibromofluoromethane	115			74.0-131		09/20/2017 15:30	WG1020800
(S) 4-Bromofluorobenzene	112			64.0-132		09/20/2017 15:30	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0177	J	0.0110	0.0551	1	09/15/2017 16:23	WG1020800
Acrylonitrile	U		0.00197	0.0110	1	09/15/2017 16:23	WG1020800
Benzene	U		0.000297	0.00110	1	09/15/2017 16:23	WG1020800
Bromobenzene	U		0.000313	0.00110	1	09/15/2017 16:23	WG1020800
Bromodichloromethane	U		0.000280	0.00110	1	09/15/2017 16:23	WG1020800
Bromochloromethane	U		0.000429	0.00551	1	09/15/2017 16:23	WG1020800
Bromoform	U		0.000467	0.00110	1	09/15/2017 16:23	WG1020800
Bromomethane	U		0.00148	0.00551	1	09/15/2017 16:23	WG1020800
n-Butylbenzene	U		0.000284	0.00110	1	09/15/2017 16:23	WG1020800
sec-Butylbenzene	U		0.000221	0.00110	1	09/15/2017 16:23	WG1020800
tert-Butylbenzene	U		0.000227	0.00110	1	09/15/2017 16:23	WG1020800
Carbon disulfide	0.00122		0.000243	0.00110	1	09/15/2017 16:23	WG1020800
Carbon tetrachloride	U		0.000361	0.00110	1	09/15/2017 16:23	WG1020800
Chlorobenzene	U		0.000233	0.00110	1	09/15/2017 16:23	WG1020800
Chlorodibromomethane	U		0.000411	0.00110	1	09/15/2017 16:23	WG1020800
Chloroethane	U		0.00104	0.00551	1	09/15/2017 16:23	WG1020800
Chloroform	U		0.000252	0.00551	1	09/15/2017 16:23	WG1020800
Chloromethane	U		0.000413	0.00275	1	09/15/2017 16:23	WG1020800
2-Chlorotoluene	U		0.000331	0.00110	1	09/15/2017 16:23	WG1020800
4-Chlorotoluene	U		0.000264	0.00110	1	09/15/2017 16:23	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	09/15/2017 16:23	WG1020800
1,2-Dibromoethane	U	J4	0.000378	0.00110	1	09/15/2017 16:23	WG1020800
Dibromomethane	U		0.000421	0.00110	1	09/15/2017 16:23	WG1020800
1,2-Dichlorobenzene	U		0.000336	0.00110	1	09/15/2017 16:23	WG1020800
1,3-Dichlorobenzene	U		0.000263	0.00110	1	09/15/2017 16:23	WG1020800
1,4-Dichlorobenzene	U		0.000249	0.00110	1	09/15/2017 16:23	WG1020800
Dichlorodifluoromethane	U		0.000785	0.00551	1	09/15/2017 16:23	WG1020800
1,1-Dichloroethane	U		0.000219	0.00110	1	09/15/2017 16:23	WG1020800
1,2-Dichloroethane	U		0.000292	0.00110	1	09/15/2017 16:23	WG1020800
1,1-Dichloroethene	U		0.000334	0.00110	1	09/15/2017 16:23	WG1020800
cis-1,2-Dichloroethene	U		0.000259	0.00110	1	09/15/2017 16:23	WG1020800
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	09/15/2017 16:23	WG1020800
1,2-Dichloropropane	U		0.000394	0.00110	1	09/15/2017 16:23	WG1020800
1,1-Dichloropropene	U		0.000349	0.00110	1	09/15/2017 16:23	WG1020800
1,3-Dichloropropane	U		0.000228	0.00110	1	09/15/2017 16:23	WG1020800
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	09/15/2017 16:23	WG1020800
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	09/15/2017 16:23	WG1020800
trans-1,4-Dichloro-2-butene	U	JO	0.000857	0.00275	1	09/15/2017 16:23	WG1020800
2,2-Dichloropropane	U		0.000307	0.00110	1	09/15/2017 16:23	WG1020800
Di-isopropyl ether	U		0.000273	0.00110	1	09/15/2017 16:23	WG1020800
Ethylbenzene	U		0.000327	0.00110	1	09/15/2017 16:23	WG1020800
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	09/15/2017 16:23	WG1020800
2-Hexanone	U		0.00151	0.0110	1	09/15/2017 16:23	WG1020800
n-Hexane	0.00110	J	0.000319	0.0110	1	09/15/2017 16:23	WG1020800
Iodomethane	U		0.00279	0.0110	1	09/15/2017 16:23	WG1020800
Isopropylbenzene	U		0.000268	0.00110	1	09/15/2017 16:23	WG1020800
p-Isopropyltoluene	U		0.000225	0.00110	1	09/15/2017 16:23	WG1020800
2-Butanone (MEK)	U		0.00515	0.0110	1	09/15/2017 16:23	WG1020800
Methylene Chloride	U		0.00110	0.00551	1	09/15/2017 16:23	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	09/15/2017 16:23	WG1020800

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 09/13/17 11:15

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	09/15/2017 16:23	WG1020800
Naphthalene	U		0.00110	0.00551	1	09/15/2017 16:23	WG1020800
n-Propylbenzene	U		0.000227	0.00110	1	09/15/2017 16:23	WG1020800
Styrene	U		0.000258	0.00110	1	09/15/2017 16:23	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	09/15/2017 16:23	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000402	0.00110	1	09/15/2017 16:23	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000402	0.00110	1	09/15/2017 16:23	WG1020800
Tetrachloroethene	U		0.000304	0.00110	1	09/15/2017 16:23	WG1020800
Toluene	U		0.000478	0.00551	1	09/15/2017 16:23	WG1020800
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	09/15/2017 16:23	WG1020800
1,2,4-Trichlorobenzene	U		0.000427	0.00110	1	09/15/2017 16:23	WG1020800
1,1,1-Trichloroethane	U		0.000315	0.00110	1	09/15/2017 16:23	WG1020800
1,1,2-Trichloroethane	U	J4	0.000305	0.00110	1	09/15/2017 16:23	WG1020800
Trichloroethene	U		0.000307	0.00110	1	09/15/2017 16:23	WG1020800
Trichlorofluoromethane	U		0.000421	0.00551	1	09/15/2017 16:23	WG1020800
1,2,3-Trichloropropane	U	J4	0.000816	0.00275	1	09/15/2017 16:23	WG1020800
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	09/15/2017 16:23	WG1020800
1,2,3-Trimethylbenzene	U		0.000316	0.00110	1	09/15/2017 16:23	WG1020800
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	09/15/2017 16:23	WG1020800
Vinyl acetate	U		0.00263	0.0110	1	09/15/2017 16:23	WG1020800
Vinyl chloride	U		0.000320	0.00110	1	09/15/2017 16:23	WG1020800
Xylenes, Total	U		0.000769	0.00330	1	09/15/2017 16:23	WG1020800
(S) Toluene-d8	102			80.0-120		09/15/2017 16:23	WG1020800
(S) Dibromofluoromethane	104			74.0-131		09/15/2017 16:23	WG1020800
(S) 4-Bromofluorobenzene	109			64.0-132		09/15/2017 16:23	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.2		1	09/19/2017 13:04	WG1021766

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	0.0124	J	0.0120	0.0601	1	09/15/2017 16:42	WG1020800
Acrylonitrile	U		0.00215	0.0120	1	09/15/2017 16:42	WG1020800
Benzene	U		0.000325	0.00120	1	09/15/2017 16:42	WG1020800
Bromobenzene	U		0.000341	0.00120	1	09/15/2017 16:42	WG1020800
Bromodichloromethane	U		0.000305	0.00120	1	09/15/2017 16:42	WG1020800
Bromochloromethane	U		0.000469	0.00601	1	09/15/2017 16:42	WG1020800
Bromoform	U		0.000510	0.00120	1	09/15/2017 16:42	WG1020800
Bromomethane	U		0.00161	0.00601	1	09/15/2017 16:42	WG1020800
n-Butylbenzene	U		0.000310	0.00120	1	09/15/2017 16:42	WG1020800
sec-Butylbenzene	U		0.000242	0.00120	1	09/15/2017 16:42	WG1020800
tert-Butylbenzene	U		0.000248	0.00120	1	09/15/2017 16:42	WG1020800
Carbon disulfide	0.000541	J	0.000266	0.00120	1	09/15/2017 16:42	WG1020800
Carbon tetrachloride	U		0.000394	0.00120	1	09/15/2017 16:42	WG1020800
Chlorobenzene	U		0.000255	0.00120	1	09/15/2017 16:42	WG1020800
Chlorodibromomethane	U		0.000448	0.00120	1	09/15/2017 16:42	WG1020800
Chloroethane	U		0.00114	0.00601	1	09/15/2017 16:42	WG1020800
Chloroform	U		0.000275	0.00601	1	09/15/2017 16:42	WG1020800
Chloromethane	U		0.000451	0.00301	1	09/15/2017 16:42	WG1020800
2-Chlorotoluene	U		0.000362	0.00120	1	09/15/2017 16:42	WG1020800
4-Chlorotoluene	U		0.000289	0.00120	1	09/15/2017 16:42	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00601	1	09/15/2017 16:42	WG1020800
1,2-Dibromoethane	U	J4	0.000412	0.00120	1	09/15/2017 16:42	WG1020800
Dibromomethane	U		0.000459	0.00120	1	09/15/2017 16:42	WG1020800
1,2-Dichlorobenzene	U		0.000367	0.00120	1	09/15/2017 16:42	WG1020800
1,3-Dichlorobenzene	U		0.000287	0.00120	1	09/15/2017 16:42	WG1020800
1,4-Dichlorobenzene	U		0.000272	0.00120	1	09/15/2017 16:42	WG1020800
Dichlorodifluoromethane	U		0.000857	0.00601	1	09/15/2017 16:42	WG1020800
1,1-Dichloroethane	U		0.000239	0.00120	1	09/15/2017 16:42	WG1020800
1,2-Dichloroethane	U		0.000319	0.00120	1	09/15/2017 16:42	WG1020800
1,1-Dichloroethene	U		0.000364	0.00120	1	09/15/2017 16:42	WG1020800
cis-1,2-Dichloroethene	U		0.000283	0.00120	1	09/15/2017 16:42	WG1020800
trans-1,2-Dichloroethene	U		0.000317	0.00120	1	09/15/2017 16:42	WG1020800
1,2-Dichloropropane	U		0.000430	0.00120	1	09/15/2017 16:42	WG1020800
1,1-Dichloropropene	U		0.000381	0.00120	1	09/15/2017 16:42	WG1020800
1,3-Dichloropropane	U		0.000249	0.00120	1	09/15/2017 16:42	WG1020800
cis-1,3-Dichloropropene	U		0.000315	0.00120	1	09/15/2017 16:42	WG1020800
trans-1,3-Dichloropropene	U		0.000321	0.00120	1	09/15/2017 16:42	WG1020800
trans-1,4-Dichloro-2-butene	U	JO	0.000935	0.00301	1	09/15/2017 16:42	WG1020800
2,2-Dichloropropane	U		0.000335	0.00120	1	09/15/2017 16:42	WG1020800
Di-isopropyl ether	U		0.000298	0.00120	1	09/15/2017 16:42	WG1020800
Ethylbenzene	U		0.000357	0.00120	1	09/15/2017 16:42	WG1020800
Hexachloro-1,3-butadiene	U		0.000411	0.00120	1	09/15/2017 16:42	WG1020800
2-Hexanone	U		0.00165	0.0120	1	09/15/2017 16:42	WG1020800
n-Hexane	U		0.000349	0.0120	1	09/15/2017 16:42	WG1020800
Iodomethane	U		0.00304	0.0120	1	09/15/2017 16:42	WG1020800
Isopropylbenzene	U		0.000292	0.00120	1	09/15/2017 16:42	WG1020800
p-Isopropyltoluene	U		0.000245	0.00120	1	09/15/2017 16:42	WG1020800
2-Butanone (MEK)	U		0.00563	0.0120	1	09/15/2017 16:42	WG1020800
Methylene Chloride	U		0.00120	0.00601	1	09/15/2017 16:42	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00226	0.0120	1	09/15/2017 16:42	WG1020800



Collected date/time: 09/13/17 11:40

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000255	0.00120	1	09/15/2017 16:42	WG1020800
Naphthalene	U		0.00120	0.00601	1	09/15/2017 16:42	WG1020800
n-Propylbenzene	U		0.000248	0.00120	1	09/15/2017 16:42	WG1020800
Styrene	U		0.000281	0.00120	1	09/15/2017 16:42	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000317	0.00120	1	09/15/2017 16:42	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000439	0.00120	1	09/15/2017 16:42	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000439	0.00120	1	09/15/2017 16:42	WG1020800
Tetrachloroethene	U		0.000332	0.00120	1	09/15/2017 16:42	WG1020800
Toluene	U		0.000522	0.00601	1	09/15/2017 16:42	WG1020800
1,2,3-Trichlorobenzene	U		0.000368	0.00120	1	09/15/2017 16:42	WG1020800
1,2,4-Trichlorobenzene	U		0.000466	0.00120	1	09/15/2017 16:42	WG1020800
1,1,1-Trichloroethane	U		0.000344	0.00120	1	09/15/2017 16:42	WG1020800
1,1,2-Trichloroethane	U	J4	0.000333	0.00120	1	09/15/2017 16:42	WG1020800
Trichloroethene	U		0.000335	0.00120	1	09/15/2017 16:42	WG1020800
Trichlorofluoromethane	U		0.000459	0.00601	1	09/15/2017 16:42	WG1020800
1,2,3-Trichloropropane	U	J4	0.000891	0.00301	1	09/15/2017 16:42	WG1020800
1,2,4-Trimethylbenzene	U		0.000254	0.00120	1	09/15/2017 16:42	WG1020800
1,2,3-Trimethylbenzene	U		0.000345	0.00120	1	09/15/2017 16:42	WG1020800
1,3,5-Trimethylbenzene	U		0.000320	0.00120	1	09/15/2017 16:42	WG1020800
Vinyl acetate	U		0.00287	0.0120	1	09/15/2017 16:42	WG1020800
Vinyl chloride	U		0.000350	0.00120	1	09/15/2017 16:42	WG1020800
Xylenes, Total	U		0.000839	0.00361	1	09/15/2017 16:42	WG1020800
(S) Toluene-d8	102			80.0-120		09/15/2017 16:42	WG1020800
(S) Dibromofluoromethane	102			74.0-131		09/15/2017 16:42	WG1020800
(S) 4-Bromofluorobenzene	110			64.0-132		09/15/2017 16:42	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.7		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0189	J	0.0109	0.0545	1	09/15/2017 17:02	WG1020800
Acrylonitrile	U		0.00195	0.0109	1	09/15/2017 17:02	WG1020800
Benzene	U		0.000295	0.00109	1	09/15/2017 17:02	WG1020800
Bromobenzene	U		0.000310	0.00109	1	09/15/2017 17:02	WG1020800
Bromodichloromethane	U		0.000277	0.00109	1	09/15/2017 17:02	WG1020800
Bromochloromethane	U		0.000425	0.00545	1	09/15/2017 17:02	WG1020800
Bromoform	U		0.000462	0.00109	1	09/15/2017 17:02	WG1020800
Bromomethane	U		0.00146	0.00545	1	09/15/2017 17:02	WG1020800
n-Butylbenzene	U		0.000281	0.00109	1	09/15/2017 17:02	WG1020800
sec-Butylbenzene	U		0.000219	0.00109	1	09/15/2017 17:02	WG1020800
tert-Butylbenzene	U		0.000225	0.00109	1	09/15/2017 17:02	WG1020800
Carbon disulfide	0.000930	J	0.000241	0.00109	1	09/15/2017 17:02	WG1020800
Carbon tetrachloride	U		0.000358	0.00109	1	09/15/2017 17:02	WG1020800
Chlorobenzene	U		0.000231	0.00109	1	09/15/2017 17:02	WG1020800
Chlorodibromomethane	U		0.000407	0.00109	1	09/15/2017 17:02	WG1020800
Chloroethane	U		0.00103	0.00545	1	09/15/2017 17:02	WG1020800
Chloroform	U		0.000250	0.00545	1	09/15/2017 17:02	WG1020800
Chloromethane	U		0.000409	0.00273	1	09/15/2017 17:02	WG1020800
2-Chlorotoluene	U		0.000328	0.00109	1	09/15/2017 17:02	WG1020800
4-Chlorotoluene	U		0.000262	0.00109	1	09/15/2017 17:02	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00545	1	09/15/2017 17:02	WG1020800
1,2-Dibromoethane	U	J4	0.000374	0.00109	1	09/15/2017 17:02	WG1020800
Dibromomethane	U		0.000417	0.00109	1	09/15/2017 17:02	WG1020800
1,2-Dichlorobenzene	U		0.000333	0.00109	1	09/15/2017 17:02	WG1020800
1,3-Dichlorobenzene	U		0.000261	0.00109	1	09/15/2017 17:02	WG1020800
1,4-Dichlorobenzene	U		0.000247	0.00109	1	09/15/2017 17:02	WG1020800
Dichlorodifluoromethane	U		0.000778	0.00545	1	09/15/2017 17:02	WG1020800
1,1-Dichloroethane	U		0.000217	0.00109	1	09/15/2017 17:02	WG1020800
1,2-Dichloroethane	U		0.000289	0.00109	1	09/15/2017 17:02	WG1020800
1,1-Dichloroethene	U		0.000331	0.00109	1	09/15/2017 17:02	WG1020800
cis-1,2-Dichloroethene	U		0.000256	0.00109	1	09/15/2017 17:02	WG1020800
trans-1,2-Dichloroethene	U		0.000288	0.00109	1	09/15/2017 17:02	WG1020800
1,2-Dichloropropane	U		0.000390	0.00109	1	09/15/2017 17:02	WG1020800
1,1-Dichloropropene	U		0.000346	0.00109	1	09/15/2017 17:02	WG1020800
1,3-Dichloropropane	U		0.000226	0.00109	1	09/15/2017 17:02	WG1020800
cis-1,3-Dichloropropene	U		0.000286	0.00109	1	09/15/2017 17:02	WG1020800
trans-1,3-Dichloropropene	U		0.000291	0.00109	1	09/15/2017 17:02	WG1020800
trans-1,4-Dichloro-2-butene	U	JO	0.000849	0.00273	1	09/15/2017 17:02	WG1020800
2,2-Dichloropropane	U		0.000304	0.00109	1	09/15/2017 17:02	WG1020800
Di-isopropyl ether	U		0.000271	0.00109	1	09/15/2017 17:02	WG1020800
Ethylbenzene	U		0.000324	0.00109	1	09/15/2017 17:02	WG1020800
Hexachloro-1,3-butadiene	U		0.000373	0.00109	1	09/15/2017 17:02	WG1020800
2-Hexanone	U		0.00149	0.0109	1	09/15/2017 17:02	WG1020800
n-Hexane	U		0.000316	0.0109	1	09/15/2017 17:02	WG1020800
Iodomethane	U		0.00276	0.0109	1	09/15/2017 17:02	WG1020800
Isopropylbenzene	U		0.000265	0.00109	1	09/15/2017 17:02	WG1020800
p-Isopropyltoluene	U		0.000223	0.00109	1	09/15/2017 17:02	WG1020800
2-Butanone (MEK)	U		0.00510	0.0109	1	09/15/2017 17:02	WG1020800
Methylene Chloride	U		0.00109	0.00545	1	09/15/2017 17:02	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0109	1	09/15/2017 17:02	WG1020800

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 09/13/17 13:05

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000231	0.00109	1	09/15/2017 17:02	WG1020800
Naphthalene	U		0.00109	0.00545	1	09/15/2017 17:02	WG1020800
n-Propylbenzene	U		0.000225	0.00109	1	09/15/2017 17:02	WG1020800
Styrene	U		0.000255	0.00109	1	09/15/2017 17:02	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000288	0.00109	1	09/15/2017 17:02	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000398	0.00109	1	09/15/2017 17:02	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000398	0.00109	1	09/15/2017 17:02	WG1020800
Tetrachloroethene	U		0.000301	0.00109	1	09/15/2017 17:02	WG1020800
Toluene	U		0.000473	0.00545	1	09/15/2017 17:02	WG1020800
1,2,3-Trichlorobenzene	U		0.000334	0.00109	1	09/15/2017 17:02	WG1020800
1,2,4-Trichlorobenzene	U		0.000423	0.00109	1	09/15/2017 17:02	WG1020800
1,1,1-Trichloroethane	U		0.000312	0.00109	1	09/15/2017 17:02	WG1020800
1,1,2-Trichloroethane	U	J4	0.000302	0.00109	1	09/15/2017 17:02	WG1020800
Trichloroethene	U		0.000304	0.00109	1	09/15/2017 17:02	WG1020800
Trichlorofluoromethane	U		0.000417	0.00545	1	09/15/2017 17:02	WG1020800
1,2,3-Trichloropropane	U	J4	0.000808	0.00273	1	09/15/2017 17:02	WG1020800
1,2,4-Trimethylbenzene	U		0.000230	0.00109	1	09/15/2017 17:02	WG1020800
1,2,3-Trimethylbenzene	U		0.000313	0.00109	1	09/15/2017 17:02	WG1020800
1,3,5-Trimethylbenzene	U		0.000290	0.00109	1	09/15/2017 17:02	WG1020800
Vinyl acetate	U		0.00261	0.0109	1	09/15/2017 17:02	WG1020800
Vinyl chloride	U		0.000317	0.00109	1	09/15/2017 17:02	WG1020800
Xylenes, Total	U		0.000761	0.00327	1	09/15/2017 17:02	WG1020800
(S) Toluene-d8	100			80.0-120		09/15/2017 17:02	WG1020800
(S) Dibromofluoromethane	102			74.0-131		09/15/2017 17:02	WG1020800
(S) 4-Bromofluorobenzene	106			64.0-132		09/15/2017 17:02	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.4		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0124	0.0622	1	09/15/2017 17:22	WG1020800
Acrylonitrile	U		0.00223	0.0124	1	09/15/2017 17:22	WG1020800
Benzene	U		0.000336	0.00124	1	09/15/2017 17:22	WG1020800
Bromobenzene	U		0.000353	0.00124	1	09/15/2017 17:22	WG1020800
Bromodichloromethane	U		0.000316	0.00124	1	09/15/2017 17:22	WG1020800
Bromochloromethane	U		0.000485	0.00622	1	09/15/2017 17:22	WG1020800
Bromoform	U		0.000527	0.00124	1	09/15/2017 17:22	WG1020800
Bromomethane	U		0.00167	0.00622	1	09/15/2017 17:22	WG1020800
n-Butylbenzene	U		0.000321	0.00124	1	09/15/2017 17:22	WG1020800
sec-Butylbenzene	U		0.000250	0.00124	1	09/15/2017 17:22	WG1020800
tert-Butylbenzene	U		0.000256	0.00124	1	09/15/2017 17:22	WG1020800
Carbon disulfide	U		0.000275	0.00124	1	09/15/2017 17:22	WG1020800
Carbon tetrachloride	U		0.000408	0.00124	1	09/15/2017 17:22	WG1020800
Chlorobenzene	U		0.000264	0.00124	1	09/15/2017 17:22	WG1020800
Chlorodibromomethane	U		0.000464	0.00124	1	09/15/2017 17:22	WG1020800
Chloroethane	U		0.00118	0.00622	1	09/15/2017 17:22	WG1020800
Chloroform	U		0.000285	0.00622	1	09/15/2017 17:22	WG1020800
Chloromethane	U		0.000466	0.00311	1	09/15/2017 17:22	WG1020800
2-Chlorotoluene	U		0.000374	0.00124	1	09/15/2017 17:22	WG1020800
4-Chlorotoluene	U		0.000299	0.00124	1	09/15/2017 17:22	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00131	0.00622	1	09/15/2017 17:22	WG1020800
1,2-Dibromoethane	U	<u>J4</u>	0.000427	0.00124	1	09/15/2017 17:22	WG1020800
Dibromomethane	U		0.000475	0.00124	1	09/15/2017 17:22	WG1020800
1,2-Dichlorobenzene	U		0.000379	0.00124	1	09/15/2017 17:22	WG1020800
1,3-Dichlorobenzene	U		0.000297	0.00124	1	09/15/2017 17:22	WG1020800
1,4-Dichlorobenzene	U		0.000281	0.00124	1	09/15/2017 17:22	WG1020800
Dichlorodifluoromethane	U		0.000887	0.00622	1	09/15/2017 17:22	WG1020800
1,1-Dichloroethane	U		0.000248	0.00124	1	09/15/2017 17:22	WG1020800
1,2-Dichloroethane	U		0.000330	0.00124	1	09/15/2017 17:22	WG1020800
1,1-Dichloroethene	U		0.000377	0.00124	1	09/15/2017 17:22	WG1020800
cis-1,2-Dichloroethene	U		0.000292	0.00124	1	09/15/2017 17:22	WG1020800
trans-1,2-Dichloroethene	U		0.000328	0.00124	1	09/15/2017 17:22	WG1020800
1,2-Dichloropropane	U		0.000445	0.00124	1	09/15/2017 17:22	WG1020800
1,1-Dichloropropene	U		0.000394	0.00124	1	09/15/2017 17:22	WG1020800
1,3-Dichloropropane	U		0.000257	0.00124	1	09/15/2017 17:22	WG1020800
cis-1,3-Dichloropropene	U		0.000326	0.00124	1	09/15/2017 17:22	WG1020800
trans-1,3-Dichloropropene	U		0.000332	0.00124	1	09/15/2017 17:22	WG1020800
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000968	0.00311	1	09/15/2017 17:22	WG1020800
2,2-Dichloropropane	U		0.000347	0.00124	1	09/15/2017 17:22	WG1020800
Di-isopropyl ether	U		0.000308	0.00124	1	09/15/2017 17:22	WG1020800
Ethylbenzene	U		0.000369	0.00124	1	09/15/2017 17:22	WG1020800
Hexachloro-1,3-butadiene	U		0.000425	0.00124	1	09/15/2017 17:22	WG1020800
2-Hexanone	U		0.00170	0.0124	1	09/15/2017 17:22	WG1020800
n-Hexane	U		0.000361	0.0124	1	09/15/2017 17:22	WG1020800
Iodomethane	U		0.00315	0.0124	1	09/15/2017 17:22	WG1020800
Isopropylbenzene	U		0.000302	0.00124	1	09/15/2017 17:22	WG1020800
p-Isopropyltoluene	U		0.000254	0.00124	1	09/15/2017 17:22	WG1020800
2-Butanone (MEK)	U		0.00582	0.0124	1	09/15/2017 17:22	WG1020800
Methylene Chloride	U		0.00124	0.00622	1	09/15/2017 17:22	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00234	0.0124	1	09/15/2017 17:22	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 12:55

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000264	0.00124	1	09/15/2017 17:22	WG1020800
Naphthalene	U		0.00124	0.00622	1	09/15/2017 17:22	WG1020800
n-Propylbenzene	U		0.000256	0.00124	1	09/15/2017 17:22	WG1020800
Styrene	U		0.000291	0.00124	1	09/15/2017 17:22	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000328	0.00124	1	09/15/2017 17:22	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000454	0.00124	1	09/15/2017 17:22	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000454	0.00124	1	09/15/2017 17:22	WG1020800
Tetrachloroethene	U		0.000343	0.00124	1	09/15/2017 17:22	WG1020800
Toluene	U		0.000540	0.00622	1	09/15/2017 17:22	WG1020800
1,2,3-Trichlorobenzene	U		0.000381	0.00124	1	09/15/2017 17:22	WG1020800
1,2,4-Trichlorobenzene	U		0.000483	0.00124	1	09/15/2017 17:22	WG1020800
1,1,1-Trichloroethane	U		0.000356	0.00124	1	09/15/2017 17:22	WG1020800
1,1,2-Trichloroethane	U	J4	0.000345	0.00124	1	09/15/2017 17:22	WG1020800
Trichloroethene	U		0.000347	0.00124	1	09/15/2017 17:22	WG1020800
Trichlorofluoromethane	U		0.000475	0.00622	1	09/15/2017 17:22	WG1020800
1,2,3-Trichloropropane	U	J4	0.000922	0.00311	1	09/15/2017 17:22	WG1020800
1,2,4-Trimethylbenzene	U		0.000262	0.00124	1	09/15/2017 17:22	WG1020800
1,2,3-Trimethylbenzene	U		0.000357	0.00124	1	09/15/2017 17:22	WG1020800
1,3,5-Trimethylbenzene	U		0.000331	0.00124	1	09/15/2017 17:22	WG1020800
Vinyl acetate	U		0.00297	0.0124	1	09/15/2017 17:22	WG1020800
Vinyl chloride	U		0.000362	0.00124	1	09/15/2017 17:22	WG1020800
Xylenes, Total	U		0.000868	0.00373	1	09/15/2017 17:22	WG1020800
(S) Toluene-d8	106			80.0-120		09/15/2017 17:22	WG1020800
(S) Dibromofluoromethane	99.4			74.0-131		09/15/2017 17:22	WG1020800
(S) 4-Bromofluorobenzene	103			64.0-132		09/15/2017 17:22	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	83.5		1	09/19/2017 13:04	WG1021766

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		0.0120	0.0598	1	09/15/2017 17:41	WG1020800
Acrylonitrile	U		0.00214	0.0120	1	09/15/2017 17:41	WG1020800
Benzene	U		0.000323	0.00120	1	09/15/2017 17:41	WG1020800
Bromobenzene	U		0.000340	0.00120	1	09/15/2017 17:41	WG1020800
Bromodichloromethane	U		0.000304	0.00120	1	09/15/2017 17:41	WG1020800
Bromochloromethane	U		0.000467	0.00598	1	09/15/2017 17:41	WG1020800
Bromoform	U		0.000507	0.00120	1	09/15/2017 17:41	WG1020800
Bromomethane	U		0.00160	0.00598	1	09/15/2017 17:41	WG1020800
n-Butylbenzene	U		0.000309	0.00120	1	09/15/2017 17:41	WG1020800
sec-Butylbenzene	U		0.000241	0.00120	1	09/15/2017 17:41	WG1020800
tert-Butylbenzene	U		0.000247	0.00120	1	09/15/2017 17:41	WG1020800
Carbon disulfide	U		0.000265	0.00120	1	09/15/2017 17:41	WG1020800
Carbon tetrachloride	U		0.000393	0.00120	1	09/15/2017 17:41	WG1020800
Chlorobenzene	U		0.000254	0.00120	1	09/15/2017 17:41	WG1020800
Chlorodibromomethane	U		0.000446	0.00120	1	09/15/2017 17:41	WG1020800
Chloroethane	U		0.00113	0.00598	1	09/15/2017 17:41	WG1020800
Chloroform	U		0.000274	0.00598	1	09/15/2017 17:41	WG1020800
Chloromethane	U		0.000449	0.00299	1	09/15/2017 17:41	WG1020800
2-Chlorotoluene	U		0.000360	0.00120	1	09/15/2017 17:41	WG1020800
4-Chlorotoluene	U		0.000287	0.00120	1	09/15/2017 17:41	WG1020800
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00598	1	09/15/2017 17:41	WG1020800
1,2-Dibromoethane	U	<u>J4</u>	0.000411	0.00120	1	09/15/2017 17:41	WG1020800
Dibromomethane	U		0.000457	0.00120	1	09/15/2017 17:41	WG1020800
1,2-Dichlorobenzene	U		0.000365	0.00120	1	09/15/2017 17:41	WG1020800
1,3-Dichlorobenzene	U		0.000286	0.00120	1	09/15/2017 17:41	WG1020800
1,4-Dichlorobenzene	U		0.000271	0.00120	1	09/15/2017 17:41	WG1020800
Dichlorodifluoromethane	U		0.000853	0.00598	1	09/15/2017 17:41	WG1020800
1,1-Dichloroethane	U		0.000238	0.00120	1	09/15/2017 17:41	WG1020800
1,2-Dichloroethane	U		0.000317	0.00120	1	09/15/2017 17:41	WG1020800
1,1-Dichloroethene	U		0.000363	0.00120	1	09/15/2017 17:41	WG1020800
cis-1,2-Dichloroethene	U		0.000281	0.00120	1	09/15/2017 17:41	WG1020800
trans-1,2-Dichloroethene	U		0.000316	0.00120	1	09/15/2017 17:41	WG1020800
1,2-Dichloropropane	U		0.000428	0.00120	1	09/15/2017 17:41	WG1020800
1,1-Dichloropropene	U		0.000379	0.00120	1	09/15/2017 17:41	WG1020800
1,3-Dichloropropane	U		0.000248	0.00120	1	09/15/2017 17:41	WG1020800
cis-1,3-Dichloropropene	U		0.000314	0.00120	1	09/15/2017 17:41	WG1020800
trans-1,3-Dichloropropene	U		0.000320	0.00120	1	09/15/2017 17:41	WG1020800
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000931	0.00299	1	09/15/2017 17:41	WG1020800
2,2-Dichloropropane	U		0.000334	0.00120	1	09/15/2017 17:41	WG1020800
Di-isopropyl ether	U		0.000297	0.00120	1	09/15/2017 17:41	WG1020800
Ethylbenzene	U		0.000355	0.00120	1	09/15/2017 17:41	WG1020800
Hexachloro-1,3-butadiene	U		0.000409	0.00120	1	09/15/2017 17:41	WG1020800
2-Hexanone	U		0.00164	0.0120	1	09/15/2017 17:41	WG1020800
n-Hexane	U		0.000347	0.0120	1	09/15/2017 17:41	WG1020800
Iodomethane	U		0.00303	0.0120	1	09/15/2017 17:41	WG1020800
Isopropylbenzene	U		0.000291	0.00120	1	09/15/2017 17:41	WG1020800
p-Isopropyltoluene	U		0.000244	0.00120	1	09/15/2017 17:41	WG1020800
2-Butanone (MEK)	U		0.00560	0.0120	1	09/15/2017 17:41	WG1020800
Methylene Chloride	U		0.00120	0.00598	1	09/15/2017 17:41	WG1020800
4-Methyl-2-pentanone (MIBK)	U		0.00225	0.0120	1	09/15/2017 17:41	WG1020800

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 10:50

L936401

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000254	0.00120	1	09/15/2017 17:41	WG1020800
Naphthalene	U		0.00120	0.00598	1	09/15/2017 17:41	WG1020800
n-Propylbenzene	U		0.000247	0.00120	1	09/15/2017 17:41	WG1020800
Styrene	U		0.000280	0.00120	1	09/15/2017 17:41	WG1020800
1,1,1,2-Tetrachloroethane	U		0.000316	0.00120	1	09/15/2017 17:41	WG1020800
1,1,2,2-Tetrachloroethane	U		0.000437	0.00120	1	09/15/2017 17:41	WG1020800
1,1,2-Trichlorotrifluoroethane	U		0.000437	0.00120	1	09/15/2017 17:41	WG1020800
Tetrachloroethene	U		0.000330	0.00120	1	09/15/2017 17:41	WG1020800
Toluene	U		0.000519	0.00598	1	09/15/2017 17:41	WG1020800
1,2,3-Trichlorobenzene	U		0.000366	0.00120	1	09/15/2017 17:41	WG1020800
1,2,4-Trichlorobenzene	U		0.000464	0.00120	1	09/15/2017 17:41	WG1020800
1,1,1-Trichloroethane	U		0.000342	0.00120	1	09/15/2017 17:41	WG1020800
1,1,2-Trichloroethane	U	J4	0.000332	0.00120	1	09/15/2017 17:41	WG1020800
Trichloroethene	U		0.000334	0.00120	1	09/15/2017 17:41	WG1020800
Trichlorofluoromethane	U		0.000457	0.00598	1	09/15/2017 17:41	WG1020800
1,2,3-Trichloropropane	U	J4	0.000887	0.00299	1	09/15/2017 17:41	WG1020800
1,2,4-Trimethylbenzene	U		0.000253	0.00120	1	09/15/2017 17:41	WG1020800
1,2,3-Trimethylbenzene	U		0.000344	0.00120	1	09/15/2017 17:41	WG1020800
1,3,5-Trimethylbenzene	U		0.000318	0.00120	1	09/15/2017 17:41	WG1020800
Vinyl acetate	U		0.00286	0.0120	1	09/15/2017 17:41	WG1020800
Vinyl chloride	U		0.000348	0.00120	1	09/15/2017 17:41	WG1020800
Xylenes, Total	U		0.000835	0.00359	1	09/15/2017 17:41	WG1020800
(S) Toluene-d8	103			80.0-120		09/15/2017 17:41	WG1020800
(S) Dibromofluoromethane	99.8			74.0-131		09/15/2017 17:41	WG1020800
(S) 4-Bromofluorobenzene	104			64.0-132		09/15/2017 17:41	WG1020800

- 1 Cp
- 2 Tc
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- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

[L936401-01.02.03.04.05.06.07.08.09](#)

Method Blank (MB)

(MB) R3250567-1 09/19/17 13:04

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Total Solids 0.00100

L936401-01 Original Sample (OS) • Duplicate (DUP)

(OS) L936401-01 09/19/17 13:04 • (DUP) R3250567-3 09/19/17 13:04

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Total Solids 86.3 87.6 1 1.43 5

Laboratory Control Sample (LCS)

(LCS) R3250567-2 09/19/17 13:04

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	%

Total Solids 50.0 50.0 100 85.0-115

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Method Blank (MB)

(MB) R3250770-3 09/15/17 11:58

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R3250770-3 09/15/17 11:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Methylene Chloride	0.00109	J	0.00100	0.00500
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
Tetrachloroethene	U		0.000276	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Toluene	U		0.000434	0.00500
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Trichloroethene	U		0.000279	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	98.6			74.0-131
(S) 4-Bromofluorobenzene	100			64.0-132

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3250770-1 09/15/17 10:39 • (LCSD) R3250770-2 09/15/17 10:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.163	0.131	130	104	11.0-160			22.0	23
Benzene	0.0250	0.0270	0.0263	108	105	71.0-124			2.47	20
Acrylonitrile	0.125	0.131	0.122	105	97.6	61.0-143			7.33	20
Bromobenzene	0.0250	0.0243	0.0246	97.3	98.2	78.0-120			0.930	20
Bromodichloromethane	0.0250	0.0269	0.0268	108	107	75.0-120			0.370	20
Bromochloromethane	0.0250	0.0299	0.0291	120	116	80.0-121			2.74	20
Bromoform	0.0250	0.0260	0.0261	104	104	65.0-133			0.220	20
Bromomethane	0.0250	0.0324	0.0314	130	126	26.0-160			3.18	20
n-Butylbenzene	0.0250	0.0282	0.0275	113	110	73.0-126			2.60	20
sec-Butylbenzene	0.0250	0.0277	0.0278	111	111	75.0-121			0.100	20
Carbon tetrachloride	0.0250	0.0273	0.0268	109	107	66.0-123			2.01	20
tert-Butylbenzene	0.0250	0.0283	0.0280	113	112	74.0-122			0.820	20
Carbon disulfide	0.0250	0.0215	0.0217	86.1	86.9	53.0-130			0.830	20
Chlorobenzene	0.0250	0.0289	0.0303	116	121	79.0-121			4.81	20
Chlorodibromomethane	0.0250	0.0285	0.0303	114	121	74.0-128			6.07	20
Chloroethane	0.0250	0.0264	0.0257	106	103	51.0-147			2.79	20
Chloroform	0.0250	0.0275	0.0263	110	105	73.0-123			4.74	20
Chloromethane	0.0250	0.0227	0.0215	91.0	85.9	51.0-138			5.69	20
2-Chlorotoluene	0.0250	0.0269	0.0267	108	107	72.0-124			0.530	20
4-Chlorotoluene	0.0250	0.0265	0.0261	106	105	78.0-120			1.48	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0264	0.0267	106	107	65.0-126			1.03	20
1,2-Dibromoethane	0.0250	0.0303	0.0313	121	125	78.0-122		J4	3.35	20
Dibromomethane	0.0250	0.0290	0.0301	116	120	79.0-120			3.79	20
1,2-Dichlorobenzene	0.0250	0.0282	0.0289	113	115	80.0-120			2.40	20
1,3-Dichlorobenzene	0.0250	0.0280	0.0285	112	114	72.0-123			1.69	20
1,4-Dichlorobenzene	0.0250	0.0276	0.0276	110	111	77.0-120			0.160	20
trans-1,4-Dichloro-2-butene	0.0250	0.0203	0.0201	81.1	80.3	68.0-126			0.990	20
Dichlorodifluoromethane	0.0250	0.0320	0.0295	128	118	49.0-155			8.21	20
1,1-Dichloroethane	0.0250	0.0250	0.0248	99.9	99.2	70.0-128			0.760	20
1,2-Dichloroethane	0.0250	0.0272	0.0262	109	105	69.0-128			3.95	20
1,1-Dichloroethene	0.0250	0.0298	0.0291	119	116	63.0-131			2.29	20
trans-1,2-Dichloroethene	0.0250	0.0283	0.0269	113	108	72.0-122			5.26	20
cis-1,2-Dichloroethene	0.0250	0.0275	0.0267	110	107	74.0-123			2.86	20
1,2-Dichloropropane	0.0250	0.0252	0.0255	101	102	75.0-126			1.13	20
1,1-Dichloropropene	0.0250	0.0268	0.0257	107	103	72.0-130			4.40	20
1,3-Dichloropropene	0.0250	0.0289	0.0295	116	118	80.0-121			1.97	20
cis-1,3-Dichloropropene	0.0250	0.0267	0.0277	107	111	80.0-125			3.83	20
trans-1,3-Dichloropropene	0.0250	0.0280	0.0291	112	116	75.0-129			3.93	20
2,2-Dichloropropane	0.0250	0.0250	0.0239	100	95.7	60.0-129			4.48	20
Ethylbenzene	0.0250	0.0281	0.0295	112	118	77.0-120			4.93	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3250770-1 09/15/17 10:39 • (LCSD) R3250770-2 09/15/17 10:59

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0250	0.0209	0.0207	83.5	82.8	62.0-133			0.880	20
Hexachloro-1,3-butadiene	0.0250	0.0276	0.0273	111	109	68.0-128			1.15	20
2-Hexanone	0.125	0.135	0.133	108	106	61.0-143			1.18	20
n-Hexane	0.0250	0.0230	0.0224	92.0	89.5	57.0-125			2.74	20
Iodomethane	0.125	0.130	0.127	104	102	67.0-132			2.20	20
Isopropylbenzene	0.0250	0.0275	0.0274	110	110	75.0-120			0.380	20
Methylene Chloride	0.0250	0.0276	0.0274	110	110	67.0-123			0.420	20
p-Isopropyltoluene	0.0250	0.0278	0.0276	111	110	74.0-125			0.670	20
2-Butanone (MEK)	0.125	0.144	0.125	115	99.7	37.0-159			14.3	20
4-Methyl-2-pentanone (MIBK)	0.125	0.125	0.128	100	102	60.0-144			1.90	20
Methyl tert-butyl ether	0.0250	0.0264	0.0256	106	102	66.0-125			3.09	20
Naphthalene	0.0250	0.0289	0.0296	116	118	64.0-125			2.24	20
n-Propylbenzene	0.0250	0.0273	0.0272	109	109	78.0-120			0.370	20
Tetrahydroethene	0.0250	0.0304	0.0308	121	123	70.0-127			1.49	20
Styrene	0.0250	0.0283	0.0270	113	108	78.0-124			4.86	20
1,1,1,2-Tetrachloroethane	0.0250	0.0289	0.0301	115	120	74.0-124			4.07	20
Toluene	0.0250	0.0288	0.0295	115	118	77.0-120			2.22	20
1,1,2,2-Tetrachloroethane	0.0250	0.0290	0.0289	116	116	73.0-120			0.450	20
1,1,1-Trichloroethane	0.0250	0.0283	0.0274	113	109	69.0-125			3.50	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0252	0.0264	101	106	64.0-135			4.96	20
1,2,3-Trichlorobenzene	0.0250	0.0265	0.0288	106	115	68.0-126			8.21	20
Trichloroethene	0.0250	0.0275	0.0287	110	115	79.0-120			4.31	20
1,2,4-Trichlorobenzene	0.0250	0.0271	0.0260	108	104	70.0-127			4.09	20
1,1,2-Trichloroethane	0.0250	0.0300	0.0310	120	124	78.0-120		J4	3.21	20
Trichlorofluoromethane	0.0250	0.0340	0.0321	136	128	59.0-136		J4	5.69	20
1,2,3-Trichloropropane	0.0250	0.0298	0.0315	119	126	73.0-124		J4	5.47	20
1,2,3-Trimethylbenzene	0.0250	0.0252	0.0253	101	101	76.0-120			0.530	20
1,2,4-Trimethylbenzene	0.0250	0.0261	0.0262	104	105	75.0-120			0.220	20
1,3,5-Trimethylbenzene	0.0250	0.0277	0.0273	111	109	75.0-120			1.32	20
Vinyl acetate	0.125	0.122	0.119	97.7	95.4	58.0-156			2.39	20
Vinyl chloride	0.0250	0.0287	0.0274	115	110	63.0-134			4.72	20
Xylenes, Total	0.0750	0.0863	0.0883	115	118	77.0-120			2.29	20
(S) Toluene-d8				105	108	80.0-120				
(S) Dibromofluoromethane				101	96.8	74.0-131				
(S) 4-Bromofluorobenzene				92.9	93.3	64.0-132				

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L936401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L936401-01 09/15/17 15:04 • (MS) R3250770-4 09/15/17 18:40 • (MSD) R3250770-5 09/15/17 19:00

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Benzene	0.0290	U	0.00468	0.00464	16.2	16.0	1	13.0-146			0.780	27
Acetone	0.145	U	0.0907	0.0989	62.6	68.3	1	10.0-160			8.63	36
Acrylonitrile	0.145	U	0.0770	0.0864	53.2	59.7	1	14.0-160			11.4	33
Bromobenzene	0.0290	U	0.0726	0.0108	43.5	37.3	1	10.0-149			15.3	33
Bromodichloromethane	0.0290	U	0.0154	0.0136	53.0	47.0	1	15.0-142			12.0	28
Bromochloromethane	0.0290	U	0.00616	0.00617	21.3	21.3	1	24.0-146	J6	J6	0.0800	27
Bromoform	0.0290	U	0.0151	0.0123	52.2	42.4	1	10.0-147			20.7	31
Bromomethane	0.0290	U	ND	ND	0.000	0.000	1	10.0-160	J6	J6	0.000	32
Carbon tetrachloride	0.0290	U	0.00605	0.00627	20.9	21.7	1	13.0-140			3.66	30
n-Butylbenzene	0.0290	U	0.0167	0.0136	57.5	47.1	1	10.0-154			19.9	37
sec-Butylbenzene	0.0290	U	0.0183	0.0146	63.3	50.5	1	10.0-151			22.6	36
tert-Butylbenzene	0.0290	U	0.0189	0.0161	65.2	55.5	1	10.0-152			16.0	35
Carbon disulfide	0.0290	0.000476	0.000439	0.000535	0.000	0.203	1	10.0-141	J6	J6	19.8	30
Chlorobenzene	0.0290	U	0.0108	0.0102	37.2	35.1	1	10.0-149			5.95	31
Chloroform	0.0290	U	0.0119	0.0123	41.1	42.3	1	18.0-148			2.78	28
Chlorodibromomethane	0.0290	U	0.0164	0.0147	56.5	50.7	1	12.0-147			10.9	29
Chloroethane	0.0290	U	ND	ND	0.000	0.000	1	10.0-159	J6	J6	0.000	33
Chloromethane	0.0290	U	ND	ND	0.000	0.000	1	10.0-146	J6	J6	0.000	29
2-Chlorotoluene	0.0290	U	0.0149	0.0128	51.3	44.2	1	10.0-151			14.9	35
4-Chlorotoluene	0.0290	U	0.0134	0.0117	46.3	40.5	1	10.0-150			13.3	35
1,2-Dibromo-3-Chloropropane	0.0290	U	0.0201	0.0190	69.5	65.7	1	10.0-149			5.55	34
1,2-Dibromoethane	0.0290	U	0.0118	0.0113	40.6	39.0	1	14.0-145			4.08	28
Dibromomethane	0.0290	U	0.0102	0.0107	35.2	36.8	1	18.0-144			4.50	27
1,2-Dichlorobenzene	0.0290	U	0.0148	0.0118	51.2	40.9	1	10.0-153			22.3	34
1,3-Dichlorobenzene	0.0290	U	0.0135	0.0117	46.4	40.5	1	10.0-150			13.7	35
1,4-Dichlorobenzene	0.0290	U	0.0131	0.0105	45.3	36.4	1	10.0-148			21.8	34
trans-1,4-Dichloro-2-butene	0.0290	U	0.0120	0.0105	41.6	36.2	1	10.0-160			13.9	40
Dichlorodifluoromethane	0.0290	U	ND	0.00133	0.000	4.60	1	10.0-160	J6	J3 J6	200	30
1,1-Dichloroethane	0.0290	U	0.00720	0.00750	24.9	25.9	1	19.0-148			4.10	28
trans-1,2-Dichloroethane	0.0290	U	0.00124	0.00119	4.27	4.11	1	11.0-142	J6	J6	3.84	29
1,2-Dichloroethane	0.0290	U	0.00852	0.00872	29.4	30.1	1	17.0-147			2.38	27
1,1-Dichloroethene	0.0290	U	0.00210	0.00218	7.25	7.51	1	10.0-150	J6	J6	3.53	31
cis-1,2-Dichloroethene	0.0290	U	0.00622	0.00646	21.5	22.3	1	16.0-145			3.83	28
1,2-Dichloropropane	0.0290	U	0.0109	0.0111	37.5	38.3	1	17.0-148			2.03	28
1,1-Dichloropropene	0.0290	U	0.00265	0.00245	9.15	8.45	1	10.0-150	J6	J6	7.95	30
1,3-Dichloropropane	0.0290	U	0.0132	0.0140	45.5	48.4	1	16.0-148			5.97	27
cis-1,3-Dichloropropene	0.0290	U	0.00844	0.00824	29.1	28.4	1	13.0-150			2.37	28
Ethylbenzene	0.0290	U	0.0101	0.00908	34.8	31.3	1	10.0-147			10.6	31
trans-1,3-Dichloropropene	0.0290	U	0.0103	0.00949	35.4	32.8	1	10.0-152			7.76	29

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc- WA

PROJECT:

1413.001.02.602

SDG:

L936401

DATE/TIME:

09/21/17 11:54

PAGE:

29 of 33

Volatile Organic Compounds (GC/MS) by Method 8260C

[L936401-01.02.03.04.05.06.07.08.09](#)

L936401-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L936401-01 09/15/17 15:04 • (MS) R3250770-4 09/15/17 18:40 • (MSD) R3250770-5 09/15/17 19:00

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
2,2-Dichloropropane	0.0290	U	0.00999	0.0100	34.5	34.5	1	16.0-143			0.190	30
Di-isopropyl ether	0.0290	U	0.0102	0.0102	35.2	35.3	1	16.0-149			0.360	28
Hexachloro-1,3-butadiene	0.0290	U	0.0196	0.0144	67.5	49.8	1	10.0-154			30.1	40
2-Hexanone	0.145	U	0.105	0.112	72.5	77.3	1	12.0-158			6.36	30
n-Hexane	0.0290	0.000629	0.00166	0.000927	3.56	1.03	1	10.0-140	J6	J3 J6	56.6	34
Iodomethane	0.145	U	0.00500	0.00501	3.45	3.46	1	10.0-157	J6	J6	0.300	34
Methylene Chloride	0.0290	U	0.00435	0.00422	15.0	14.6	1	16.0-139	J6	J6	2.89	29
Isopropylbenzene	0.0290	U	0.0151	0.0132	52.1	45.6	1	10.0-147			13.3	33
p-Isopropyltoluene	0.0290	U	0.0165	0.0140	57.1	48.3	1	10.0-156			16.7	37
2-Butanone (MEK)	0.145	U	0.0929	0.102	64.2	70.4	1	10.0-160			9.26	33
4-Methyl-2-pentanone (MIBK)	0.145	U	0.106	0.111	73.5	76.7	1	12.0-160			4.35	32
Methyl tert-butyl ether	0.0290	U	0.0143	0.0143	49.2	49.2	1	21.0-145			0.000	29
Naphthalene	0.0290	U	0.0113	0.00888	39.1	30.7	1	10.0-153			24.2	36
Tetrachloroethene	0.0290	U	0.00551	0.00473	19.0	16.3	1	10.0-144			15.2	32
n-Propylbenzene	0.0290	U	0.0146	0.0123	50.4	42.6	1	10.0-151			16.9	34
Toluene	0.0290	U	0.00686	0.00651	23.7	22.5	1	10.0-144			5.19	28
Styrene	0.0290	U	0.0119	0.00981	41.2	33.9	1	10.0-155			19.6	34
1,1,1,2-Tetrachloroethane	0.0290	U	0.0174	0.0174	60.0	59.9	1	10.0-147			0.210	30
1,1,2,2-Tetrachloroethane	0.0290	U	0.0265	0.0252	91.6	87.0	1	10.0-155			5.09	31
1,1,1-Trichloroethane	0.0290	U	0.00909	0.00904	31.4	31.2	1	18.0-145			0.640	29
Trichloroethene	0.0290	U	0.00543	0.00464	18.8	16.0	1	11.0-148			15.8	29
1,1,2-Trichlorotrifluoroethane	0.0290	U	0.00617	0.00705	21.3	24.3	1	10.0-153			13.3	33
1,2,3-Trichlorobenzene	0.0290	U	0.0108	0.00819	37.1	28.3	1	10.0-153			27.2	40
1,2,4-Trichlorobenzene	0.0290	U	0.0105	0.00798	36.4	27.5	1	10.0-156			27.6	40
1,1,2-Trichloroethane	0.0290	U	0.0190	0.0193	65.5	66.5	1	12.0-151			1.49	28
Trichlorofluoromethane	0.0290	U	0.00360	0.00387	12.4	13.4	1	10.0-157			7.30	34
1,2,3-Trichloropropene	0.0290	U	0.0269	0.0250	92.8	86.2	1	10.0-154			7.41	32
1,2,3-Trimethylbenzene	0.0290	U	0.0154	0.0131	53.0	45.2	1	10.0-150			16.0	33
1,2,4-Trimethylbenzene	0.0290	U	0.0142	0.0123	49.1	42.3	1	10.0-151			14.9	34
1,3,5-Trimethylbenzene	0.0290	U	0.0148	0.0124	51.3	42.8	1	10.0-150			17.9	33
Vinyl acetate	0.145	U	0.0252	0.0237	17.4	16.4	1	10.0-160			6.16	40
Vinyl chloride	0.0290	U	0.000412	0.000389	1.42	1.34	1	10.0-150	J6	J6	5.68	29
Xylenes, Total	0.0869	U	0.0313	0.0290	36.0	33.4	1	10.0-150			7.41	31
(S) Toluene-d8					97.4	105		80.0-120				
(S) Dibromofluoromethane					96.8	99.7		74.0-131				
(S) 4-Bromofluorobenzene					101	100		64.0-132				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

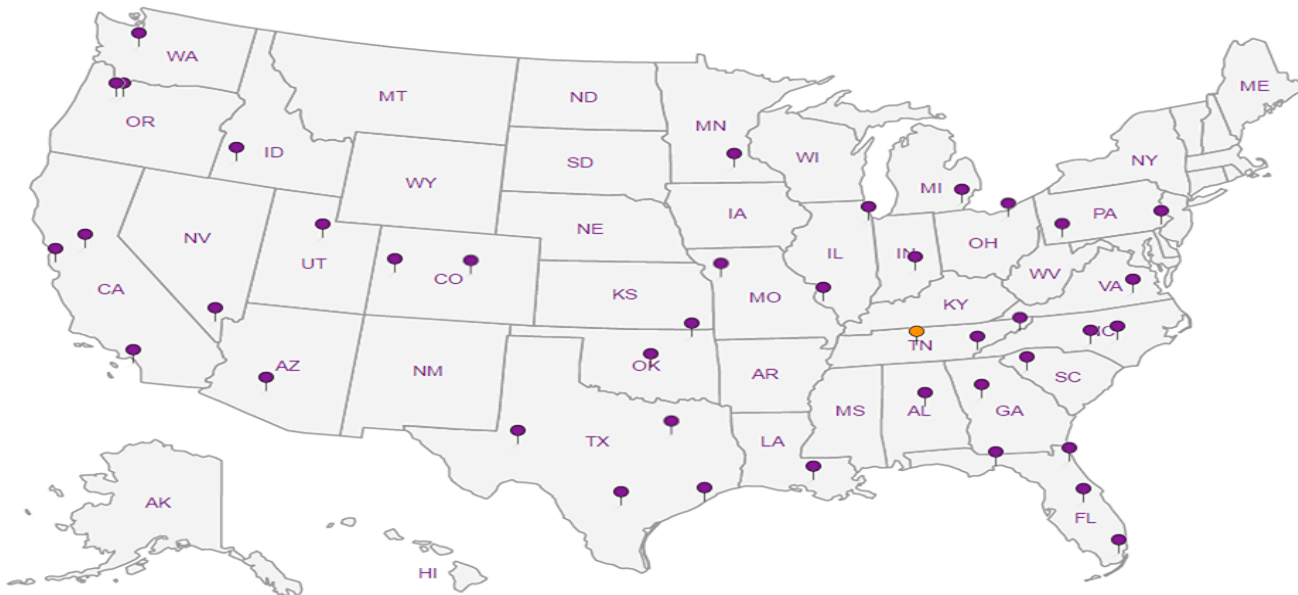
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

PES Environmental, Inc. -WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Report to:
Bill Haldeman

Email To:
bhaldeman@pesenv.com

Project:
American Linen Project

City/State Collected:
Seattle, WA

Phone:
206-529-3980

Client Project #:
1413.001.02.602

Lab Project #:
PESENVSWA-ALP

Fax:
206-529-3985

Collected by (print):
Kirsten S. Overstreet

Site/Facility ID #:
1413.001.02.602

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Fad Only)
 Two Day 10 Day (Fad Only)
 Three Day

Quote #

Immediately Packed on Ice N Y X

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cnts

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts
B-910-90	GRAB	SS	90	9/13/17	0930	5
B-215-85			85		1015	45
MW-138-65			65		1030	4
B-909-115			115		1130	5
MW-138-75			75		1115	5
MW-138-85			85		1140	5
MW-138-95			95		1255 1305	5
MW-138-105			105		1255	5
B-215-95	Grab	SS	95	9/13/17	1050	5

Remarks:

Matrix: SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Wastewater
 DW - Drinking Water
 OT - Other

Returned via: UPS FedEx Courier

Tracking # **7474 0927 0935**
 Received by: (Signature)
 Trip Blank Received: Yes/No Yes No
 HCl/MeOH HCl MeOH
 Flow: _____ Other: _____
 pH: _____ Temp: _____

Sample Receipt Checklist
 COC Seal Present/Intact: NP N
 COC Signed/Accurate: N N
 Bottles arrive intact: N N
 Correct bottles used: N N
 Sufficient volume sent: N N
 If Applicable
 VOA Zero Headspace: Y N
 Preservation Correct/Checked: Y N

Relinquished by: (Signature)
[Signature]

Date: **9/13/17**

Time: **1500**

Received by: (Signature)
[Signature]

Date: **9/14/17**

Time: **0845**

Temp: **13** °C

Bottles Received: **44**

Hold: _____

Condition: **NCF / 100**

Relinquished by: (Signature)
[Signature]

Date: _____

Time: _____

Received by: (Signature)
[Signature]

Date: **9/14/17**

Time: **0845**

Temp: **13** °C

Bottles Received: **44**

Hold: _____

Condition: **NCF / 100**

Analysis / Container / Preservative

NWTPHGX 2ozClr-NoPres	
NWTPHGX 40mlAmb HCl	
TS 4ozClr-NoPres / 2x 2ozClr-NoPres	
V8260C 40ml/NaHSO4/Syr/MeOH	
V8260C 40mlAmb-HCl	

Chain of Custody Page 1 of 1



YOUR LAB OF CHOICE
 12005 Lebonon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



L# **1936401**
 A203

Table 1

Account: **PESENVSWA**
 Template: **T126586**
 Prelogin: **P613274**
 TSR:
 PB:
 Shipped Var:
 Remarks: _____
 Sample # (lab only): _____

September 25, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L937125
Samples Received: 09/15/2017
Project Number: 1413.001.02.602
Description: American Linen Project
Site: 1413.001.02.602
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-139-31 L937125-02	8	⁷Gl
MW-139-41 L937125-03	10	⁸Al
MW-139-51 L937125-04	12	⁹Sc
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MW-139-70 L937125-06	16	
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MW-139-20 L937125-01 Solid

Collected by Shannon McKernan
 Collected date/time 09/13/17 15:10
 Received date/time 09/15/17 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022370	1	09/20/17 14:30	09/20/17 14:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/13/17 15:10	09/24/17 17:49	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	30.75	09/13/17 15:10	09/25/17 13:33	BMB

2 Tc

3 Ss

MW-139-31 L937125-02 Solid

Collected by Shannon McKernan
 Collected date/time 09/13/17 16:15
 Received date/time 09/15/17 08:45

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022370	1	09/20/17 14:30	09/20/17 14:56	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/13/17 16:15	09/19/17 23:50	JHH

5 Sr

6 Qc

MW-139-41 L937125-03 Solid

Collected by Shannon McKernan
 Collected date/time 09/13/17 16:40
 Received date/time 09/15/17 08:45

7 Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022371	1	09/20/17 14:12	09/20/17 14:29	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/13/17 16:40	09/20/17 00:08	JHH

8 Al

9 Sc

MW-139-51 L937125-04 Solid

Collected by Shannon McKernan
 Collected date/time 09/13/17 17:00
 Received date/time 09/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022371	1	09/20/17 14:12	09/20/17 14:29	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/13/17 17:00	09/20/17 00:25	JHH

MW-139-60 L937125-05 Solid

Collected by Shannon McKernan
 Collected date/time 09/13/17 17:05
 Received date/time 09/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022371	1	09/20/17 14:12	09/20/17 14:29	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/13/17 17:05	09/20/17 00:43	JHH

MW-139-70 L937125-06 Solid

Collected by Shannon McKernan
 Collected date/time 09/13/17 18:25
 Received date/time 09/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022371	1	09/20/17 14:12	09/20/17 14:29	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/13/17 18:25	09/20/17 01:00	JHH

MW-139-80 L937125-07 Solid

Collected by Shannon McKernan
 Collected date/time 09/13/17 18:40
 Received date/time 09/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022371	1	09/20/17 14:12	09/20/17 14:29	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/13/17 18:40	09/24/17 18:09	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	25	09/13/17 18:40	09/25/17 14:03	BMB



MW-138-115 L937125-08 Solid

Collected by Shannon McKernan
 Collected date/time 09/14/17 10:55
 Received date/time 09/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1022371	1	09/20/17 14:12	09/20/17 14:29	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1022131	1	09/14/17 10:55	09/20/17 01:35	JHH

¹ Cp

² Tc

³ Ss

MW-138-115-W L937125-09 GW

Collected by Shannon McKernan
 Collected date/time 09/14/17 12:00
 Received date/time 09/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1021889	1	09/19/17 18:06	09/19/17 18:06	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1021889	1	09/23/17 16:42	09/23/17 16:42	DWR

⁴ Cn

⁵ Sr

⁶ Qc

TRIP BLANK-091417 L937125-10 GW

Collected by Shannon McKernan
 Collected date/time 09/13/17 00:00
 Received date/time 09/15/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1021889	1	09/19/17 12:20	09/19/17 12:20	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1021889	1	09/23/17 17:21	09/23/17 17:21	DWR

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.4		1	09/20/2017 14:56	WG1022370

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0116	0.0578	1	09/24/2017 17:49	WG1022131
Acrylonitrile	U	<u>JO</u>	0.00207	0.0116	1	09/24/2017 17:49	WG1022131
Benzene	U		0.000312	0.00116	1	09/24/2017 17:49	WG1022131
Bromobenzene	U		0.000329	0.00116	1	09/24/2017 17:49	WG1022131
Bromodichloromethane	U		0.000294	0.00116	1	09/24/2017 17:49	WG1022131
Bromochloromethane	U		0.000451	0.00578	1	09/24/2017 17:49	WG1022131
Bromoform	U		0.000490	0.00116	1	09/24/2017 17:49	WG1022131
Bromomethane	U		0.00155	0.00578	1	09/24/2017 17:49	WG1022131
n-Butylbenzene	U		0.000298	0.00116	1	09/24/2017 17:49	WG1022131
sec-Butylbenzene	U		0.000233	0.00116	1	09/24/2017 17:49	WG1022131
tert-Butylbenzene	U		0.000238	0.00116	1	09/24/2017 17:49	WG1022131
Carbon disulfide	0.000485	<u>J</u>	0.000256	0.00116	1	09/24/2017 17:49	WG1022131
Carbon tetrachloride	U		0.000379	0.00116	1	09/24/2017 17:49	WG1022131
Chlorobenzene	U		0.000245	0.00116	1	09/24/2017 17:49	WG1022131
Chlorodibromomethane	U		0.000431	0.00116	1	09/24/2017 17:49	WG1022131
Chloroethane	U		0.00109	0.00578	1	09/24/2017 17:49	WG1022131
Chloroform	U		0.000265	0.00578	1	09/24/2017 17:49	WG1022131
Chloromethane	U	<u>JO</u>	0.000434	0.00289	1	09/24/2017 17:49	WG1022131
2-Chlorotoluene	U		0.000348	0.00116	1	09/24/2017 17:49	WG1022131
4-Chlorotoluene	U		0.000278	0.00116	1	09/24/2017 17:49	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00578	1	09/24/2017 17:49	WG1022131
1,2-Dibromoethane	U	<u>JO</u>	0.000397	0.00116	1	09/24/2017 17:49	WG1022131
Dibromomethane	U		0.000442	0.00116	1	09/24/2017 17:49	WG1022131
1,2-Dichlorobenzene	U		0.000353	0.00116	1	09/24/2017 17:49	WG1022131
1,3-Dichlorobenzene	U		0.000276	0.00116	1	09/24/2017 17:49	WG1022131
1,4-Dichlorobenzene	U		0.000261	0.00116	1	09/24/2017 17:49	WG1022131
Dichlorodifluoromethane	U		0.000825	0.00578	1	09/24/2017 17:49	WG1022131
1,1-Dichloroethane	U		0.000230	0.00116	1	09/24/2017 17:49	WG1022131
1,2-Dichloroethane	U		0.000307	0.00116	1	09/24/2017 17:49	WG1022131
1,1-Dichloroethene	U		0.000351	0.00116	1	09/24/2017 17:49	WG1022131
cis-1,2-Dichloroethene	0.000500	<u>J</u>	0.000272	0.00116	1	09/24/2017 17:49	WG1022131
trans-1,2-Dichloroethene	U		0.000305	0.00116	1	09/24/2017 17:49	WG1022131
1,2-Dichloropropane	U		0.000414	0.00116	1	09/24/2017 17:49	WG1022131
1,1-Dichloropropene	U		0.000367	0.00116	1	09/24/2017 17:49	WG1022131
1,3-Dichloropropane	U		0.000239	0.00116	1	09/24/2017 17:49	WG1022131
cis-1,3-Dichloropropene	U		0.000303	0.00116	1	09/24/2017 17:49	WG1022131
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	09/24/2017 17:49	WG1022131
trans-1,4-Dichloro-2-butene	U		0.0276	0.0889	30.75	09/25/2017 13:33	WG1022131
2,2-Dichloropropane	U		0.000323	0.00116	1	09/24/2017 17:49	WG1022131
Di-isopropyl ether	U	<u>JO</u>	0.000287	0.00116	1	09/24/2017 17:49	WG1022131
Ethylbenzene	U		0.000344	0.00116	1	09/24/2017 17:49	WG1022131
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	09/24/2017 17:49	WG1022131
2-Hexanone	U		0.00158	0.0116	1	09/24/2017 17:49	WG1022131
n-Hexane	U		0.000335	0.0116	1	09/24/2017 17:49	WG1022131
Iodomethane	U		0.00293	0.0116	1	09/24/2017 17:49	WG1022131
Isopropylbenzene	U		0.000281	0.00116	1	09/24/2017 17:49	WG1022131
p-Isopropyltoluene	U		0.000236	0.00116	1	09/24/2017 17:49	WG1022131
2-Butanone (MEK)	U		0.00541	0.0116	1	09/24/2017 17:49	WG1022131
Methylene Chloride	U		0.00116	0.00578	1	09/24/2017 17:49	WG1022131
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.00217	0.0116	1	09/24/2017 17:49	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 15:10

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00116	1	09/24/2017 17:49	WG1022131
Naphthalene	U		0.00116	0.00578	1	09/24/2017 17:49	WG1022131
n-Propylbenzene	U		0.000238	0.00116	1	09/24/2017 17:49	WG1022131
Styrene	U		0.000271	0.00116	1	09/24/2017 17:49	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000305	0.00116	1	09/24/2017 17:49	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000422	0.00116	1	09/24/2017 17:49	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000422	0.00116	1	09/24/2017 17:49	WG1022131
Tetrachloroethene	0.0138	J	0.00982	0.0356	30.75	09/25/2017 13:33	WG1022131
Toluene	U		0.000502	0.00578	1	09/24/2017 17:49	WG1022131
1,2,3-Trichlorobenzene	U		0.000354	0.00116	1	09/24/2017 17:49	WG1022131
1,2,4-Trichlorobenzene	U		0.000449	0.00116	1	09/24/2017 17:49	WG1022131
1,1,1-Trichloroethane	U		0.000331	0.00116	1	09/24/2017 17:49	WG1022131
1,1,2-Trichloroethane	U		0.000320	0.00116	1	09/24/2017 17:49	WG1022131
Trichloroethene	U		0.000323	0.00116	1	09/24/2017 17:49	WG1022131
Trichlorofluoromethane	U		0.000442	0.00578	1	09/24/2017 17:49	WG1022131
1,2,3-Trichloropropane	U		0.000857	0.00289	1	09/24/2017 17:49	WG1022131
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	09/24/2017 17:49	WG1022131
1,2,3-Trimethylbenzene	U		0.000332	0.00116	1	09/24/2017 17:49	WG1022131
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	09/24/2017 17:49	WG1022131
Vinyl acetate	U		0.00276	0.0116	1	09/24/2017 17:49	WG1022131
Vinyl chloride	0.00397		0.000337	0.00116	1	09/24/2017 17:49	WG1022131
Xylenes, Total	U		0.000807	0.00347	1	09/24/2017 17:49	WG1022131
(S) Toluene-d8	95.1			80.0-120		09/25/2017 13:33	WG1022131
(S) Toluene-d8	99.8			80.0-120		09/24/2017 17:49	WG1022131
(S) Dibromofluoromethane	105			74.0-131		09/24/2017 17:49	WG1022131
(S) Dibromofluoromethane	101			74.0-131		09/25/2017 13:33	WG1022131
(S) 4-Bromofluorobenzene	103			64.0-132		09/25/2017 13:33	WG1022131
(S) 4-Bromofluorobenzene	104			64.0-132		09/24/2017 17:49	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L937125-01 WG1022131: Elevated RL. Bisulfate vials overweight, reported from MEOH vial.



Collected date/time: 09/13/17 16:15

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.5		1	09/20/2017 14:56	WG1022370

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0107	0.0535	1	09/19/2017 23:50	WG1022131
Acrylonitrile	U		0.00192	0.0107	1	09/19/2017 23:50	WG1022131
Benzene	U		0.000289	0.00107	1	09/19/2017 23:50	WG1022131
Bromobenzene	U		0.000304	0.00107	1	09/19/2017 23:50	WG1022131
Bromodichloromethane	U		0.000272	0.00107	1	09/19/2017 23:50	WG1022131
Bromochloromethane	U		0.000417	0.00535	1	09/19/2017 23:50	WG1022131
Bromoform	U	<u>JO</u>	0.000454	0.00107	1	09/19/2017 23:50	WG1022131
Bromomethane	U		0.00143	0.00535	1	09/19/2017 23:50	WG1022131
n-Butylbenzene	U		0.000276	0.00107	1	09/19/2017 23:50	WG1022131
sec-Butylbenzene	U		0.000215	0.00107	1	09/19/2017 23:50	WG1022131
tert-Butylbenzene	U		0.000220	0.00107	1	09/19/2017 23:50	WG1022131
Carbon disulfide	0.000694	<u>J</u>	0.000236	0.00107	1	09/19/2017 23:50	WG1022131
Carbon tetrachloride	U		0.000351	0.00107	1	09/19/2017 23:50	WG1022131
Chlorobenzene	U		0.000227	0.00107	1	09/19/2017 23:50	WG1022131
Chlorodibromomethane	U		0.000399	0.00107	1	09/19/2017 23:50	WG1022131
Chloroethane	U		0.00101	0.00535	1	09/19/2017 23:50	WG1022131
Chloroform	U		0.000245	0.00535	1	09/19/2017 23:50	WG1022131
Chloromethane	U		0.000401	0.00267	1	09/19/2017 23:50	WG1022131
2-Chlorotoluene	U		0.000322	0.00107	1	09/19/2017 23:50	WG1022131
4-Chlorotoluene	U		0.000257	0.00107	1	09/19/2017 23:50	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00535	1	09/19/2017 23:50	WG1022131
1,2-Dibromoethane	U		0.000367	0.00107	1	09/19/2017 23:50	WG1022131
Dibromomethane	U		0.000409	0.00107	1	09/19/2017 23:50	WG1022131
1,2-Dichlorobenzene	U		0.000326	0.00107	1	09/19/2017 23:50	WG1022131
1,3-Dichlorobenzene	U		0.000256	0.00107	1	09/19/2017 23:50	WG1022131
1,4-Dichlorobenzene	U		0.000242	0.00107	1	09/19/2017 23:50	WG1022131
Dichlorodifluoromethane	U		0.000763	0.00535	1	09/19/2017 23:50	WG1022131
1,1-Dichloroethane	U		0.000213	0.00107	1	09/19/2017 23:50	WG1022131
1,2-Dichloroethane	U		0.000284	0.00107	1	09/19/2017 23:50	WG1022131
1,1-Dichloroethene	U		0.000324	0.00107	1	09/19/2017 23:50	WG1022131
cis-1,2-Dichloroethene	0.00814		0.000251	0.00107	1	09/19/2017 23:50	WG1022131
trans-1,2-Dichloroethene	U		0.000282	0.00107	1	09/19/2017 23:50	WG1022131
1,2-Dichloropropane	U		0.000383	0.00107	1	09/19/2017 23:50	WG1022131
1,1-Dichloropropene	U		0.000339	0.00107	1	09/19/2017 23:50	WG1022131
1,3-Dichloropropane	U		0.000221	0.00107	1	09/19/2017 23:50	WG1022131
cis-1,3-Dichloropropene	U		0.000280	0.00107	1	09/19/2017 23:50	WG1022131
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	09/19/2017 23:50	WG1022131
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000832	0.00267	1	09/19/2017 23:50	WG1022131
2,2-Dichloropropane	U		0.000298	0.00107	1	09/19/2017 23:50	WG1022131
Di-isopropyl ether	U		0.000265	0.00107	1	09/19/2017 23:50	WG1022131
Ethylbenzene	U		0.000318	0.00107	1	09/19/2017 23:50	WG1022131
Hexachloro-1,3-butadiene	U	<u>JO</u>	0.000366	0.00107	1	09/19/2017 23:50	WG1022131
2-Hexanone	U		0.00147	0.0107	1	09/19/2017 23:50	WG1022131
n-Hexane	U		0.000310	0.0107	1	09/19/2017 23:50	WG1022131
Iodomethane	U		0.00271	0.0107	1	09/19/2017 23:50	WG1022131
Isopropylbenzene	U		0.000260	0.00107	1	09/19/2017 23:50	WG1022131
p-Isopropyltoluene	U		0.000218	0.00107	1	09/19/2017 23:50	WG1022131
2-Butanone (MEK)	U		0.00501	0.0107	1	09/19/2017 23:50	WG1022131
Methylene Chloride	U		0.00107	0.00535	1	09/19/2017 23:50	WG1022131
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	09/19/2017 23:50	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 16:15

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	09/19/2017 23:50	WG1022131
Naphthalene	U		0.00107	0.00535	1	09/19/2017 23:50	WG1022131
n-Propylbenzene	U		0.000220	0.00107	1	09/19/2017 23:50	WG1022131
Styrene	U		0.000250	0.00107	1	09/19/2017 23:50	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000282	0.00107	1	09/19/2017 23:50	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	09/19/2017 23:50	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	09/19/2017 23:50	WG1022131
Tetrachloroethene	0.00308		0.000295	0.00107	1	09/19/2017 23:50	WG1022131
Toluene	U		0.000464	0.00535	1	09/19/2017 23:50	WG1022131
1,2,3-Trichlorobenzene	U		0.000327	0.00107	1	09/19/2017 23:50	WG1022131
1,2,4-Trichlorobenzene	U		0.000415	0.00107	1	09/19/2017 23:50	WG1022131
1,1,1-Trichloroethane	U		0.000306	0.00107	1	09/19/2017 23:50	WG1022131
1,1,2-Trichloroethane	U		0.000296	0.00107	1	09/19/2017 23:50	WG1022131
Trichloroethene	0.000467	J	0.000298	0.00107	1	09/19/2017 23:50	WG1022131
Trichlorofluoromethane	U		0.000409	0.00535	1	09/19/2017 23:50	WG1022131
1,2,3-Trichloropropane	U		0.000793	0.00267	1	09/19/2017 23:50	WG1022131
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	09/19/2017 23:50	WG1022131
1,2,3-Trimethylbenzene	U		0.000307	0.00107	1	09/19/2017 23:50	WG1022131
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	09/19/2017 23:50	WG1022131
Vinyl acetate	U		0.00256	0.0107	1	09/19/2017 23:50	WG1022131
Vinyl chloride	0.00139		0.000311	0.00107	1	09/19/2017 23:50	WG1022131
Xylenes, Total	U		0.000747	0.00321	1	09/19/2017 23:50	WG1022131
(S) Toluene-d8	97.9			80.0-120		09/19/2017 23:50	WG1022131
(S) Dibromofluoromethane	115			74.0-131		09/19/2017 23:50	WG1022131
(S) 4-Bromofluorobenzene	103			64.0-132		09/19/2017 23:50	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 16:40

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	09/20/2017 14:29	WG1022371

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0153	J JO	0.0107	0.0537	1	09/20/2017 00:08	WG1022131
Acrylonitrile	U		0.00192	0.0107	1	09/20/2017 00:08	WG1022131
Benzene	U		0.000290	0.00107	1	09/20/2017 00:08	WG1022131
Bromobenzene	U		0.000305	0.00107	1	09/20/2017 00:08	WG1022131
Bromodichloromethane	U		0.000273	0.00107	1	09/20/2017 00:08	WG1022131
Bromochloromethane	U		0.000419	0.00537	1	09/20/2017 00:08	WG1022131
Bromoform	U	JO	0.000455	0.00107	1	09/20/2017 00:08	WG1022131
Bromomethane	U		0.00144	0.00537	1	09/20/2017 00:08	WG1022131
n-Butylbenzene	U		0.000277	0.00107	1	09/20/2017 00:08	WG1022131
sec-Butylbenzene	U		0.000216	0.00107	1	09/20/2017 00:08	WG1022131
tert-Butylbenzene	U		0.000221	0.00107	1	09/20/2017 00:08	WG1022131
Carbon disulfide	0.00149		0.000237	0.00107	1	09/20/2017 00:08	WG1022131
Carbon tetrachloride	U		0.000352	0.00107	1	09/20/2017 00:08	WG1022131
Chlorobenzene	U		0.000228	0.00107	1	09/20/2017 00:08	WG1022131
Chlorodibromomethane	U		0.000401	0.00107	1	09/20/2017 00:08	WG1022131
Chloroethane	U		0.00102	0.00537	1	09/20/2017 00:08	WG1022131
Chloroform	U		0.000246	0.00537	1	09/20/2017 00:08	WG1022131
Chloromethane	U		0.000403	0.00269	1	09/20/2017 00:08	WG1022131
2-Chlorotoluene	U		0.000323	0.00107	1	09/20/2017 00:08	WG1022131
4-Chlorotoluene	U		0.000258	0.00107	1	09/20/2017 00:08	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00537	1	09/20/2017 00:08	WG1022131
1,2-Dibromoethane	U		0.000368	0.00107	1	09/20/2017 00:08	WG1022131
Dibromomethane	U		0.000410	0.00107	1	09/20/2017 00:08	WG1022131
1,2-Dichlorobenzene	U		0.000328	0.00107	1	09/20/2017 00:08	WG1022131
1,3-Dichlorobenzene	U		0.000257	0.00107	1	09/20/2017 00:08	WG1022131
1,4-Dichlorobenzene	U		0.000243	0.00107	1	09/20/2017 00:08	WG1022131
Dichlorodifluoromethane	U		0.000766	0.00537	1	09/20/2017 00:08	WG1022131
1,1-Dichloroethane	U		0.000214	0.00107	1	09/20/2017 00:08	WG1022131
1,2-Dichloroethane	U		0.000285	0.00107	1	09/20/2017 00:08	WG1022131
1,1-Dichloroethene	U		0.000325	0.00107	1	09/20/2017 00:08	WG1022131
cis-1,2-Dichloroethene	0.0982		0.000252	0.00107	1	09/20/2017 00:08	WG1022131
trans-1,2-Dichloroethene	0.000407	J	0.000284	0.00107	1	09/20/2017 00:08	WG1022131
1,2-Dichloropropane	U		0.000385	0.00107	1	09/20/2017 00:08	WG1022131
1,1-Dichloropropene	U		0.000340	0.00107	1	09/20/2017 00:08	WG1022131
1,3-Dichloropropane	U		0.000222	0.00107	1	09/20/2017 00:08	WG1022131
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	09/20/2017 00:08	WG1022131
trans-1,3-Dichloropropene	U		0.000287	0.00107	1	09/20/2017 00:08	WG1022131
trans-1,4-Dichloro-2-butene	U	JO	0.000836	0.00269	1	09/20/2017 00:08	WG1022131
2,2-Dichloropropane	U		0.000300	0.00107	1	09/20/2017 00:08	WG1022131
Di-isopropyl ether	U		0.000266	0.00107	1	09/20/2017 00:08	WG1022131
Ethylbenzene	U		0.000319	0.00107	1	09/20/2017 00:08	WG1022131
Hexachloro-1,3-butadiene	U	JO	0.000367	0.00107	1	09/20/2017 00:08	WG1022131
2-Hexanone	U		0.00147	0.0107	1	09/20/2017 00:08	WG1022131
n-Hexane	0.00158	J	0.000311	0.0107	1	09/20/2017 00:08	WG1022131
Iodomethane	U		0.00272	0.0107	1	09/20/2017 00:08	WG1022131
Isopropylbenzene	U		0.000261	0.00107	1	09/20/2017 00:08	WG1022131
p-Isopropyltoluene	U		0.000219	0.00107	1	09/20/2017 00:08	WG1022131
2-Butanone (MEK)	U		0.00503	0.0107	1	09/20/2017 00:08	WG1022131
Methylene Chloride	U		0.00107	0.00537	1	09/20/2017 00:08	WG1022131
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0107	1	09/20/2017 00:08	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 16:40

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00107	1	09/20/2017 00:08	WG1022131
Naphthalene	U		0.00107	0.00537	1	09/20/2017 00:08	WG1022131
n-Propylbenzene	U		0.000221	0.00107	1	09/20/2017 00:08	WG1022131
Styrene	U		0.000251	0.00107	1	09/20/2017 00:08	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000284	0.00107	1	09/20/2017 00:08	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000392	0.00107	1	09/20/2017 00:08	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00107	1	09/20/2017 00:08	WG1022131
Tetrachloroethene	0.0126		0.000296	0.00107	1	09/20/2017 00:08	WG1022131
Toluene	U		0.000466	0.00537	1	09/20/2017 00:08	WG1022131
1,2,3-Trichlorobenzene	U		0.000329	0.00107	1	09/20/2017 00:08	WG1022131
1,2,4-Trichlorobenzene	U		0.000417	0.00107	1	09/20/2017 00:08	WG1022131
1,1,1-Trichloroethane	U		0.000307	0.00107	1	09/20/2017 00:08	WG1022131
1,1,2-Trichloroethane	U		0.000298	0.00107	1	09/20/2017 00:08	WG1022131
Trichloroethene	0.00100	J	0.000300	0.00107	1	09/20/2017 00:08	WG1022131
Trichlorofluoromethane	U		0.000410	0.00537	1	09/20/2017 00:08	WG1022131
1,2,3-Trichloropropane	U		0.000796	0.00269	1	09/20/2017 00:08	WG1022131
1,2,4-Trimethylbenzene	U		0.000227	0.00107	1	09/20/2017 00:08	WG1022131
1,2,3-Trimethylbenzene	U		0.000308	0.00107	1	09/20/2017 00:08	WG1022131
1,3,5-Trimethylbenzene	U		0.000286	0.00107	1	09/20/2017 00:08	WG1022131
Vinyl acetate	U		0.00257	0.0107	1	09/20/2017 00:08	WG1022131
Vinyl chloride	0.00209		0.000313	0.00107	1	09/20/2017 00:08	WG1022131
Xylenes, Total	U		0.000750	0.00322	1	09/20/2017 00:08	WG1022131
(S) Toluene-d8	93.7			80.0-120		09/20/2017 00:08	WG1022131
(S) Dibromofluoromethane	117			74.0-131		09/20/2017 00:08	WG1022131
(S) 4-Bromofluorobenzene	101			64.0-132		09/20/2017 00:08	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 17:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.7		1	09/20/2017 14:29	WG1022371

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0147	J JO	0.0115	0.0577	1	09/20/2017 00:25	WG1022131
Acrylonitrile	U		0.00207	0.0115	1	09/20/2017 00:25	WG1022131
Benzene	U		0.000312	0.00115	1	09/20/2017 00:25	WG1022131
Bromobenzene	U		0.000328	0.00115	1	09/20/2017 00:25	WG1022131
Bromodichloromethane	U		0.000293	0.00115	1	09/20/2017 00:25	WG1022131
Bromochloromethane	U		0.000450	0.00577	1	09/20/2017 00:25	WG1022131
Bromoform	U	JO	0.000489	0.00115	1	09/20/2017 00:25	WG1022131
Bromomethane	U		0.00155	0.00577	1	09/20/2017 00:25	WG1022131
n-Butylbenzene	U		0.000298	0.00115	1	09/20/2017 00:25	WG1022131
sec-Butylbenzene	U		0.000232	0.00115	1	09/20/2017 00:25	WG1022131
tert-Butylbenzene	U		0.000238	0.00115	1	09/20/2017 00:25	WG1022131
Carbon disulfide	0.000918	J	0.000255	0.00115	1	09/20/2017 00:25	WG1022131
Carbon tetrachloride	U		0.000378	0.00115	1	09/20/2017 00:25	WG1022131
Chlorobenzene	U		0.000245	0.00115	1	09/20/2017 00:25	WG1022131
Chlorodibromomethane	U		0.000430	0.00115	1	09/20/2017 00:25	WG1022131
Chloroethane	U		0.00109	0.00577	1	09/20/2017 00:25	WG1022131
Chloroform	U		0.000264	0.00577	1	09/20/2017 00:25	WG1022131
Chloromethane	U		0.000433	0.00288	1	09/20/2017 00:25	WG1022131
2-Chlorotoluene	U		0.000347	0.00115	1	09/20/2017 00:25	WG1022131
4-Chlorotoluene	U		0.000277	0.00115	1	09/20/2017 00:25	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00577	1	09/20/2017 00:25	WG1022131
1,2-Dibromoethane	U		0.000396	0.00115	1	09/20/2017 00:25	WG1022131
Dibromomethane	U		0.000441	0.00115	1	09/20/2017 00:25	WG1022131
1,2-Dichlorobenzene	U		0.000352	0.00115	1	09/20/2017 00:25	WG1022131
1,3-Dichlorobenzene	U		0.000276	0.00115	1	09/20/2017 00:25	WG1022131
1,4-Dichlorobenzene	U		0.000261	0.00115	1	09/20/2017 00:25	WG1022131
Dichlorodifluoromethane	U		0.000823	0.00577	1	09/20/2017 00:25	WG1022131
1,1-Dichloroethane	U		0.000230	0.00115	1	09/20/2017 00:25	WG1022131
1,2-Dichloroethane	U		0.000306	0.00115	1	09/20/2017 00:25	WG1022131
1,1-Dichloroethene	U		0.000350	0.00115	1	09/20/2017 00:25	WG1022131
cis-1,2-Dichloroethene	0.000763	J	0.000271	0.00115	1	09/20/2017 00:25	WG1022131
trans-1,2-Dichloroethene	U		0.000305	0.00115	1	09/20/2017 00:25	WG1022131
1,2-Dichloropropane	U		0.000413	0.00115	1	09/20/2017 00:25	WG1022131
1,1-Dichloropropene	U		0.000366	0.00115	1	09/20/2017 00:25	WG1022131
1,3-Dichloropropane	U		0.000239	0.00115	1	09/20/2017 00:25	WG1022131
cis-1,3-Dichloropropene	U		0.000302	0.00115	1	09/20/2017 00:25	WG1022131
trans-1,3-Dichloropropene	U		0.000308	0.00115	1	09/20/2017 00:25	WG1022131
trans-1,4-Dichloro-2-butene	U	JO	0.000898	0.00288	1	09/20/2017 00:25	WG1022131
2,2-Dichloropropane	U		0.000322	0.00115	1	09/20/2017 00:25	WG1022131
Di-isopropyl ether	U		0.000286	0.00115	1	09/20/2017 00:25	WG1022131
Ethylbenzene	U		0.000343	0.00115	1	09/20/2017 00:25	WG1022131
Hexachloro-1,3-butadiene	U	JO	0.000395	0.00115	1	09/20/2017 00:25	WG1022131
2-Hexanone	U		0.00158	0.0115	1	09/20/2017 00:25	WG1022131
n-Hexane	0.000675	J	0.000335	0.0115	1	09/20/2017 00:25	WG1022131
Iodomethane	U		0.00292	0.0115	1	09/20/2017 00:25	WG1022131
Isopropylbenzene	U		0.000280	0.00115	1	09/20/2017 00:25	WG1022131
p-Isopropyltoluene	U		0.000235	0.00115	1	09/20/2017 00:25	WG1022131
2-Butanone (MEK)	U		0.00540	0.0115	1	09/20/2017 00:25	WG1022131
Methylene Chloride	U		0.00115	0.00577	1	09/20/2017 00:25	WG1022131
4-Methyl-2-pentanone (MIBK)	U		0.00217	0.0115	1	09/20/2017 00:25	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 17:00

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00115	1	09/20/2017 00:25	WG1022131
Naphthalene	U		0.00115	0.00577	1	09/20/2017 00:25	WG1022131
n-Propylbenzene	U		0.000238	0.00115	1	09/20/2017 00:25	WG1022131
Styrene	U		0.000270	0.00115	1	09/20/2017 00:25	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000305	0.00115	1	09/20/2017 00:25	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000421	0.00115	1	09/20/2017 00:25	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000421	0.00115	1	09/20/2017 00:25	WG1022131
Tetrachloroethene	0.000397	J	0.000318	0.00115	1	09/20/2017 00:25	WG1022131
Toluene	U		0.000501	0.00577	1	09/20/2017 00:25	WG1022131
1,2,3-Trichlorobenzene	U		0.000353	0.00115	1	09/20/2017 00:25	WG1022131
1,2,4-Trichlorobenzene	U		0.000448	0.00115	1	09/20/2017 00:25	WG1022131
1,1,1-Trichloroethane	U		0.000330	0.00115	1	09/20/2017 00:25	WG1022131
1,1,2-Trichloroethane	U		0.000320	0.00115	1	09/20/2017 00:25	WG1022131
Trichloroethene	U		0.000322	0.00115	1	09/20/2017 00:25	WG1022131
Trichlorofluoromethane	U		0.000441	0.00577	1	09/20/2017 00:25	WG1022131
1,2,3-Trichloropropane	U		0.000855	0.00288	1	09/20/2017 00:25	WG1022131
1,2,4-Trimethylbenzene	U		0.000243	0.00115	1	09/20/2017 00:25	WG1022131
1,2,3-Trimethylbenzene	U		0.000331	0.00115	1	09/20/2017 00:25	WG1022131
1,3,5-Trimethylbenzene	U		0.000307	0.00115	1	09/20/2017 00:25	WG1022131
Vinyl acetate	U		0.00276	0.0115	1	09/20/2017 00:25	WG1022131
Vinyl chloride	U		0.000336	0.00115	1	09/20/2017 00:25	WG1022131
Xylenes, Total	U		0.000805	0.00346	1	09/20/2017 00:25	WG1022131
(S) Toluene-d8	93.3			80.0-120		09/20/2017 00:25	WG1022131
(S) Dibromofluoromethane	111			74.0-131		09/20/2017 00:25	WG1022131
(S) 4-Bromofluorobenzene	106			64.0-132		09/20/2017 00:25	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 17:05

Total Solids by Method 2540 G-2011

Analyte	Result %	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.1		1	09/20/2017 14:29	WG1022371

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0107	0.0537	1	09/20/2017 00:43	WG1022131
Acrylonitrile	U		0.00192	0.0107	1	09/20/2017 00:43	WG1022131
Benzene	U		0.000290	0.00107	1	09/20/2017 00:43	WG1022131
Bromobenzene	U		0.000305	0.00107	1	09/20/2017 00:43	WG1022131
Bromodichloromethane	U		0.000273	0.00107	1	09/20/2017 00:43	WG1022131
Bromochloromethane	U		0.000419	0.00537	1	09/20/2017 00:43	WG1022131
Bromoform	U	<u>JO</u>	0.000455	0.00107	1	09/20/2017 00:43	WG1022131
Bromomethane	U		0.00144	0.00537	1	09/20/2017 00:43	WG1022131
n-Butylbenzene	U		0.000277	0.00107	1	09/20/2017 00:43	WG1022131
sec-Butylbenzene	U		0.000216	0.00107	1	09/20/2017 00:43	WG1022131
tert-Butylbenzene	U		0.000221	0.00107	1	09/20/2017 00:43	WG1022131
Carbon disulfide	0.000528	<u>J</u>	0.000237	0.00107	1	09/20/2017 00:43	WG1022131
Carbon tetrachloride	U		0.000352	0.00107	1	09/20/2017 00:43	WG1022131
Chlorobenzene	U		0.000228	0.00107	1	09/20/2017 00:43	WG1022131
Chlorodibromomethane	U		0.000401	0.00107	1	09/20/2017 00:43	WG1022131
Chloroethane	U		0.00102	0.00537	1	09/20/2017 00:43	WG1022131
Chloroform	U		0.000246	0.00537	1	09/20/2017 00:43	WG1022131
Chloromethane	U		0.000403	0.00268	1	09/20/2017 00:43	WG1022131
2-Chlorotoluene	U		0.000323	0.00107	1	09/20/2017 00:43	WG1022131
4-Chlorotoluene	U		0.000258	0.00107	1	09/20/2017 00:43	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00537	1	09/20/2017 00:43	WG1022131
1,2-Dibromoethane	U		0.000368	0.00107	1	09/20/2017 00:43	WG1022131
Dibromomethane	U		0.000410	0.00107	1	09/20/2017 00:43	WG1022131
1,2-Dichlorobenzene	U		0.000328	0.00107	1	09/20/2017 00:43	WG1022131
1,3-Dichlorobenzene	U		0.000257	0.00107	1	09/20/2017 00:43	WG1022131
1,4-Dichlorobenzene	U		0.000243	0.00107	1	09/20/2017 00:43	WG1022131
Dichlorodifluoromethane	U		0.000766	0.00537	1	09/20/2017 00:43	WG1022131
1,1-Dichloroethane	U		0.000214	0.00107	1	09/20/2017 00:43	WG1022131
1,2-Dichloroethane	U		0.000285	0.00107	1	09/20/2017 00:43	WG1022131
1,1-Dichloroethene	U		0.000325	0.00107	1	09/20/2017 00:43	WG1022131
cis-1,2-Dichloroethene	U		0.000252	0.00107	1	09/20/2017 00:43	WG1022131
trans-1,2-Dichloroethene	U		0.000284	0.00107	1	09/20/2017 00:43	WG1022131
1,2-Dichloropropane	U		0.000384	0.00107	1	09/20/2017 00:43	WG1022131
1,1-Dichloropropene	U		0.000340	0.00107	1	09/20/2017 00:43	WG1022131
1,3-Dichloropropane	U		0.000222	0.00107	1	09/20/2017 00:43	WG1022131
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	09/20/2017 00:43	WG1022131
trans-1,3-Dichloropropene	U		0.000287	0.00107	1	09/20/2017 00:43	WG1022131
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000836	0.00268	1	09/20/2017 00:43	WG1022131
2,2-Dichloropropane	U		0.000300	0.00107	1	09/20/2017 00:43	WG1022131
Di-isopropyl ether	U		0.000266	0.00107	1	09/20/2017 00:43	WG1022131
Ethylbenzene	U		0.000319	0.00107	1	09/20/2017 00:43	WG1022131
Hexachloro-1,3-butadiene	U	<u>JO</u>	0.000367	0.00107	1	09/20/2017 00:43	WG1022131
2-Hexanone	U		0.00147	0.0107	1	09/20/2017 00:43	WG1022131
n-Hexane	U		0.000311	0.0107	1	09/20/2017 00:43	WG1022131
Iodomethane	U		0.00272	0.0107	1	09/20/2017 00:43	WG1022131
Isopropylbenzene	U		0.000261	0.00107	1	09/20/2017 00:43	WG1022131
p-Isopropyltoluene	U		0.000219	0.00107	1	09/20/2017 00:43	WG1022131
2-Butanone (MEK)	U		0.00503	0.0107	1	09/20/2017 00:43	WG1022131
Methylene Chloride	U		0.00107	0.00537	1	09/20/2017 00:43	WG1022131
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0107	1	09/20/2017 00:43	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 17:05

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00107	1	09/20/2017 00:43	WG1022131
Naphthalene	U		0.00107	0.00537	1	09/20/2017 00:43	WG1022131
n-Propylbenzene	U		0.000221	0.00107	1	09/20/2017 00:43	WG1022131
Styrene	U		0.000251	0.00107	1	09/20/2017 00:43	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000284	0.00107	1	09/20/2017 00:43	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000392	0.00107	1	09/20/2017 00:43	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00107	1	09/20/2017 00:43	WG1022131
Tetrachloroethene	U		0.000296	0.00107	1	09/20/2017 00:43	WG1022131
Toluene	U		0.000466	0.00537	1	09/20/2017 00:43	WG1022131
1,2,3-Trichlorobenzene	U		0.000329	0.00107	1	09/20/2017 00:43	WG1022131
1,2,4-Trichlorobenzene	U		0.000417	0.00107	1	09/20/2017 00:43	WG1022131
1,1,1-Trichloroethane	U		0.000307	0.00107	1	09/20/2017 00:43	WG1022131
1,1,2-Trichloroethane	U		0.000297	0.00107	1	09/20/2017 00:43	WG1022131
Trichloroethene	U		0.000300	0.00107	1	09/20/2017 00:43	WG1022131
Trichlorofluoromethane	U		0.000410	0.00537	1	09/20/2017 00:43	WG1022131
1,2,3-Trichloropropane	U		0.000796	0.00268	1	09/20/2017 00:43	WG1022131
1,2,4-Trimethylbenzene	U		0.000227	0.00107	1	09/20/2017 00:43	WG1022131
1,2,3-Trimethylbenzene	U		0.000308	0.00107	1	09/20/2017 00:43	WG1022131
1,3,5-Trimethylbenzene	U		0.000286	0.00107	1	09/20/2017 00:43	WG1022131
Vinyl acetate	U		0.00257	0.0107	1	09/20/2017 00:43	WG1022131
Vinyl chloride	U		0.000313	0.00107	1	09/20/2017 00:43	WG1022131
Xylenes, Total	U		0.000750	0.00322	1	09/20/2017 00:43	WG1022131
<i>(S) Toluene-d8</i>	94.4			80.0-120		09/20/2017 00:43	WG1022131
<i>(S) Dibromofluoromethane</i>	113			74.0-131		09/20/2017 00:43	WG1022131
<i>(S) 4-Bromofluorobenzene</i>	104			64.0-132		09/20/2017 00:43	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 18:25

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.8		1	09/20/2017 14:29	WG1022371

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0118	J JO	0.0118	0.0590	1	09/20/2017 01:00	WG1022131
Acrylonitrile	U		0.00211	0.0118	1	09/20/2017 01:00	WG1022131
Benzene	U		0.000319	0.00118	1	09/20/2017 01:00	WG1022131
Bromobenzene	U		0.000335	0.00118	1	09/20/2017 01:00	WG1022131
Bromodichloromethane	U		0.000300	0.00118	1	09/20/2017 01:00	WG1022131
Bromochloromethane	U		0.000460	0.00590	1	09/20/2017 01:00	WG1022131
Bromoform	U	JO	0.000500	0.00118	1	09/20/2017 01:00	WG1022131
Bromomethane	U		0.00158	0.00590	1	09/20/2017 01:00	WG1022131
n-Butylbenzene	U		0.000304	0.00118	1	09/20/2017 01:00	WG1022131
sec-Butylbenzene	U		0.000237	0.00118	1	09/20/2017 01:00	WG1022131
tert-Butylbenzene	U		0.000243	0.00118	1	09/20/2017 01:00	WG1022131
Carbon disulfide	0.000621	J	0.000261	0.00118	1	09/20/2017 01:00	WG1022131
Carbon tetrachloride	U		0.000387	0.00118	1	09/20/2017 01:00	WG1022131
Chlorobenzene	U		0.000250	0.00118	1	09/20/2017 01:00	WG1022131
Chlorodibromomethane	U		0.000440	0.00118	1	09/20/2017 01:00	WG1022131
Chloroethane	U		0.00112	0.00590	1	09/20/2017 01:00	WG1022131
Chloroform	U		0.000270	0.00590	1	09/20/2017 01:00	WG1022131
Chloromethane	U		0.000442	0.00295	1	09/20/2017 01:00	WG1022131
2-Chlorotoluene	U		0.000355	0.00118	1	09/20/2017 01:00	WG1022131
4-Chlorotoluene	U		0.000283	0.00118	1	09/20/2017 01:00	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00590	1	09/20/2017 01:00	WG1022131
1,2-Dibromoethane	U		0.000405	0.00118	1	09/20/2017 01:00	WG1022131
Dibromomethane	U		0.000451	0.00118	1	09/20/2017 01:00	WG1022131
1,2-Dichlorobenzene	U		0.000360	0.00118	1	09/20/2017 01:00	WG1022131
1,3-Dichlorobenzene	U		0.000282	0.00118	1	09/20/2017 01:00	WG1022131
1,4-Dichlorobenzene	U		0.000267	0.00118	1	09/20/2017 01:00	WG1022131
Dichlorodifluoromethane	U		0.000841	0.00590	1	09/20/2017 01:00	WG1022131
1,1-Dichloroethane	U		0.000235	0.00118	1	09/20/2017 01:00	WG1022131
1,2-Dichloroethane	U		0.000313	0.00118	1	09/20/2017 01:00	WG1022131
1,1-Dichloroethene	U		0.000358	0.00118	1	09/20/2017 01:00	WG1022131
cis-1,2-Dichloroethene	U		0.000277	0.00118	1	09/20/2017 01:00	WG1022131
trans-1,2-Dichloroethene	U		0.000312	0.00118	1	09/20/2017 01:00	WG1022131
1,2-Dichloropropane	U		0.000422	0.00118	1	09/20/2017 01:00	WG1022131
1,1-Dichloropropene	U		0.000374	0.00118	1	09/20/2017 01:00	WG1022131
1,3-Dichloropropane	U		0.000244	0.00118	1	09/20/2017 01:00	WG1022131
cis-1,3-Dichloropropene	U		0.000309	0.00118	1	09/20/2017 01:00	WG1022131
trans-1,3-Dichloropropene	U		0.000315	0.00118	1	09/20/2017 01:00	WG1022131
trans-1,4-Dichloro-2-butene	U	JO	0.000918	0.00295	1	09/20/2017 01:00	WG1022131
2,2-Dichloropropane	U		0.000329	0.00118	1	09/20/2017 01:00	WG1022131
Di-isopropyl ether	U		0.000293	0.00118	1	09/20/2017 01:00	WG1022131
Ethylbenzene	U		0.000350	0.00118	1	09/20/2017 01:00	WG1022131
Hexachloro-1,3-butadiene	U	JO	0.000404	0.00118	1	09/20/2017 01:00	WG1022131
2-Hexanone	U		0.00162	0.0118	1	09/20/2017 01:00	WG1022131
n-Hexane	U		0.000342	0.0118	1	09/20/2017 01:00	WG1022131
Iodomethane	U		0.00299	0.0118	1	09/20/2017 01:00	WG1022131
Isopropylbenzene	U		0.000287	0.00118	1	09/20/2017 01:00	WG1022131
p-Isopropyltoluene	U		0.000241	0.00118	1	09/20/2017 01:00	WG1022131
2-Butanone (MEK)	U		0.00552	0.0118	1	09/20/2017 01:00	WG1022131
Methylene Chloride	U		0.00118	0.00590	1	09/20/2017 01:00	WG1022131
4-Methyl-2-pentanone (MIBK)	U		0.00222	0.0118	1	09/20/2017 01:00	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 18:25

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000250	0.00118	1	09/20/2017 01:00	WG1022131
Naphthalene	U		0.00118	0.00590	1	09/20/2017 01:00	WG1022131
n-Propylbenzene	U		0.000243	0.00118	1	09/20/2017 01:00	WG1022131
Styrene	U		0.000276	0.00118	1	09/20/2017 01:00	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000312	0.00118	1	09/20/2017 01:00	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000431	0.00118	1	09/20/2017 01:00	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000431	0.00118	1	09/20/2017 01:00	WG1022131
Tetrachloroethene	U		0.000326	0.00118	1	09/20/2017 01:00	WG1022131
Toluene	U		0.000512	0.00590	1	09/20/2017 01:00	WG1022131
1,2,3-Trichlorobenzene	U		0.000361	0.00118	1	09/20/2017 01:00	WG1022131
1,2,4-Trichlorobenzene	U		0.000458	0.00118	1	09/20/2017 01:00	WG1022131
1,1,1-Trichloroethane	U		0.000337	0.00118	1	09/20/2017 01:00	WG1022131
1,1,2-Trichloroethane	U		0.000327	0.00118	1	09/20/2017 01:00	WG1022131
Trichloroethene	U		0.000329	0.00118	1	09/20/2017 01:00	WG1022131
Trichlorofluoromethane	U		0.000451	0.00590	1	09/20/2017 01:00	WG1022131
1,2,3-Trichloropropane	U		0.000874	0.00295	1	09/20/2017 01:00	WG1022131
1,2,4-Trimethylbenzene	U		0.000249	0.00118	1	09/20/2017 01:00	WG1022131
1,2,3-Trimethylbenzene	U		0.000339	0.00118	1	09/20/2017 01:00	WG1022131
1,3,5-Trimethylbenzene	U		0.000314	0.00118	1	09/20/2017 01:00	WG1022131
Vinyl acetate	U		0.00282	0.0118	1	09/20/2017 01:00	WG1022131
Vinyl chloride	U		0.000343	0.00118	1	09/20/2017 01:00	WG1022131
Xylenes, Total	U		0.000824	0.00354	1	09/20/2017 01:00	WG1022131
(S) Toluene-d8	93.8			80.0-120		09/20/2017 01:00	WG1022131
(S) Dibromofluoromethane	111			74.0-131		09/20/2017 01:00	WG1022131
(S) 4-Bromofluorobenzene	105			64.0-132		09/20/2017 01:00	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	88.5		1	09/20/2017 14:29	WG1022371

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0113	0.0565	1	09/24/2017 18:09	WG1022131
Acrylonitrile	U	JO	0.00202	0.0113	1	09/24/2017 18:09	WG1022131
Benzene	U		0.000305	0.00113	1	09/24/2017 18:09	WG1022131
Bromobenzene	U		0.000321	0.00113	1	09/24/2017 18:09	WG1022131
Bromodichloromethane	U		0.000287	0.00113	1	09/24/2017 18:09	WG1022131
Bromochloromethane	U		0.000441	0.00565	1	09/24/2017 18:09	WG1022131
Bromoform	U		0.000479	0.00113	1	09/24/2017 18:09	WG1022131
Bromomethane	U		0.00151	0.00565	1	09/24/2017 18:09	WG1022131
n-Butylbenzene	U		0.000292	0.00113	1	09/24/2017 18:09	WG1022131
sec-Butylbenzene	U		0.000227	0.00113	1	09/24/2017 18:09	WG1022131
tert-Butylbenzene	U		0.000233	0.00113	1	09/24/2017 18:09	WG1022131
Carbon disulfide	0.000551	J	0.000250	0.00113	1	09/24/2017 18:09	WG1022131
Carbon tetrachloride	U		0.000371	0.00113	1	09/24/2017 18:09	WG1022131
Chlorobenzene	U		0.000240	0.00113	1	09/24/2017 18:09	WG1022131
Chlorodibromomethane	U		0.000421	0.00113	1	09/24/2017 18:09	WG1022131
Chloroethane	U		0.00107	0.00565	1	09/24/2017 18:09	WG1022131
Chloroform	U		0.000259	0.00565	1	09/24/2017 18:09	WG1022131
Chloromethane	U	JO	0.000424	0.00283	1	09/24/2017 18:09	WG1022131
2-Chlorotoluene	U		0.000340	0.00113	1	09/24/2017 18:09	WG1022131
4-Chlorotoluene	U		0.000271	0.00113	1	09/24/2017 18:09	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00565	1	09/24/2017 18:09	WG1022131
1,2-Dibromoethane	U	JO	0.000388	0.00113	1	09/24/2017 18:09	WG1022131
Dibromomethane	U		0.000432	0.00113	1	09/24/2017 18:09	WG1022131
1,2-Dichlorobenzene	U		0.000345	0.00113	1	09/24/2017 18:09	WG1022131
1,3-Dichlorobenzene	U		0.000270	0.00113	1	09/24/2017 18:09	WG1022131
1,4-Dichlorobenzene	U		0.000255	0.00113	1	09/24/2017 18:09	WG1022131
Dichlorodifluoromethane	U		0.000806	0.00565	1	09/24/2017 18:09	WG1022131
1,1-Dichloroethane	U		0.000225	0.00113	1	09/24/2017 18:09	WG1022131
1,2-Dichloroethane	U		0.000299	0.00113	1	09/24/2017 18:09	WG1022131
1,1-Dichloroethene	U		0.000342	0.00113	1	09/24/2017 18:09	WG1022131
cis-1,2-Dichloroethene	U		0.000266	0.00113	1	09/24/2017 18:09	WG1022131
trans-1,2-Dichloroethene	U		0.000298	0.00113	1	09/24/2017 18:09	WG1022131
1,2-Dichloropropane	U		0.000405	0.00113	1	09/24/2017 18:09	WG1022131
1,1-Dichloropropene	U		0.000358	0.00113	1	09/24/2017 18:09	WG1022131
1,3-Dichloropropane	U		0.000234	0.00113	1	09/24/2017 18:09	WG1022131
cis-1,3-Dichloropropene	U		0.000296	0.00113	1	09/24/2017 18:09	WG1022131
trans-1,3-Dichloropropene	U		0.000302	0.00113	1	09/24/2017 18:09	WG1022131
trans-1,4-Dichloro-2-butene	U		0.0219	0.0706	25	09/25/2017 14:03	WG1022131
2,2-Dichloropropane	U		0.000315	0.00113	1	09/24/2017 18:09	WG1022131
Di-isopropyl ether	U	JO	0.000280	0.00113	1	09/24/2017 18:09	WG1022131
Ethylbenzene	U		0.000336	0.00113	1	09/24/2017 18:09	WG1022131
Hexachloro-1,3-butadiene	U		0.000386	0.00113	1	09/24/2017 18:09	WG1022131
2-Hexanone	U		0.00155	0.0113	1	09/24/2017 18:09	WG1022131
n-Hexane	U		0.000328	0.0113	1	09/24/2017 18:09	WG1022131
Iodomethane	U		0.00286	0.0113	1	09/24/2017 18:09	WG1022131
Isopropylbenzene	U		0.000275	0.00113	1	09/24/2017 18:09	WG1022131
p-Isopropyltoluene	U		0.000231	0.00113	1	09/24/2017 18:09	WG1022131
2-Butanone (MEK)	U		0.00529	0.0113	1	09/24/2017 18:09	WG1022131
Methylene Chloride	U		0.00113	0.00565	1	09/24/2017 18:09	WG1022131
4-Methyl-2-pentanone (MIBK)	U	JO	0.00212	0.0113	1	09/24/2017 18:09	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 18:40

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	09/24/2017 18:09	WG1022131
Naphthalene	U		0.00113	0.00565	1	09/24/2017 18:09	WG1022131
n-Propylbenzene	U		0.000233	0.00113	1	09/24/2017 18:09	WG1022131
Styrene	U		0.000264	0.00113	1	09/24/2017 18:09	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000298	0.00113	1	09/24/2017 18:09	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000412	0.00113	1	09/24/2017 18:09	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000412	0.00113	1	09/24/2017 18:09	WG1022131
Tetrachloroethene	U		0.00780	0.0283	25	09/25/2017 14:03	WG1022131
Toluene	U		0.000490	0.00565	1	09/24/2017 18:09	WG1022131
1,2,3-Trichlorobenzene	U		0.000346	0.00113	1	09/24/2017 18:09	WG1022131
1,2,4-Trichlorobenzene	U		0.000438	0.00113	1	09/24/2017 18:09	WG1022131
1,1,1-Trichloroethane	U		0.000323	0.00113	1	09/24/2017 18:09	WG1022131
1,1,2-Trichloroethane	U		0.000313	0.00113	1	09/24/2017 18:09	WG1022131
Trichloroethene	U		0.000315	0.00113	1	09/24/2017 18:09	WG1022131
Trichlorofluoromethane	U		0.000432	0.00565	1	09/24/2017 18:09	WG1022131
1,2,3-Trichloropropane	U		0.000837	0.00283	1	09/24/2017 18:09	WG1022131
1,2,4-Trimethylbenzene	U		0.000238	0.00113	1	09/24/2017 18:09	WG1022131
1,2,3-Trimethylbenzene	U		0.000324	0.00113	1	09/24/2017 18:09	WG1022131
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	09/24/2017 18:09	WG1022131
Vinyl acetate	U		0.00270	0.0113	1	09/24/2017 18:09	WG1022131
Vinyl chloride	U		0.000329	0.00113	1	09/24/2017 18:09	WG1022131
Xylenes, Total	U		0.000789	0.00339	1	09/24/2017 18:09	WG1022131
(S) Toluene-d8	111			80.0-120		09/24/2017 18:09	WG1022131
(S) Toluene-d8	94.2			80.0-120		09/25/2017 14:03	WG1022131
(S) Dibromofluoromethane	100			74.0-131		09/25/2017 14:03	WG1022131
(S) Dibromofluoromethane	97.2			74.0-131		09/24/2017 18:09	WG1022131
(S) 4-Bromofluorobenzene	102			64.0-132		09/24/2017 18:09	WG1022131
(S) 4-Bromofluorobenzene	108			64.0-132		09/25/2017 14:03	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L937125-07 WG1022131: Elevated RL. Bisulfate vials overweight, reported from MEOH vial.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.3		1	09/20/2017 14:29	WG1022371

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	0.0116	0.0579	1	09/20/2017 01:35	WG1022131
Acrylonitrile	U		0.00207	0.0116	1	09/20/2017 01:35	WG1022131
Benzene	U		0.000313	0.00116	1	09/20/2017 01:35	WG1022131
Bromobenzene	U		0.000329	0.00116	1	09/20/2017 01:35	WG1022131
Bromodichloromethane	U		0.000294	0.00116	1	09/20/2017 01:35	WG1022131
Bromochloromethane	U		0.000452	0.00579	1	09/20/2017 01:35	WG1022131
Bromoform	U	<u>JO</u>	0.000491	0.00116	1	09/20/2017 01:35	WG1022131
Bromomethane	U		0.00155	0.00579	1	09/20/2017 01:35	WG1022131
n-Butylbenzene	U		0.000299	0.00116	1	09/20/2017 01:35	WG1022131
sec-Butylbenzene	U		0.000233	0.00116	1	09/20/2017 01:35	WG1022131
tert-Butylbenzene	U		0.000239	0.00116	1	09/20/2017 01:35	WG1022131
Carbon disulfide	U		0.000256	0.00116	1	09/20/2017 01:35	WG1022131
Carbon tetrachloride	U		0.000380	0.00116	1	09/20/2017 01:35	WG1022131
Chlorobenzene	U		0.000246	0.00116	1	09/20/2017 01:35	WG1022131
Chlorodibromomethane	U		0.000432	0.00116	1	09/20/2017 01:35	WG1022131
Chloroethane	U		0.00110	0.00579	1	09/20/2017 01:35	WG1022131
Chloroform	U		0.000265	0.00579	1	09/20/2017 01:35	WG1022131
Chloromethane	U		0.000434	0.00290	1	09/20/2017 01:35	WG1022131
2-Chlorotoluene	U		0.000349	0.00116	1	09/20/2017 01:35	WG1022131
4-Chlorotoluene	U		0.000278	0.00116	1	09/20/2017 01:35	WG1022131
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00579	1	09/20/2017 01:35	WG1022131
1,2-Dibromoethane	U		0.000397	0.00116	1	09/20/2017 01:35	WG1022131
Dibromomethane	U		0.000443	0.00116	1	09/20/2017 01:35	WG1022131
1,2-Dichlorobenzene	U		0.000353	0.00116	1	09/20/2017 01:35	WG1022131
1,3-Dichlorobenzene	U		0.000277	0.00116	1	09/20/2017 01:35	WG1022131
1,4-Dichlorobenzene	U		0.000262	0.00116	1	09/20/2017 01:35	WG1022131
Dichlorodifluoromethane	U		0.000826	0.00579	1	09/20/2017 01:35	WG1022131
1,1-Dichloroethane	U		0.000231	0.00116	1	09/20/2017 01:35	WG1022131
1,2-Dichloroethane	U		0.000307	0.00116	1	09/20/2017 01:35	WG1022131
1,1-Dichloroethene	U		0.000351	0.00116	1	09/20/2017 01:35	WG1022131
cis-1,2-Dichloroethene	U		0.000272	0.00116	1	09/20/2017 01:35	WG1022131
trans-1,2-Dichloroethene	U		0.000306	0.00116	1	09/20/2017 01:35	WG1022131
1,2-Dichloropropane	U		0.000415	0.00116	1	09/20/2017 01:35	WG1022131
1,1-Dichloropropene	U		0.000367	0.00116	1	09/20/2017 01:35	WG1022131
1,3-Dichloropropane	U		0.000240	0.00116	1	09/20/2017 01:35	WG1022131
cis-1,3-Dichloropropene	U		0.000303	0.00116	1	09/20/2017 01:35	WG1022131
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	09/20/2017 01:35	WG1022131
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000901	0.00290	1	09/20/2017 01:35	WG1022131
2,2-Dichloropropane	U		0.000323	0.00116	1	09/20/2017 01:35	WG1022131
Di-isopropyl ether	U		0.000287	0.00116	1	09/20/2017 01:35	WG1022131
Ethylbenzene	U		0.000344	0.00116	1	09/20/2017 01:35	WG1022131
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	09/20/2017 01:35	WG1022131
2-Hexanone	U	<u>JO</u>	0.00159	0.0116	1	09/20/2017 01:35	WG1022131
n-Hexane	U		0.000336	0.0116	1	09/20/2017 01:35	WG1022131
Iodomethane	U		0.00293	0.0116	1	09/20/2017 01:35	WG1022131
Isopropylbenzene	U		0.000281	0.00116	1	09/20/2017 01:35	WG1022131
p-Isopropyltoluene	U		0.000236	0.00116	1	09/20/2017 01:35	WG1022131
2-Butanone (MEK)	U		0.00542	0.0116	1	09/20/2017 01:35	WG1022131
Methylene Chloride	U		0.00116	0.00579	1	09/20/2017 01:35	WG1022131
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	09/20/2017 01:35	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/14/17 10:55

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	09/20/2017 01:35	WG1022131
Naphthalene	U		0.00116	0.00579	1	09/20/2017 01:35	WG1022131
n-Propylbenzene	U		0.000239	0.00116	1	09/20/2017 01:35	WG1022131
Styrene	U		0.000271	0.00116	1	09/20/2017 01:35	WG1022131
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	09/20/2017 01:35	WG1022131
1,1,2,2-Tetrachloroethane	U		0.000423	0.00116	1	09/20/2017 01:35	WG1022131
1,1,2-Trichlorotrifluoroethane	U		0.000423	0.00116	1	09/20/2017 01:35	WG1022131
Tetrachloroethene	U		0.000320	0.00116	1	09/20/2017 01:35	WG1022131
Toluene	U		0.000503	0.00579	1	09/20/2017 01:35	WG1022131
1,2,3-Trichlorobenzene	U		0.000354	0.00116	1	09/20/2017 01:35	WG1022131
1,2,4-Trichlorobenzene	U		0.000449	0.00116	1	09/20/2017 01:35	WG1022131
1,1,1-Trichloroethane	U		0.000331	0.00116	1	09/20/2017 01:35	WG1022131
1,1,2-Trichloroethane	U		0.000321	0.00116	1	09/20/2017 01:35	WG1022131
Trichloroethene	U		0.000323	0.00116	1	09/20/2017 01:35	WG1022131
Trichlorofluoromethane	U		0.000443	0.00579	1	09/20/2017 01:35	WG1022131
1,2,3-Trichloropropane	U		0.000858	0.00290	1	09/20/2017 01:35	WG1022131
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	09/20/2017 01:35	WG1022131
1,2,3-Trimethylbenzene	U		0.000332	0.00116	1	09/20/2017 01:35	WG1022131
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	09/20/2017 01:35	WG1022131
Vinyl acetate	U		0.00277	0.0116	1	09/20/2017 01:35	WG1022131
Vinyl chloride	U		0.000337	0.00116	1	09/20/2017 01:35	WG1022131
Xylenes, Total	U		0.000809	0.00348	1	09/20/2017 01:35	WG1022131
(S) Toluene-d8	94.5			80.0-120		09/20/2017 01:35	WG1022131
(S) Dibromofluoromethane	113			74.0-131		09/20/2017 01:35	WG1022131
(S) 4-Bromofluorobenzene	103			64.0-132		09/20/2017 01:35	WG1022131

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	6.20	<u>BJ</u>	1.05	25.0	1	09/19/2017 18:06	WG1021889
Acrylonitrile	U		0.873	5.00	1	09/19/2017 18:06	WG1021889
Benzene	0.275	<u>J</u>	0.0896	0.500	1	09/19/2017 18:06	WG1021889
Bromobenzene	U		0.133	0.500	1	09/19/2017 18:06	WG1021889
Bromodichloromethane	U		0.0800	0.500	1	09/19/2017 18:06	WG1021889
Bromochloromethane	U		0.145	0.500	1	09/19/2017 18:06	WG1021889
Bromoform	U		0.186	0.500	1	09/19/2017 18:06	WG1021889
Bromomethane	U		0.157	2.50	1	09/19/2017 18:06	WG1021889
n-Butylbenzene	U		0.143	0.500	1	09/19/2017 18:06	WG1021889
sec-Butylbenzene	U		0.134	0.500	1	09/19/2017 18:06	WG1021889
tert-Butylbenzene	U		0.183	0.500	1	09/19/2017 18:06	WG1021889
Carbon disulfide	U		0.101	0.500	1	09/19/2017 18:06	WG1021889
Carbon tetrachloride	U		0.159	0.500	1	09/19/2017 18:06	WG1021889
Chlorobenzene	U		0.140	0.500	1	09/19/2017 18:06	WG1021889
Chlorodibromomethane	U		0.128	0.500	1	09/19/2017 18:06	WG1021889
Chloroethane	U		0.141	2.50	1	09/19/2017 18:06	WG1021889
Chloroform	U		0.0860	0.500	1	09/19/2017 18:06	WG1021889
Chloromethane	0.489	<u>J</u>	0.153	1.25	1	09/19/2017 18:06	WG1021889
2-Chlorotoluene	U		0.111	0.500	1	09/19/2017 18:06	WG1021889
4-Chlorotoluene	U		0.0972	0.500	1	09/19/2017 18:06	WG1021889
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/19/2017 18:06	WG1021889
1,2-Dibromoethane	U		0.193	0.500	1	09/19/2017 18:06	WG1021889
Dibromomethane	U		0.117	0.500	1	09/19/2017 18:06	WG1021889
1,2-Dichlorobenzene	U		0.101	0.500	1	09/19/2017 18:06	WG1021889
1,3-Dichlorobenzene	U		0.130	0.500	1	09/19/2017 18:06	WG1021889
1,4-Dichlorobenzene	U		0.121	0.500	1	09/19/2017 18:06	WG1021889
Dichlorodifluoromethane	U		0.127	2.50	1	09/19/2017 18:06	WG1021889
1,1-Dichloroethane	U		0.114	0.500	1	09/19/2017 18:06	WG1021889
1,2-Dichloroethane	U		0.108	0.500	1	09/19/2017 18:06	WG1021889
1,1-Dichloroethene	U		0.188	0.500	1	09/19/2017 18:06	WG1021889
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/19/2017 18:06	WG1021889
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/19/2017 18:06	WG1021889
1,2-Dichloropropane	U		0.190	0.500	1	09/19/2017 18:06	WG1021889
1,1-Dichloropropene	U		0.128	0.500	1	09/19/2017 18:06	WG1021889
1,3-Dichloropropane	U		0.147	1.00	1	09/19/2017 18:06	WG1021889
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/19/2017 18:06	WG1021889
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/19/2017 18:06	WG1021889
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/23/2017 16:42	WG1021889
2,2-Dichloropropane	U		0.0929	0.500	1	09/19/2017 18:06	WG1021889
Di-isopropyl ether	U		0.0924	0.500	1	09/19/2017 18:06	WG1021889
Ethylbenzene	U		0.158	0.500	1	09/19/2017 18:06	WG1021889
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/19/2017 18:06	WG1021889
2-Hexanone	U		0.757	5.00	1	09/19/2017 18:06	WG1021889
n-Hexane	0.707	<u>J</u>	0.305	5.00	1	09/19/2017 18:06	WG1021889
Iodomethane	U		0.377	10.0	1	09/19/2017 18:06	WG1021889
Isopropylbenzene	U		0.126	0.500	1	09/19/2017 18:06	WG1021889
p-Isopropyltoluene	U		0.138	0.500	1	09/19/2017 18:06	WG1021889
2-Butanone (MEK)	1.50	<u>J</u>	1.28	5.00	1	09/19/2017 18:06	WG1021889
Methylene Chloride	U		1.07	2.50	1	09/19/2017 18:06	WG1021889
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/19/2017 18:06	WG1021889
Methyl tert-butyl ether	U		0.102	0.500	1	09/19/2017 18:06	WG1021889
Naphthalene	U		0.174	2.50	1	09/19/2017 18:06	WG1021889
n-Propylbenzene	U		0.162	0.500	1	09/19/2017 18:06	WG1021889
Styrene	U		0.117	0.500	1	09/19/2017 18:06	WG1021889
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/19/2017 18:06	WG1021889
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/19/2017 18:06	WG1021889

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/14/17 12:00

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/19/2017 18:06	WG1021889
Tetrachloroethene	U		0.199	0.500	1	09/19/2017 18:06	WG1021889
Toluene	10.4		0.412	0.500	1	09/19/2017 18:06	WG1021889
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/19/2017 18:06	WG1021889
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/19/2017 18:06	WG1021889
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/19/2017 18:06	WG1021889
1,1,2-Trichloroethane	U		0.186	0.500	1	09/19/2017 18:06	WG1021889
Trichloroethene	U		0.153	0.500	1	09/19/2017 18:06	WG1021889
Trichlorofluoromethane	U		0.130	2.50	1	09/19/2017 18:06	WG1021889
1,2,3-Trichloropropane	U		0.247	2.50	1	09/19/2017 18:06	WG1021889
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/19/2017 18:06	WG1021889
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/19/2017 18:06	WG1021889
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/19/2017 18:06	WG1021889
Vinyl acetate	U		0.645	5.00	1	09/19/2017 18:06	WG1021889
Vinyl chloride	U		0.118	0.500	1	09/19/2017 18:06	WG1021889
Xylenes, Total	U		0.316	1.50	1	09/19/2017 18:06	WG1021889
(S) Toluene-d8	104			80.0-120		09/23/2017 16:42	WG1021889
(S) Toluene-d8	103			80.0-120		09/19/2017 18:06	WG1021889
(S) Dibromofluoromethane	97.7			76.0-123		09/23/2017 16:42	WG1021889
(S) Dibromofluoromethane	98.0			76.0-123		09/19/2017 18:06	WG1021889
(S) 4-Bromofluorobenzene	95.2			80.0-120		09/19/2017 18:06	WG1021889
(S) 4-Bromofluorobenzene	101			80.0-120		09/23/2017 16:42	WG1021889

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 00:00

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.39	<u>BJ</u>	1.05	25.0	1	09/19/2017 12:20	WG1021889
Acrylonitrile	U		0.873	5.00	1	09/19/2017 12:20	WG1021889
Benzene	U		0.0896	0.500	1	09/19/2017 12:20	WG1021889
Bromobenzene	U		0.133	0.500	1	09/19/2017 12:20	WG1021889
Bromodichloromethane	U		0.0800	0.500	1	09/19/2017 12:20	WG1021889
Bromochloromethane	U		0.145	0.500	1	09/19/2017 12:20	WG1021889
Bromoform	U		0.186	0.500	1	09/19/2017 12:20	WG1021889
Bromomethane	U		0.157	2.50	1	09/19/2017 12:20	WG1021889
n-Butylbenzene	U		0.143	0.500	1	09/19/2017 12:20	WG1021889
sec-Butylbenzene	U		0.134	0.500	1	09/19/2017 12:20	WG1021889
tert-Butylbenzene	U		0.183	0.500	1	09/19/2017 12:20	WG1021889
Carbon disulfide	U		0.101	0.500	1	09/19/2017 12:20	WG1021889
Carbon tetrachloride	U		0.159	0.500	1	09/19/2017 12:20	WG1021889
Chlorobenzene	U		0.140	0.500	1	09/19/2017 12:20	WG1021889
Chlorodibromomethane	U		0.128	0.500	1	09/19/2017 12:20	WG1021889
Chloroethane	U		0.141	2.50	1	09/19/2017 12:20	WG1021889
Chloroform	U		0.0860	0.500	1	09/19/2017 12:20	WG1021889
Chloromethane	U		0.153	1.25	1	09/19/2017 12:20	WG1021889
2-Chlorotoluene	U		0.111	0.500	1	09/19/2017 12:20	WG1021889
4-Chlorotoluene	U		0.0972	0.500	1	09/19/2017 12:20	WG1021889
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/19/2017 12:20	WG1021889
1,2-Dibromoethane	U		0.193	0.500	1	09/19/2017 12:20	WG1021889
Dibromomethane	U		0.117	0.500	1	09/19/2017 12:20	WG1021889
1,2-Dichlorobenzene	U		0.101	0.500	1	09/19/2017 12:20	WG1021889
1,3-Dichlorobenzene	U		0.130	0.500	1	09/19/2017 12:20	WG1021889
1,4-Dichlorobenzene	U		0.121	0.500	1	09/19/2017 12:20	WG1021889
Dichlorodifluoromethane	U		0.127	2.50	1	09/19/2017 12:20	WG1021889
1,1-Dichloroethane	U		0.114	0.500	1	09/19/2017 12:20	WG1021889
1,2-Dichloroethane	U		0.108	0.500	1	09/19/2017 12:20	WG1021889
1,1-Dichloroethene	U		0.188	0.500	1	09/19/2017 12:20	WG1021889
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/19/2017 12:20	WG1021889
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/19/2017 12:20	WG1021889
1,2-Dichloropropane	U		0.190	0.500	1	09/19/2017 12:20	WG1021889
1,1-Dichloropropene	U		0.128	0.500	1	09/19/2017 12:20	WG1021889
1,3-Dichloropropane	U		0.147	1.00	1	09/19/2017 12:20	WG1021889
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/19/2017 12:20	WG1021889
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/19/2017 12:20	WG1021889
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/23/2017 17:21	WG1021889
2,2-Dichloropropane	U		0.0929	0.500	1	09/19/2017 12:20	WG1021889
Di-isopropyl ether	U		0.0924	0.500	1	09/19/2017 12:20	WG1021889
Ethylbenzene	U		0.158	0.500	1	09/19/2017 12:20	WG1021889
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/19/2017 12:20	WG1021889
2-Hexanone	U		0.757	5.00	1	09/19/2017 12:20	WG1021889
n-Hexane	U		0.305	5.00	1	09/19/2017 12:20	WG1021889
Iodomethane	U		0.377	10.0	1	09/19/2017 12:20	WG1021889
Isopropylbenzene	U		0.126	0.500	1	09/19/2017 12:20	WG1021889
p-Isopropyltoluene	U		0.138	0.500	1	09/19/2017 12:20	WG1021889
2-Butanone (MEK)	U		1.28	5.00	1	09/19/2017 12:20	WG1021889
Methylene Chloride	U		1.07	2.50	1	09/19/2017 12:20	WG1021889
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/19/2017 12:20	WG1021889
Methyl tert-butyl ether	U		0.102	0.500	1	09/19/2017 12:20	WG1021889
Naphthalene	U		0.174	2.50	1	09/19/2017 12:20	WG1021889
n-Propylbenzene	U		0.162	0.500	1	09/19/2017 12:20	WG1021889
Styrene	U		0.117	0.500	1	09/19/2017 12:20	WG1021889
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/19/2017 12:20	WG1021889
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/19/2017 12:20	WG1021889

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
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- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/13/17 00:00

L937125

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/19/2017 12:20	WG1021889
Tetrachloroethene	U		0.199	0.500	1	09/19/2017 12:20	WG1021889
Toluene	U		0.412	0.500	1	09/19/2017 12:20	WG1021889
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/19/2017 12:20	WG1021889
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/19/2017 12:20	WG1021889
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/19/2017 12:20	WG1021889
1,1,2-Trichloroethane	U		0.186	0.500	1	09/19/2017 12:20	WG1021889
Trichloroethene	U		0.153	0.500	1	09/19/2017 12:20	WG1021889
Trichlorofluoromethane	U		0.130	2.50	1	09/19/2017 12:20	WG1021889
1,2,3-Trichloropropane	U		0.247	2.50	1	09/19/2017 12:20	WG1021889
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/19/2017 12:20	WG1021889
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/19/2017 12:20	WG1021889
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/19/2017 12:20	WG1021889
Vinyl acetate	U		0.645	5.00	1	09/19/2017 12:20	WG1021889
Vinyl chloride	U		0.118	0.500	1	09/19/2017 12:20	WG1021889
Xylenes, Total	U		0.316	1.50	1	09/19/2017 12:20	WG1021889
(S) Toluene-d8	103			80.0-120		09/23/2017 17:21	WG1021889
(S) Toluene-d8	104			80.0-120		09/19/2017 12:20	WG1021889
(S) Dibromofluoromethane	99.9			76.0-123		09/23/2017 17:21	WG1021889
(S) Dibromofluoromethane	99.7			76.0-123		09/19/2017 12:20	WG1021889
(S) 4-Bromofluorobenzene	98.3			80.0-120		09/23/2017 17:21	WG1021889
(S) 4-Bromofluorobenzene	91.8			80.0-120		09/19/2017 12:20	WG1021889

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3250966-1 09/20/17 14:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.00130	%	%	%

L936877-08 Original Sample (OS) • Duplicate (DUP)

(OS) L936877-08 09/20/17 14:56 • (DUP) R3250966-3 09/20/17 14:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	97.2	97.2	1	0.0217	%	5

Laboratory Control Sample (LCS)

(LCS) R3250966-2 09/20/17 14:56

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

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2 Tc
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Method Blank (MB)

(MB) R3250965-1	09/20/17 14:29	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	%		%		%
Total Solids	0.000800				

L937125-03 Original Sample (OS) • Duplicate (DUP)

(OS) L937125-03	09/20/17 14:29	• (DUP) R3250965-3	09/20/17 14:29		
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>
	%	%	%	%	DUP RPD Limits
Total Solids	93.1	92.5	1	0.696	5

Laboratory Control Sample (LCS)

(LCS) R3250965-2	09/20/17 14:29				
Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
	%	%	%	%	
Total Solids	50.0	50.0	100	85.0-115	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L937125-09.10](#)

Method Blank (MB)

(MB) R3251721-3 09/19/17 10:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	135	J	1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
Chloroform	U		0.0860	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,1-Dichloroethene	U		0.188	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,2-Dichloroethane	U		0.108	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,2-Dichloroethene	U		0.0933	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3251721-3 09/19/17 10:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.164	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Methylene Chloride	U		1.07	2.50
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	5.00
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
Trichloroethene	U		0.153	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	97.6			76.0-123
(S) 4-Bromofluorobenzene	95.0			80.0-120

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3251721-1 09/19/17 09:04 • (LCSD) R3251721-2 09/19/17 09:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	124	127	99.0	102	10.0-160			2.94	23
Acrylonitrile	125	123	133	98.5	106	60.0-142			7.72	20
Benzene	25.0	24.7	24.6	98.8	98.6	69.0-123			0.260	20
Bromobenzene	25.0	22.6	23.3	90.6	93.1	79.0-120			2.71	20
Bromodichloromethane	25.0	24.3	24.5	97.2	98.1	76.0-120			0.900	20
Bromochloromethane	25.0	25.1	25.7	100	103	76.0-122			2.19	20
Bromoform	25.0	25.5	25.9	102	104	67.0-132			1.46	20
Bromomethane	25.0	27.2	26.7	109	107	18.0-160			2.15	20
n-Butylbenzene	25.0	24.4	25.1	97.6	101	72.0-126			3.02	20
sec-Butylbenzene	25.0	24.5	25.2	97.9	101	74.0-121			3.07	20
tert-Butylbenzene	25.0	24.3	24.9	97.1	99.7	75.0-122			2.66	20
Carbon disulfide	25.0	25.9	26.1	104	105	55.0-127			0.850	20
Carbon tetrachloride	25.0	25.3	24.9	101	99.5	63.0-122			1.50	20
Chlorobenzene	25.0	25.4	25.9	102	103	79.0-121			1.74	20
Chlorodibromomethane	25.0	27.0	26.9	108	108	75.0-125			0.410	20
Chloroethane	25.0	27.7	27.8	111	111	47.0-152			0.0900	20
Chloromethane	25.0	26.5	26.7	106	107	48.0-139			0.780	20
2-Chlorotoluene	25.0	23.3	24.0	93.3	96.1	74.0-122			2.91	20
4-Chlorotoluene	25.0	22.9	23.8	91.5	95.1	79.0-120			3.80	20
1,2-Dibromo-3-Chloropropane	25.0	25.5	25.9	102	103	64.0-127			1.19	20
1,2-Dibromoethane	25.0	25.3	25.7	101	103	77.0-123			1.23	20
Dibromomethane	25.0	24.9	25.3	99.6	101	78.0-120			1.76	20
1,2-Dichlorobenzene	25.0	24.6	25.1	98.4	100	80.0-120			1.97	20
1,3-Dichlorobenzene	25.0	24.2	25.0	96.9	99.8	72.0-123			2.95	20
1,4-Dichlorobenzene	25.0	24.2	24.7	96.9	98.6	77.0-120			1.70	20
Dichlorodifluoromethane	25.0	31.2	31.7	125	127	49.0-155			1.62	20
1,1-Dichloroethane	25.0	25.0	24.8	99.8	99.3	70.0-126			0.490	20
1,1-Dichloroethene	25.0	25.5	25.3	102	101	64.0-129			0.740	20
trans-1,2-Dichloroethene	25.0	25.4	25.2	102	101	71.0-121			0.760	20
1,2-Dichloropropane	25.0	24.7	25.0	98.9	99.9	75.0-125			1.01	20
1,1-Dichloropropene	25.0	25.6	25.6	102	102	71.0-129			0.0600	20
1,3-Dichloropropene	25.0	25.4	25.6	102	102	80.0-121			0.820	20
cis-1,3-Dichloropropene	25.0	25.8	26.4	103	105	79.0-123			2.15	20
trans-1,3-Dichloropropene	25.0	25.6	25.9	102	104	74.0-127			1.33	20
trans-1,4-Dichloro-2-butene	25.0	19.0	20.8	75.9	83.0	55.0-134			8.91	20
2,2-Dichloropropane	25.0	26.5	25.8	106	103	60.0-125			2.66	20
Di-isopropyl ether	25.0	24.2	24.2	96.8	96.6	59.0-133			0.180	20
Ethylbenzene	25.0	25.2	25.4	101	101	77.0-120			0.570	20
Hexachloro-1,3-butadiene	25.0	23.5	25.9	93.9	104	64.0-131			9.98	20
2-Hexanone	125	134	136	107	109	58.0-147			1.50	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3251721-1 09/19/17 09:04 • (LCSD) R3251721-2 09/19/17 09:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Hexane	25.0	25.6	25.7	103	103	56.0-124			0.210	20
Iodomethane	125	128	128	102	103	57.0-140			0.110	20
Isopropylbenzene	25.0	23.7	24.2	94.8	96.7	75.0-120			2.05	20
p-Isopropyltoluene	25.0	25.1	25.8	100	103	74.0-126			2.82	20
2-Butanone (MEK)	125	116	120	92.7	95.9	37.0-158			3.32	20
4-Methyl-2-pentanone (MIBK)	125	125	124	99.9	99.6	59.0-143			0.380	20
Methyl tert-butyl ether	25.0	24.8	24.9	99.0	99.6	64.0-123			0.610	20
Naphthalene	25.0	23.3	24.6	93.2	98.3	62.0-128			5.30	20
n-Propylbenzene	25.0	23.4	24.2	93.8	96.9	79.0-120			3.25	20
Chloroform	25.0	24.8	24.7	99.0	98.8	72.0-121			0.300	20
Styrene	25.0	23.8	24.5	95.1	97.9	78.0-124			3.00	20
1,1,1,2-Tetrachloroethane	25.0	25.9	26.0	103	104	75.0-122			0.570	20
1,1,2,2-Tetrachloroethane	25.0	23.3	23.9	93.4	95.8	71.0-122			2.54	20
1,1,2-Trichlorotrifluoroethane	25.0	26.3	26.7	105	107	61.0-136			1.25	20
1,2,3-Trichlorobenzene	25.0	23.2	25.0	92.9	99.9	61.0-133			7.27	20
1,2,4-Trichlorobenzene	25.0	23.5	24.7	93.8	98.7	69.0-129			5.03	20
1,1,1-Trichloroethane	25.0	25.4	25.6	101	102	68.0-122			0.780	20
1,1,2-Trichloroethane	25.0	24.7	25.2	98.8	101	78.0-120			2.07	20
Trichlorofluoromethane	25.0	27.5	27.6	110	110	56.0-137			0.550	20
1,2,3-Trichloropropane	25.0	23.5	24.2	94.1	96.9	72.0-124			2.97	20
1,2,4-Trimethylbenzene	25.0	23.1	23.7	92.3	94.9	75.0-120			2.77	20
1,2,3-Trimethylbenzene	25.0	24.2	24.5	96.9	98.0	75.0-120			1.10	20
1,2-Dichloroethane	25.0	25.0	25.1	99.8	100	67.0-126			0.480	20
1,3,5-Trimethylbenzene	25.0	23.6	24.2	94.3	96.9	75.0-120			2.72	20
cis-1,2-Dichloroethene	25.0	24.6	24.6	98.6	98.2	73.0-120			0.340	20
Vinyl acetate	125	135	135	108	108	46.0-160			0.310	20
Xylenes, Total	75.0	75.8	76.3	101	102	77.0-120			0.660	20
Methylene Chloride	25.0	24.2	24.1	96.9	96.5	66.0-121			0.400	20
Tetrachloroethene	25.0	26.3	26.1	105	104	70.0-127			0.780	20
Toluene	25.0	24.8	25.0	99.0	100	77.0-120			1.03	20
Trichloroethene	25.0	25.6	25.8	102	103	78.0-120			0.600	20
Vinyl chloride	25.0	28.1	28.2	112	113	64.0-133			0.360	20
(S) Toluene-d8				103	103	80.0-120				
(S) Dibromofluoromethane				100	99.8	76.0-123				
(S) 4-Bromofluorobenzene				93.6	95.7	80.0-120				

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L936800-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L936800-03 09/19/17 18:27 • (MS) R3251721-4 09/19/17 18:48 • (MSD) R3251721-5 09/19/17 19:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	ND	57.7	64.0	46.1	51.2	1	10.0-139			10.4	25
Acrylonitrile	125	ND	60.0	69.8	48.0	55.8	1	46.0-159			15.1	23
Benzene	25.0	ND	13.2	15.0	52.6	60.1	1	34.0-147			13.2	20
Bromobenzene	25.0	ND	12.1	14.2	47.8	56.1	1	51.0-137	<u>J6</u>		15.9	20
Bromodichloromethane	25.0	ND	12.6	14.3	50.3	57.1	1	52.0-135	<u>J6</u>		12.6	20
Bromochloromethane	25.0	ND	13.3	15.2	53.3	60.8	1	53.0-138			13.1	20
Bromoform	25.0	ND	12.6	14.7	50.6	59.0	1	50.0-146			15.3	20
Bromomethane	25.0	ND	14.0	16.3	56.0	65.1	1	10.0-160			15.1	23
n-Butylbenzene	25.0	ND	12.8	15.0	51.1	59.9	1	50.0-144			15.7	20
sec-Butylbenzene	25.0	ND	13.0	15.1	52.0	60.3	1	48.0-143			14.8	20
tert-Butylbenzene	25.0	ND	12.8	14.8	51.3	59.4	1	50.0-142			14.6	20
Carbon disulfide	25.0	ND	13.6	15.7	54.2	62.7	1	10.0-147			14.4	20
Carbon tetrachloride	25.0	ND	13.5	15.0	54.0	59.8	1	41.0-138			10.2	20
Chlorobenzene	25.0	ND	13.5	15.7	54.0	62.7	1	52.0-141			14.9	20
Chlorodibromomethane	25.0	ND	13.9	15.7	55.6	62.8	1	54.0-142			12.2	20
Chloroethane	25.0	ND	14.7	17.0	58.9	68.1	1	23.0-160			14.5	20
Chloromethane	25.0	ND	13.9	16.1	55.5	64.6	1	14.0-151			15.1	20
2-Chlorotoluene	25.0	ND	12.4	14.4	49.4	57.4	1	48.0-142			14.9	20
4-Chlorotoluene	25.0	ND	12.4	14.4	49.7	57.5	1	52.0-139	<u>J6</u>		14.5	20
1,2-Dibromo-3-Chloropropane	25.0	ND	12.5	14.4	49.9	57.6	1	49.0-144			14.3	24
1,2-Dibromoethane	25.0	ND	13.1	15.3	52.3	61.2	1	54.0-140	<u>J6</u>		15.6	20
Dibromomethane	25.0	ND	13.0	14.8	51.9	59.3	1	53.0-138	<u>J6</u>		13.3	20
1,2-Dichlorobenzene	25.0	ND	13.2	15.3	52.6	61.0	1	56.0-139	<u>J6</u>		14.8	20
1,3-Dichlorobenzene	25.0	ND	13.0	14.9	51.9	59.4	1	50.0-141			13.5	20
1,4-Dichlorobenzene	25.0	ND	12.9	15.0	51.8	60.0	1	53.0-136	<u>J6</u>		14.6	20
Dichlorodifluoromethane	25.0	ND	15.9	18.2	63.8	72.9	1	20.0-160			13.3	21
1,1-Dichloroethane	25.0	ND	13.6	15.4	54.3	61.4	1	47.0-143			12.4	20
1,1-Dichloroethene	25.0	ND	14.3	16.3	57.0	65.2	1	31.0-148			13.4	20
trans-1,2-Dichloroethene	25.0	ND	14.2	16.4	54.7	63.5	1	36.0-141			14.5	20
1,2-Dichloropropane	25.0	ND	13.0	14.6	52.0	58.4	1	51.0-141			11.7	20
1,1-Dichloropropene	25.0	ND	13.8	15.7	55.0	62.9	1	42.0-146			13.4	20
1,3-Dichloropropane	25.0	ND	13.3	15.2	53.1	60.9	1	58.0-139	<u>J6</u>		13.8	20
cis-1,3-Dichloropropene	25.0	ND	13.1	15.2	52.5	61.0	1	53.0-139	<u>J6</u>		15.0	20
trans-1,3-Dichloropropene	25.0	ND	12.7	14.9	50.7	59.6	1	51.0-143	<u>J6</u>		16.2	20
trans-1,4-Dichloro-2-butene	25.0	ND	7.35	9.31	29.4	37.2	1	40.0-150	<u>J6</u>	<u>J3J6</u>	23.5	21
2,2-Dichloropropane	25.0	ND	13.4	15.4	53.7	61.6	1	43.0-139			13.7	20
Di-isopropyl ether	25.0	ND	12.1	13.9	48.6	55.5	1	44.0-144			13.2	20
Ethylbenzene	25.0	ND	13.3	15.3	53.2	61.3	1	42.0-147			14.2	20
Hexachloro-1,3-butadiene	25.0	ND	11.4	14.4	45.8	57.5	1	44.0-146		<u>J3</u>	22.8	21
2-Hexanone	125	ND	61.2	70.7	48.9	56.6	1	36.0-145			14.5	23

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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L936800-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L936800-03 09/19/17 18:27 • (MS) R3251721-4 09/19/17 18:48 • (MSD) R3251721-5 09/19/17 19:10

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
n-Hexane	25.0	ND	13.0	15.0	52.0	59.9	1	13.0-145			13.9	20
Iodomethane	125	ND	69.4	80.4	55.5	64.3	1	30.0-151			14.7	20
Isopropylbenzene	25.0	ND	12.7	14.7	50.8	59.0	1	48.0-141			14.8	20
p-Isopropyltoluene	25.0	ND	12.9	15.3	51.8	61.2	1	49.0-146			16.7	20
2-Butanone (MEK)	125	ND	53.7	62.1	43.0	49.7	1	12.0-149			14.5	24
4-Methyl-2-pentanone (MIBK)	125	ND	61.6	70.7	49.3	56.5	1	44.0-160			13.7	22
Methyl tert-butyl ether	25.0	ND	12.5	14.3	50.1	57.2	1	42.0-142			13.2	20
Naphthalene	25.0	ND	11.7	14.2	46.9	56.9	1	42.0-146			19.3	24
n-Propylbenzene	25.0	ND	12.5	14.5	50.1	58.1	1	47.0-144			14.8	20
Styrene	25.0	ND	12.7	14.8	50.7	59.2	1	47.0-147			15.4	20
1,1,1,2-Tetrachloroethane	25.0	ND	13.4	15.7	53.8	62.7	1	52.0-140			15.3	20
1,1,2,2-Tetrachloroethane	25.0	ND	11.9	13.8	47.8	55.3	1	46.0-149			14.6	20
1,1,2-Trichlorotrifluoroethane	25.0	ND	14.9	16.6	59.5	66.5	1	40.0-151			11.2	21
1,2,3-Trichlorobenzene	25.0	ND	11.9	14.5	47.5	57.9	1	45.0-145			19.9	22
1,2,4-Trichlorobenzene	25.0	ND	11.9	14.3	47.5	57.3	1	49.0-147			18.7	21
1,1,1-Trichloroethane	25.0	ND	13.7	16.1	54.8	64.4	1	46.0-140			16.2	20
1,1,2-Trichloroethane	25.0	ND	13.0	15.2	52.1	60.6	1	54.0-139			15.1	20
Chloroform	25.0	ND	13.3	15.2	53.2	60.7	1	50.0-139			13.3	20
Trichlorofluoromethane	25.0	ND	14.9	17.2	59.7	69.0	1	32.0-152			14.4	20
1,2,3-Trichloropropane	25.0	ND	12.0	14.0	48.0	56.1	1	54.0-143			15.6	21
1,2,4-Trimethylbenzene	25.0	ND	12.2	14.2	49.0	56.7	1	41.0-146			14.7	20
1,2,3-Trimethylbenzene	25.0	ND	12.8	14.9	51.2	59.4	1	48.0-138			14.9	20
1,3,5-Trimethylbenzene	25.0	ND	12.2	14.4	48.9	57.7	1	44.0-143			16.5	20
Vinyl acetate	125	ND	59.7	66.4	47.8	53.1	1	30.0-160			10.6	20
Xylenes, Total	75.0	ND	39.4	45.9	52.5	61.2	1	41.0-148			15.2	20
1,2-Dichloroethane	25.0	ND	13.0	15.1	51.9	60.3	1	47.0-141			15.1	20
cis-1,2-Dichloroethane	25.0	99.5	99.3	114	0.000	56.6	1	43.0-142			13.5	20
Methylene Chloride	25.0	ND	13.1	14.9	52.5	59.8	1	42.0-135			13.0	20
Tetrachloroethene	25.0	ND	13.9	16.0	55.7	64.0	1	38.0-147			13.9	20
Toluene	25.0	ND	13.3	15.3	53.2	61.1	1	42.0-141			13.8	20
Trichloroethene	25.0	109	129	129	77.7	80.4	1	32.0-156			0.510	20
Vinyl chloride	25.0	ND	15.7	18.1	62.9	72.5	1	24.0-153			14.1	20
(S) Toluene-d8					102	104		80.0-120				
(S) Dibromofluoromethane					98.7	100		76.0-123				
(S) 4-Bromofluorobenzene					94.4	96.7		80.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3251840-2 09/19/17 18:08

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
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Method Blank (MB)

(MB) R3251840-2 09/19/17 18:08

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	98.7			80.0-120
(S) Dibromofluoromethane	110			74.0-131
(S) 4-Bromofluorobenzene	102			64.0-132

1 Cp
2 Tc
3 Ss
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3251840-1 09/19/17 17:11 • (LCSD) R3251840-3 09/19/17 18:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.128	0.108	103	86.6	11.0-160			17.1	23
Acrylonitrile	0.125	0.127	0.126	102	101	61.0-143			0.730	20
Benzene	0.0250	0.0277	0.0283	111	113	71.0-124			2.19	20
Bromobenzene	0.0250	0.0262	0.0264	105	106	78.0-120			0.720	20
Bromodichloromethane	0.0250	0.0246	0.0243	98.4	97.2	75.0-120			1.23	20
Bromochloromethane	0.0250	0.0268	0.0272	107	109	80.0-121			1.62	20
Bromoform	0.0250	0.0219	0.0209	87.6	83.8	65.0-133			4.46	20
Bromomethane	0.0250	0.0282	0.0269	113	107	26.0-160			4.91	20
n-Butylbenzene	0.0250	0.0291	0.0270	116	108	73.0-126			7.47	20
sec-Butylbenzene	0.0250	0.0278	0.0264	111	106	75.0-121			5.22	20
tert-Butylbenzene	0.0250	0.0275	0.0256	110	102	74.0-122			6.94	20
Carbon disulfide	0.0250	0.0259	0.0246	103	98.5	53.0-130			4.92	20
Carbon tetrachloride	0.0250	0.0281	0.0271	112	108	66.0-123			3.73	20
Chlorobenzene	0.0250	0.0246	0.0242	98.4	96.9	79.0-121			1.49	20
Chlorodibromomethane	0.0250	0.0229	0.0221	91.7	88.4	74.0-128			3.68	20
Chloroethane	0.0250	0.0283	0.0276	113	110	51.0-147			2.76	20
Chloroform	0.0250	0.0288	0.0285	115	114	73.0-123			1.28	20
Chloromethane	0.0250	0.0228	0.0230	91.4	91.9	51.0-138			0.580	20
2-Chlorotoluene	0.0250	0.0279	0.0275	112	110	72.0-124			1.42	20
4-Chlorotoluene	0.0250	0.0265	0.0265	106	106	78.0-120			0.140	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0233	0.0217	93.1	86.7	65.0-126			7.15	20
1,2-Dibromoethane	0.0250	0.0241	0.0238	96.3	95.3	78.0-122			1.06	20
Dibromomethane	0.0250	0.0248	0.0246	99.0	98.5	79.0-120			0.570	20
1,2-Dichlorobenzene	0.0250	0.0275	0.0264	110	106	80.0-120			4.00	20
1,3-Dichlorobenzene	0.0250	0.0282	0.0266	113	106	72.0-123			5.91	20
1,4-Dichlorobenzene	0.0250	0.0260	0.0250	104	100	77.0-120			3.76	20
trans-1,4-Dichloro-2-butene	0.0250	0.0246	0.0232	98.4	92.8	68.0-126			5.88	20
Dichlorodifluoromethane	0.0250	0.0259	0.0218	104	87.4	49.0-155			16.9	20
1,1-Dichloroethane	0.0250	0.0282	0.0279	113	112	70.0-128			1.00	20
1,2-Dichloroethane	0.0250	0.0277	0.0287	111	115	69.0-128			3.65	20
1,1-Dichloroethene	0.0250	0.0288	0.0273	115	109	63.0-131			5.44	20
cis-1,2-Dichloroethene	0.0250	0.0266	0.0264	106	105	74.0-123			0.990	20
trans-1,2-Dichloroethene	0.0250	0.0274	0.0267	110	107	72.0-122			2.53	20
1,2-Dichloropropane	0.0250	0.0257	0.0267	103	107	75.0-126			3.85	20
1,1-Dichloropropene	0.0250	0.0286	0.0271	115	108	72.0-130			5.65	20
1,3-Dichloropropene	0.0250	0.0238	0.0238	95.1	95.1	80.0-121			0.0400	20
cis-1,3-Dichloropropene	0.0250	0.0263	0.0260	105	104	80.0-125			1.16	20
trans-1,3-Dichloropropene	0.0250	0.0245	0.0245	97.9	97.9	75.0-129			0.0300	20
2,2-Dichloropropane	0.0250	0.0263	0.0260	105	104	60.0-129			1.31	20
Di-isopropyl ether	0.0250	0.0263	0.0264	105	106	62.0-133			0.360	20

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3251840-1 09/19/17 17:11 • (LCSD) R3251840-3 09/19/17 18:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0239	0.0233	95.4	93.1	77.0-120			2.46	20
Hexachloro-1,3-butadiene	0.0250	0.0247	0.0222	98.9	88.6	68.0-128			11.0	20
2-Hexanone	0.125	0.135	0.125	108	99.6	61.0-143			7.85	20
n-Hexane	0.0250	0.0228	0.0220	91.4	87.9	57.0-125			3.88	20
Iodomethane	0.125	0.137	0.135	110	108	67.0-132			1.81	20
Isopropylbenzene	0.0250	0.0275	0.0260	110	104	75.0-120			5.62	20
p-Isopropyltoluene	0.0250	0.0285	0.0268	114	107	74.0-125			6.27	20
2-Butanone (MEK)	0.125	0.138	0.134	110	107	37.0-159			2.79	20
Methylene Chloride	0.0250	0.0279	0.0276	112	111	67.0-123			0.990	20
4-Methyl-2-pentanone (MIBK)	0.125	0.119	0.116	95.4	92.6	60.0-144			2.90	20
Methyl tert-butyl ether	0.0250	0.0275	0.0277	110	111	66.0-125			0.750	20
Naphthalene	0.0250	0.0265	0.0254	106	102	64.0-125			4.11	20
n-Propylbenzene	0.0250	0.0284	0.0268	114	107	78.0-120			5.86	20
Styrene	0.0250	0.0266	0.0263	106	105	78.0-124			0.910	20
1,1,1,2-Tetrachloroethane	0.0250	0.0239	0.0232	95.4	92.7	74.0-124			2.84	20
1,1,2,2-Tetrachloroethane	0.0250	0.0278	0.0267	111	107	73.0-120			4.12	20
Tetrachloroethene	0.0250	0.0236	0.0215	94.2	85.9	70.0-127			9.28	20
Toluene	0.0250	0.0249	0.0236	99.5	94.4	77.0-120			5.24	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0292	0.0268	117	107	64.0-135			8.64	20
1,2,3-Trichlorobenzene	0.0250	0.0272	0.0246	109	98.3	68.0-126			10.0	20
1,2,4-Trichlorobenzene	0.0250	0.0265	0.0238	106	95.3	70.0-127			10.8	20
1,1,1-Trichloroethane	0.0250	0.0275	0.0261	110	104	69.0-125			5.44	20
1,1,2-Trichloroethane	0.0250	0.0235	0.0231	94.0	92.2	78.0-120			1.93	20
Trichloroethene	0.0250	0.0250	0.0240	99.8	96.0	79.0-120			3.90	20
Trichlorofluoromethane	0.0250	0.0291	0.0275	116	110	59.0-136			5.52	20
1,2,3-Trichloropropane	0.0250	0.0277	0.0274	111	110	73.0-124			1.17	20
1,2,3-Trimethylbenzene	0.0250	0.0257	0.0251	103	101	76.0-120			2.32	20
1,2,4-Trimethylbenzene	0.0250	0.0281	0.0265	112	106	75.0-120			5.88	20
1,3,5-Trimethylbenzene	0.0250	0.0280	0.0266	112	106	75.0-120			5.26	20
Vinyl acetate	0.125	0.153	0.156	122	124	58.0-156			1.95	20
Vinyl chloride	0.0250	0.0279	0.0264	111	106	63.0-134			5.23	20
Xylenes, Total	0.0750	0.0730	0.0714	97.3	95.2	77.0-120			2.22	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

L937086-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L937086-01 09/19/17 20:39 • (MS) R3251840-4 09/20/17 01:52 • (MSD) R3251840-5 09/20/17 02:09

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.204	ND	0.0931	0.0988	19.9	22.7	1	10.0-160			5.91	36
Acrylonitrile	0.204	ND	0.139	0.155	68.2	76.0	1	14.0-160			10.9	33
Benzene	0.0409	ND	0.0211	0.0269	51.6	65.9	1	13.0-146			24.4	27
Bromobenzene	0.0409	ND	0.0140	0.0157	34.3	38.4	1	10.0-149			11.5	33
Bromodichloromethane	0.0409	ND	0.0169	0.0225	41.3	55.0	1	15.0-142		J3	28.3	28
Bromochloromethane	0.0409	ND	0.0224	0.0274	54.7	67.0	1	24.0-146			20.3	27
Bromoform	0.0409	ND	0.0131	0.0160	32.1	39.0	1	10.0-147			19.5	31
Bromomethane	0.0409	ND	0.0250	0.0292	61.1	71.5	1	10.0-160			15.7	32
n-Butylbenzene	0.0409	ND	0.0171	0.0162	41.9	39.5	1	10.0-154			5.83	37
sec-Butylbenzene	0.0409	ND	0.0193	0.0184	47.2	45.1	1	10.0-151			4.57	36
tert-Butylbenzene	0.0409	ND	0.0193	0.0199	47.3	48.6	1	10.0-152			2.82	35
Carbon disulfide	0.0409	ND	0.0199	0.0255	45.0	58.5	1	10.0-141			24.4	30
Carbon tetrachloride	0.0409	ND	0.0217	0.0272	53.0	66.4	1	13.0-140			22.6	30
Chlorobenzene	0.0409	ND	0.0116	0.0148	28.3	36.1	1	10.0-149			24.3	31
Chlorodibromomethane	0.0409	ND	0.0122	0.0163	29.7	39.9	1	12.0-147		J3	29.2	29
Chloroethane	0.0409	ND	0.0280	0.0333	68.5	81.5	1	10.0-159			17.3	33
Chloroform	0.0409	ND	0.0233	0.0290	57.0	70.9	1	18.0-148			21.7	28
Chloromethane	0.0409	ND	0.0258	0.0281	63.2	68.7	1	10.0-146			8.34	29
2-Chlorotoluene	0.0409	ND	0.0173	0.0184	42.4	44.9	1	10.0-151			5.63	35
4-Chlorotoluene	0.0409	ND	0.0144	0.0157	35.2	38.3	1	10.0-150			8.30	35
1,2-Dibromo-3-Chloropropane	0.0409	ND	0.00958	0.0132	23.4	32.4	1	10.0-149			32.1	34
1,2-Dibromoethane	0.0409	ND	0.0139	0.0186	34.0	45.4	1	14.0-145		J3	28.9	28
Dibromomethane	0.0409	ND	0.0195	0.0242	47.6	59.1	1	18.0-144			21.5	27
1,2-Dichlorobenzene	0.0409	ND	0.0106	0.0120	25.9	29.3	1	10.0-153			12.2	34
1,3-Dichlorobenzene	0.0409	ND	0.0118	0.0130	28.8	31.8	1	10.0-150			10.0	35
1,4-Dichlorobenzene	0.0409	ND	0.0107	0.0112	26.3	27.4	1	10.0-148			4.08	34
trans-1,4-Dichloro-2-butene	0.0409	ND	0.0117	0.0145	28.6	35.6	1	10.0-160			21.5	40
Dichlorodifluoromethane	0.0409	ND	0.0279	0.0335	68.2	82.0	1	10.0-160			18.5	30
1,1-Dichloroethane	0.0409	ND	0.0255	0.0301	60.8	72.0	1	19.0-148			16.5	28
1,2-Dichloroethane	0.0409	ND	0.0234	0.0290	57.3	70.9	1	17.0-147			21.2	27
1,1-Dichloroethene	0.0409	ND	0.0245	0.0297	59.9	72.6	1	10.0-150			19.2	31
cis-1,2-Dichloroethene	0.0409	ND	0.0212	0.0266	50.7	63.8	1	16.0-145			22.4	28
trans-1,2-Dichloroethene	0.0409	ND	0.0209	0.0266	51.2	65.0	1	11.0-142			23.8	29
1,2-Dichloropropane	0.0409	ND	0.0195	0.0268	47.6	65.4	1	17.0-148		J3	31.5	28
1,1-Dichloropropene	0.0409	ND	0.0199	0.0253	48.7	61.9	1	10.0-150			23.9	30
1,3-Dichloropropene	0.0409	ND	0.0158	0.0196	38.7	47.9	1	16.0-148			21.2	27
cis-1,3-Dichloropropene	0.0409	ND	0.0148	0.0191	36.3	46.8	1	13.0-150			25.2	28
trans-1,3-Dichloropropene	0.0409	ND	0.0127	0.0164	31.2	40.0	1	10.0-152			24.8	29
2,2-Dichloropropene	0.0409	ND	0.0227	0.0287	55.5	70.2	1	16.0-143			23.4	30

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PES Environmental, Inc.- WA

1413.001.02.602

L937125

09/25/17 19:16

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L937086-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

[L937125-01.02.03.04.05.06.07.08](#)

(OS) L937086-01 09/19/17 20:39 • (MS) R3251840-4 09/20/17 01:52 • (MSD) R3251840-5 09/20/17 02:09

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0409	ND	0.0224	0.0283	54.7	69.1	1	16.0-149			23.3	28
Ethylbenzene	0.0409	ND	0.0132	0.0161	32.2	39.3	1	10.0-147			19.8	31
Hexachloro-1,3-butadiene	0.0409	ND	0.0146	0.0137	35.7	33.6	1	10.0-154			6.29	40
2-Hexanone	0.204	ND	0.0776	0.105	38.0	51.3	1	12.0-158			29.9	30
n-Hexane	0.0409	ND	0.0163	0.0203	38.1	47.9	1	10.0-140			21.7	34
Iodomethane	0.204	ND	0.117	0.142	57.4	69.5	1	10.0-157			19.0	34
Isopropylbenzene	0.0409	ND	0.0197	0.0206	48.1	50.4	1	10.0-147			4.69	33
p-Isopropyltoluene	0.0409	ND	0.0188	0.0180	45.8	44.0	1	10.0-156			4.13	37
2-Butanone (MEK)	0.204	ND	0.121	0.136	53.8	61.1	1	10.0-160			11.6	33
Methylene Chloride	0.0409	ND	0.0251	0.0291	61.4	71.2	1	16.0-139			14.9	29
4-Methyl-2-pentanone (MIBK)	0.204	ND	0.115	0.144	56.2	70.3	1	12.0-160			22.3	32
Methyl tert-butyl ether	0.0409	ND	ND	0.0328	0.000	80.3	1	21.0-145	J6	J3	200	29
Naphthalene	0.0409	ND	0.00379	0.00512	9.26	12.5	1	10.0-153	J6		30.0	36
n-Propylbenzene	0.0409	ND	0.0193	0.0193	47.1	47.2	1	10.0-151			0.200	34
Styrene	0.0409	ND	0.00740	0.00600	18.1	14.7	1	10.0-155			20.9	34
1,1,1,2-Tetrachloroethane	0.0409	ND	0.0129	0.0172	31.4	42.0	1	10.0-147			28.9	30
1,1,2,2-Tetrachloroethane	0.0409	ND	0.0190	0.0222	46.5	54.2	1	10.0-155			15.4	31
Tetrachloroethene	0.0409	ND	0.0136	0.0168	33.2	41.0	1	10.0-144			20.9	32
Toluene	0.0409	ND	0.0142	0.0182	34.8	44.5	1	10.0-144			24.7	28
1,1,2-Trichlorotrifluoroethane	0.0409	ND	0.0241	0.0293	58.8	71.7	1	10.0-153			19.8	33
1,2,3-Trichlorobenzene	0.0409	ND	0.00548	0.00636	13.4	15.5	1	10.0-153			14.9	40
1,2,4-Trichlorobenzene	0.0409	ND	0.00536	0.00617	13.1	15.1	1	10.0-156			14.1	40
1,1,1-Trichloroethane	0.0409	ND	0.0216	0.0279	52.8	68.2	1	18.0-145			25.4	29
1,1,2-Trichloroethane	0.0409	ND	0.0147	0.0199	36.0	48.8	1	12.0-151		J3	30.0	28
Trichloroethene	0.0409	ND	0.0174	0.0217	42.6	53.2	1	11.0-148			22.0	29
Trichlorofluoromethane	0.0409	ND	0.0263	0.0323	64.4	79.0	1	10.0-157			20.3	34
1,2,3-Trichloropropene	0.0409	ND	0.0199	0.0241	48.6	59.0	1	10.0-154			19.2	32
1,2,3-Trimethylbenzene	0.0409	ND	0.0144	0.0153	35.2	37.5	1	10.0-150			6.41	33
1,2,4-Trimethylbenzene	0.0409	ND	0.0159	0.0165	38.9	40.4	1	10.0-151			3.72	34
1,3,5-Trimethylbenzene	0.0409	ND	0.0172	0.0177	42.1	43.3	1	10.0-150			2.83	33
Vinyl acetate	0.204	ND	0.0713	0.0887	34.9	43.4	1	10.0-160			21.8	40
Vinyl chloride	0.0409	ND	0.0272	0.0322	66.5	78.7	1	10.0-150			16.8	29
Xylenes, Total	0.123	ND	0.0373	0.0460	30.4	37.5	1	10.0-150			20.9	31
(S) Toluene-d8				88.4		89.7		80.0-120				
(S) Dibromofluoromethane				118		119		74.0-131				
(S) 4-Bromofluorobenzene				116		107		64.0-132				

Public Review Draft

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
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Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

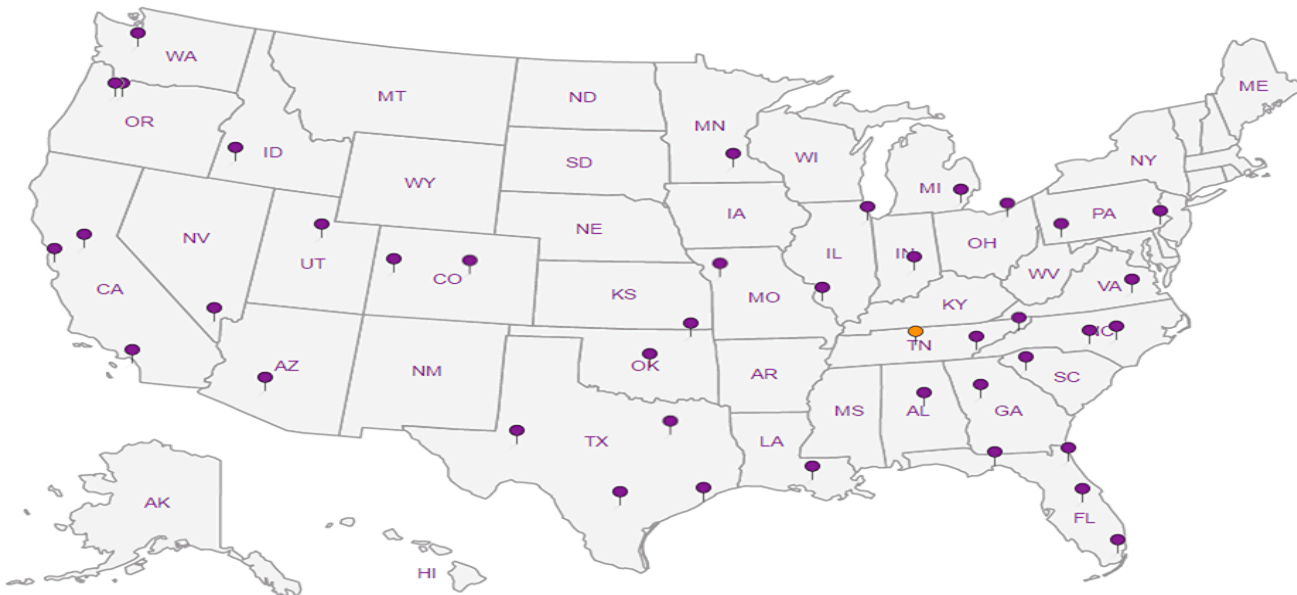
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. -WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Report to:
Bill Haldeman

Email To:
 bhdaldeman@pesenv.com

Project: **American Linen Project**

City/State Collected: **Seattle, WA**

Phone: **206-529-3980**
 Fax: **206-529-3985**

Client Project #
1413.001.02.602

Lab Project #
PESENVSWA-ALP

Collected by (print):
SHANNON MCKERNAN

Site/Facility ID #
1413.001.02.602

P.O. #

Rush? (Lab MUST Be Notified)

Quote #

Immediate Packed on Ice N Y X

Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Date Results Needed

No. of Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-139-20	GRAB	SS	20	9/13/17	1510	5
MW-139-31			31		1550	5
MW-139-41			41		1640	5
MW-139-51			51		1700	5
MW-139-60			60		1705	5
MW-139-70			70		1825	5
MW-138-80			80	9/14/17	1840	5
MW-138-115			115		1055	5
MW-138-115-W			115	9/14/17	1200	3
TRIP BLANK-09417	NA	NA	NA	11/01/16	NA	1

Remarks:

Samples returned via:
 UPS FedEx Courier

Tracking #

pH _____ Temp _____
 Flow _____ Other _____

Relinquished by: (Signature)

Date: 9/14/17

Time: 1030

Received by: (Signature)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Analysis / Container / Preservative

Analysis / Container / Preservative	Pres Chk
NWTPHGX 2ozClr-NoPres	
NWTPHGX 40mlAmb HCl	
TS 4ozClr-NoPres / 2x 2ozClr-NoPres	
V8260C 40ml/NaHSO4/Syr/MeOH	
V8260C 40mlAmb-HCl	

Chain of Custody Page 1 of 1

IESC
 L.A.B S.C.I.E.N.C.E.S.

YOUR LAB OF CHOICE
 12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-787-5859
 Fax: 615-758-5859



L# **L937185**
E192

Account: **PESENVSWA**
 Template: **T126586**
 Prelogin: **P613274**
 TSR:
 PB:

Shipped Via: _____
 Remarks _____
 Sample # (lab only) _____

Sample Receipt Checklist
 Coc Seal Present/Intact: Y N
 Coc Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 VOA zero headspace: Y N
 Preservation Correct/checked: Y N
 If applicable

Temp: **21.50** °C
 Bottles Received: **412**

Date: **9-15-17** Time: **0845**

Hold: _____
 Condition: **NCE / OK**

October 03, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L938636
Samples Received: 09/22/2017
Project Number: 1413.001.02.602
Description: American Linen Project
Site: 1413.001.02.602
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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B-221-37 L938636-05	15	6 Qc
B-221-45 L938636-06	17	
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B-915-80 L938636-01 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 14:30
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	100	09/20/17 14:30	10/01/17 15:02	DWR

1 Cp

2 Tc

3 Ss

B-221-16 L938636-02 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 14:50
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	25	09/20/17 14:50	10/01/17 14:42	DWR

4 Cn

5 Sr

6 Qc

B-221-22 L938636-03 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 14:55
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	1000	09/20/17 14:55	09/29/17 19:48	ACG

7 Gl

8 Al

9 Sc

B-221-33 L938636-04 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 15:15
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	1000	09/20/17 15:15	09/29/17 20:08	ACG

B-221-37 L938636-05 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 15:20
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	200	09/20/17 15:20	10/01/17 15:21	DWR

B-221-45 L938636-06 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 15:40
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	10000	09/20/17 15:40	09/29/17 20:47	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	200000	09/20/17 15:40	10/01/17 16:20	DWR

B-221-50 L938636-07 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 15:45
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	500	09/20/17 15:45	10/01/17 15:41	DWR



MW-138-092117 L938636-08 GW

Collected by Shannon McKernan
Collected date/time 09/21/17 10:10
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1024796	1	09/27/17 19:54	09/27/17 19:54	ACE
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024893	2	09/27/17 07:22	09/27/17 07:22	ACG

1 Cp

2 Tc

3 Ss

B-221-60 L938636-09 Solid

Collected by Shannon McKernan
Collected date/time 09/20/17 17:20
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1026247	500	09/20/17 17:20	10/01/17 16:01	DWR

4 Cn

5 Sr

6 Qc

B-221-70 L938636-10 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 08:50
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	1	09/21/17 08:50	09/24/17 06:30	JHH

7 Gl

8 Al

9 Sc

B-222-17 L938636-11 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 11:35
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024280	1	09/26/17 08:27	09/26/17 08:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	1	09/21/17 11:35	09/24/17 06:50	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	50	09/21/17 11:35	10/01/17 18:25	DWR

B-222-25 L938636-12 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 11:55
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024282	1	09/26/17 08:15	09/26/17 08:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	1	09/21/17 11:55	09/24/17 07:09	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	25	09/21/17 11:55	10/01/17 18:45	DWR

B-222-34 L938636-13 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 13:10
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024282	1	09/26/17 08:15	09/26/17 08:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	1	09/21/17 13:10	09/24/17 07:29	JHH

B-222-42 L938636-14 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 13:00
Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024282	1	09/26/17 08:15	09/26/17 08:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	1	09/21/17 13:00	09/24/17 07:48	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	100	09/21/17 13:00	10/01/17 19:04	DWR



B-222-50 L938636-15 Solid

Collected by Shannon McKernan
 Collected date/time 09/21/17 12:55
 Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024282	1	09/26/17 08:15	09/26/17 08:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	50	09/21/17 12:55	10/01/17 19:25	DWR

1 Cp

2 Tc

3 Ss

B-916-30 L938636-16 Solid

Collected by Shannon McKernan
 Collected date/time 09/21/17 13:30
 Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1024282	1	09/26/17 08:15	09/26/17 08:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	1	09/21/17 13:30	09/24/17 08:27	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024032	25	09/21/17 13:30	10/01/17 19:44	DWR

4 Cn

5 Sr

6 Qc

TRIP BLANK-092117 L938636-17 GW

Collected by Shannon McKernan
 Collected date/time 05/15/17 00:00
 Received date/time 09/22/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024893	1	09/27/17 01:35	09/27/17 01:35	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024893	1	10/02/17 20:51	10/02/17 20:51	JAH

7 Gl

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.3		1	09/26/2017 08:36	WG1024280

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	1.15	5.73	100	10/01/2017 15:02	WG1026247
Acrylonitrile	U		0.205	1.15	100	10/01/2017 15:02	WG1026247
Benzene	U		0.0309	0.115	100	10/01/2017 15:02	WG1026247
Bromobenzene	U		0.0325	0.115	100	10/01/2017 15:02	WG1026247
Bromodichloromethane	U		0.0291	0.115	100	10/01/2017 15:02	WG1026247
Bromochloromethane	U		0.0447	0.573	100	10/01/2017 15:02	WG1026247
Bromoform	U		0.0486	0.115	100	10/01/2017 15:02	WG1026247
Bromomethane	U		0.154	0.573	100	10/01/2017 15:02	WG1026247
n-Butylbenzene	U		0.0296	0.115	100	10/01/2017 15:02	WG1026247
sec-Butylbenzene	U		0.0230	0.115	100	10/01/2017 15:02	WG1026247
tert-Butylbenzene	U		0.0236	0.115	100	10/01/2017 15:02	WG1026247
Carbon disulfide	U		0.0253	0.115	100	10/01/2017 15:02	WG1026247
Carbon tetrachloride	U		0.0376	0.115	100	10/01/2017 15:02	WG1026247
Chlorobenzene	U		0.0243	0.115	100	10/01/2017 15:02	WG1026247
Chlorodibromomethane	U		0.0428	0.115	100	10/01/2017 15:02	WG1026247
Chloroethane	U		0.108	0.573	100	10/01/2017 15:02	WG1026247
Chloroform	U		0.0262	0.573	100	10/01/2017 15:02	WG1026247
Chloromethane	U		0.0430	0.287	100	10/01/2017 15:02	WG1026247
2-Chlorotoluene	U		0.0345	0.115	100	10/01/2017 15:02	WG1026247
4-Chlorotoluene	U		0.0275	0.115	100	10/01/2017 15:02	WG1026247
1,2-Dibromo-3-Chloropropane	U		0.120	0.573	100	10/01/2017 15:02	WG1026247
1,2-Dibromoethane	U		0.0393	0.115	100	10/01/2017 15:02	WG1026247
Dibromomethane	U		0.0438	0.115	100	10/01/2017 15:02	WG1026247
1,2-Dichlorobenzene	U		0.0350	0.115	100	10/01/2017 15:02	WG1026247
1,3-Dichlorobenzene	U		0.0274	0.115	100	10/01/2017 15:02	WG1026247
1,4-Dichlorobenzene	U		0.0259	0.115	100	10/01/2017 15:02	WG1026247
Dichlorodifluoromethane	U		0.0817	0.573	100	10/01/2017 15:02	WG1026247
1,1-Dichloroethane	U		0.0228	0.115	100	10/01/2017 15:02	WG1026247
1,2-Dichloroethane	U		0.0304	0.115	100	10/01/2017 15:02	WG1026247
1,1-Dichloroethene	U		0.0347	0.115	100	10/01/2017 15:02	WG1026247
cis-1,2-Dichloroethene	0.342		0.0269	0.115	100	10/01/2017 15:02	WG1026247
trans-1,2-Dichloroethene	U		0.0303	0.115	100	10/01/2017 15:02	WG1026247
1,2-Dichloropropane	U		0.0410	0.115	100	10/01/2017 15:02	WG1026247
1,1-Dichloropropene	U		0.0363	0.115	100	10/01/2017 15:02	WG1026247
1,3-Dichloropropane	U		0.0237	0.115	100	10/01/2017 15:02	WG1026247
cis-1,3-Dichloropropene	U		0.0300	0.115	100	10/01/2017 15:02	WG1026247
trans-1,3-Dichloropropene	U		0.0306	0.115	100	10/01/2017 15:02	WG1026247
trans-1,4-Dichloro-2-butene	U	JO	0.0892	0.287	100	10/01/2017 15:02	WG1026247
2,2-Dichloropropane	U	JO	0.0320	0.115	100	10/01/2017 15:02	WG1026247
Di-isopropyl ether	U	JO	0.0284	0.115	100	10/01/2017 15:02	WG1026247
Ethylbenzene	U		0.0340	0.115	100	10/01/2017 15:02	WG1026247
Hexachloro-1,3-butadiene	U		0.0392	0.115	100	10/01/2017 15:02	WG1026247
2-Hexanone	U		0.157	1.15	100	10/01/2017 15:02	WG1026247
n-Hexane	U	JO	0.0332	1.15	100	10/01/2017 15:02	WG1026247
Iodomethane	U		0.290	1.15	100	10/01/2017 15:02	WG1026247
Isopropylbenzene	U		0.0279	0.115	100	10/01/2017 15:02	WG1026247
p-Isopropyltoluene	U		0.0234	0.115	100	10/01/2017 15:02	WG1026247
2-Butanone (MEK)	U		0.536	1.15	100	10/01/2017 15:02	WG1026247
Methylene Chloride	U		0.115	0.573	100	10/01/2017 15:02	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	0.215	1.15	100	10/01/2017 15:02	WG1026247



Collected date/time: 09/20/17 14:30

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.0243	0.115	100	10/01/2017 15:02	WG1026247
Naphthalene	U		0.115	0.573	100	10/01/2017 15:02	WG1026247
n-Propylbenzene	U		0.0236	0.115	100	10/01/2017 15:02	WG1026247
Styrene	U		0.0268	0.115	100	10/01/2017 15:02	WG1026247
1,1,1,2-Tetrachloroethane	U		0.0303	0.115	100	10/01/2017 15:02	WG1026247
1,1,2,2-Tetrachloroethane	U		0.0418	0.115	100	10/01/2017 15:02	WG1026247
1,1,2-Trichlorotrifluoroethane	U		0.0418	0.115	100	10/01/2017 15:02	WG1026247
Tetrachloroethene	7.54		0.0316	0.115	100	10/01/2017 15:02	WG1026247
Toluene	U		0.0497	0.573	100	10/01/2017 15:02	WG1026247
1,2,3-Trichlorobenzene	U		0.0351	0.115	100	10/01/2017 15:02	WG1026247
1,2,4-Trichlorobenzene	U		0.0445	0.115	100	10/01/2017 15:02	WG1026247
1,1,1-Trichloroethane	U		0.0328	0.115	100	10/01/2017 15:02	WG1026247
1,1,2-Trichloroethane	U		0.0317	0.115	100	10/01/2017 15:02	WG1026247
Trichloroethene	0.400		0.0320	0.115	100	10/01/2017 15:02	WG1026247
Trichlorofluoromethane	U		0.0438	0.573	100	10/01/2017 15:02	WG1026247
1,2,3-Trichloropropane	U		0.0849	0.287	100	10/01/2017 15:02	WG1026247
1,2,4-Trimethylbenzene	U		0.0242	0.115	100	10/01/2017 15:02	WG1026247
1,2,3-Trimethylbenzene	U		0.0329	0.115	100	10/01/2017 15:02	WG1026247
1,3,5-Trimethylbenzene	U		0.0305	0.115	100	10/01/2017 15:02	WG1026247
Vinyl acetate	U		0.274	1.15	100	10/01/2017 15:02	WG1026247
Vinyl chloride	U		0.0334	0.115	100	10/01/2017 15:02	WG1026247
Xylenes, Total	U		0.0800	0.344	100	10/01/2017 15:02	WG1026247
<i>(S) Toluene-d8</i>	105			80.0-120		10/01/2017 15:02	WG1026247
<i>(S) Dibromofluoromethane</i>	99.2			74.0-131		10/01/2017 15:02	WG1026247
<i>(S) 4-Bromofluorobenzene</i>	102			64.0-132		10/01/2017 15:02	WG1026247

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

L938636-01 WG1026247: Target compound too high to run at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.3		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO J3	0.293	1.46	25	10/01/2017 14:42	WG1026247
Acrylonitrile	U		0.0525	0.293	25	10/01/2017 14:42	WG1026247
Benzene	U		0.00791	0.0293	25	10/01/2017 14:42	WG1026247
Bromobenzene	U		0.00832	0.0293	25	10/01/2017 14:42	WG1026247
Bromodichloromethane	U		0.00744	0.0293	25	10/01/2017 14:42	WG1026247
Bromochloromethane	U		0.0114	0.146	25	10/01/2017 14:42	WG1026247
Bromoform	U		0.0124	0.0293	25	10/01/2017 14:42	WG1026247
Bromomethane	U		0.0393	0.146	25	10/01/2017 14:42	WG1026247
n-Butylbenzene	U		0.00756	0.0293	25	10/01/2017 14:42	WG1026247
sec-Butylbenzene	U		0.00588	0.0293	25	10/01/2017 14:42	WG1026247
tert-Butylbenzene	U		0.00603	0.0293	25	10/01/2017 14:42	WG1026247
Carbon disulfide	U		0.00647	0.0293	25	10/01/2017 14:42	WG1026247
Carbon tetrachloride	U		0.00961	0.0293	25	10/01/2017 14:42	WG1026247
Chlorobenzene	U		0.00621	0.0293	25	10/01/2017 14:42	WG1026247
Chlorodibromomethane	U		0.0109	0.0293	25	10/01/2017 14:42	WG1026247
Chloroethane	U		0.0277	0.146	25	10/01/2017 14:42	WG1026247
Chloroform	U		0.00670	0.146	25	10/01/2017 14:42	WG1026247
Chloromethane	U		0.0110	0.0732	25	10/01/2017 14:42	WG1026247
2-Chlorotoluene	U		0.00881	0.0293	25	10/01/2017 14:42	WG1026247
4-Chlorotoluene	U		0.00703	0.0293	25	10/01/2017 14:42	WG1026247
1,2-Dibromo-3-Chloropropane	U		0.0307	0.146	25	10/01/2017 14:42	WG1026247
1,2-Dibromoethane	U		0.0101	0.0293	25	10/01/2017 14:42	WG1026247
Dibromomethane	U		0.0112	0.0293	25	10/01/2017 14:42	WG1026247
1,2-Dichlorobenzene	U		0.00893	0.0293	25	10/01/2017 14:42	WG1026247
1,3-Dichlorobenzene	U		0.00701	0.0293	25	10/01/2017 14:42	WG1026247
1,4-Dichlorobenzene	U		0.00662	0.0293	25	10/01/2017 14:42	WG1026247
Dichlorodifluoromethane	U		0.0209	0.146	25	10/01/2017 14:42	WG1026247
1,1-Dichloroethane	U		0.00584	0.0293	25	10/01/2017 14:42	WG1026247
1,2-Dichloroethane	U		0.00776	0.0293	25	10/01/2017 14:42	WG1026247
1,1-Dichloroethene	U		0.00888	0.0293	25	10/01/2017 14:42	WG1026247
cis-1,2-Dichloroethene	1.37		0.00689	0.0293	25	10/01/2017 14:42	WG1026247
trans-1,2-Dichloroethene	U		0.00773	0.0293	25	10/01/2017 14:42	WG1026247
1,2-Dichloropropane	U		0.0105	0.0293	25	10/01/2017 14:42	WG1026247
1,1-Dichloropropene	U		0.00928	0.0293	25	10/01/2017 14:42	WG1026247
1,3-Dichloropropane	U		0.00607	0.0293	25	10/01/2017 14:42	WG1026247
cis-1,3-Dichloropropene	U		0.00768	0.0293	25	10/01/2017 14:42	WG1026247
trans-1,3-Dichloropropene	U		0.00783	0.0293	25	10/01/2017 14:42	WG1026247
trans-1,4-Dichloro-2-butene	U		0.0227	0.0732	25	10/01/2017 14:42	WG1026247
2,2-Dichloropropane	U	JO	0.00818	0.0293	25	10/01/2017 14:42	WG1026247
Di-isopropyl ether	U	JO	0.00727	0.0293	25	10/01/2017 14:42	WG1026247
Ethylbenzene	U		0.00869	0.0293	25	10/01/2017 14:42	WG1026247
Hexachloro-1,3-butadiene	U		0.0100	0.0293	25	10/01/2017 14:42	WG1026247
2-Hexanone	U		0.0401	0.293	25	10/01/2017 14:42	WG1026247
n-Hexane	U	JO	0.00850	0.293	25	10/01/2017 14:42	WG1026247
Iodomethane	U		0.0741	0.293	25	10/01/2017 14:42	WG1026247
Isopropylbenzene	U		0.00712	0.0293	25	10/01/2017 14:42	WG1026247
p-Isopropyltoluene	U		0.00598	0.0293	25	10/01/2017 14:42	WG1026247
2-Butanone (MEK)	U		0.137	0.293	25	10/01/2017 14:42	WG1026247
Methylene Chloride	U		0.0293	0.146	25	10/01/2017 14:42	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	0.0551	0.293	25	10/01/2017 14:42	WG1026247

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/20/17 14:50

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.00621	0.0293	25	10/01/2017 14:42	WG1026247
Naphthalene	U		0.0293	0.146	25	10/01/2017 14:42	WG1026247
n-Propylbenzene	U		0.00603	0.0293	25	10/01/2017 14:42	WG1026247
Styrene	U		0.00686	0.0293	25	10/01/2017 14:42	WG1026247
1,1,1,2-Tetrachloroethane	U		0.00773	0.0293	25	10/01/2017 14:42	WG1026247
1,1,2,2-Tetrachloroethane	U		0.0107	0.0293	25	10/01/2017 14:42	WG1026247
1,1,2-Trichlorotrifluoroethane	U		0.0107	0.0293	25	10/01/2017 14:42	WG1026247
Tetrachloroethene	0.539		0.00809	0.0293	25	10/01/2017 14:42	WG1026247
Toluene	U		0.0127	0.146	25	10/01/2017 14:42	WG1026247
1,2,3-Trichlorobenzene	U		0.00896	0.0293	25	10/01/2017 14:42	WG1026247
1,2,4-Trichlorobenzene	U		0.0114	0.0293	25	10/01/2017 14:42	WG1026247
1,1,1-Trichloroethane	U		0.00838	0.0293	25	10/01/2017 14:42	WG1026247
1,1,2-Trichloroethane	U		0.00811	0.0293	25	10/01/2017 14:42	WG1026247
Trichloroethene	0.250		0.00818	0.0293	25	10/01/2017 14:42	WG1026247
Trichlorofluoromethane	U		0.0112	0.146	25	10/01/2017 14:42	WG1026247
1,2,3-Trichloropropane	U		0.0217	0.0732	25	10/01/2017 14:42	WG1026247
1,2,4-Trimethylbenzene	U		0.00619	0.0293	25	10/01/2017 14:42	WG1026247
1,2,3-Trimethylbenzene	U		0.00841	0.0293	25	10/01/2017 14:42	WG1026247
1,3,5-Trimethylbenzene	U		0.00779	0.0293	25	10/01/2017 14:42	WG1026247
Vinyl acetate	U		0.0701	0.293	25	10/01/2017 14:42	WG1026247
Vinyl chloride	0.0805		0.00853	0.0293	25	10/01/2017 14:42	WG1026247
Xylenes, Total	U		0.0204	0.0879	25	10/01/2017 14:42	WG1026247
<i>(S) Toluene-d8</i>	113			80.0-120		10/01/2017 14:42	WG1026247
<i>(S) Dibromofluoromethane</i>	98.9			74.0-131		10/01/2017 14:42	WG1026247
<i>(S) 4-Bromofluorobenzene</i>	101			64.0-132		10/01/2017 14:42	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938636-02 WG1026247: Target compound too high to run at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.9		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	11.5	57.5	1000	09/29/2017 19:48	WG1026247
Acrylonitrile	U	JO	2.06	11.5	1000	09/29/2017 19:48	WG1026247
Benzene	U		0.311	1.15	1000	09/29/2017 19:48	WG1026247
Bromobenzene	U		0.327	1.15	1000	09/29/2017 19:48	WG1026247
Bromodichloromethane	U		0.292	1.15	1000	09/29/2017 19:48	WG1026247
Bromochloromethane	U		0.449	5.75	1000	09/29/2017 19:48	WG1026247
Bromoform	U		0.488	1.15	1000	09/29/2017 19:48	WG1026247
Bromomethane	U	JO	1.54	5.75	1000	09/29/2017 19:48	WG1026247
n-Butylbenzene	U		0.297	1.15	1000	09/29/2017 19:48	WG1026247
sec-Butylbenzene	U		0.231	1.15	1000	09/29/2017 19:48	WG1026247
tert-Butylbenzene	U		0.237	1.15	1000	09/29/2017 19:48	WG1026247
Carbon disulfide	U		0.254	1.15	1000	09/29/2017 19:48	WG1026247
Carbon tetrachloride	U		0.377	1.15	1000	09/29/2017 19:48	WG1026247
Chlorobenzene	U		0.244	1.15	1000	09/29/2017 19:48	WG1026247
Chlorodibromomethane	U		0.429	1.15	1000	09/29/2017 19:48	WG1026247
Chloroethane	U		1.09	5.75	1000	09/29/2017 19:48	WG1026247
Chloroform	U		0.263	5.75	1000	09/29/2017 19:48	WG1026247
Chloromethane	U		0.431	2.88	1000	09/29/2017 19:48	WG1026247
2-Chlorotoluene	U		0.346	1.15	1000	09/29/2017 19:48	WG1026247
4-Chlorotoluene	U		0.276	1.15	1000	09/29/2017 19:48	WG1026247
1,2-Dibromo-3-Chloropropane	U		1.21	5.75	1000	09/29/2017 19:48	WG1026247
1,2-Dibromoethane	U		0.395	1.15	1000	09/29/2017 19:48	WG1026247
Dibromomethane	U		0.439	1.15	1000	09/29/2017 19:48	WG1026247
1,2-Dichlorobenzene	U		0.351	1.15	1000	09/29/2017 19:48	WG1026247
1,3-Dichlorobenzene	U		0.275	1.15	1000	09/29/2017 19:48	WG1026247
1,4-Dichlorobenzene	U		0.260	1.15	1000	09/29/2017 19:48	WG1026247
Dichlorodifluoromethane	U		0.820	5.75	1000	09/29/2017 19:48	WG1026247
1,1-Dichloroethane	U		0.229	1.15	1000	09/29/2017 19:48	WG1026247
1,2-Dichloroethane	U		0.305	1.15	1000	09/29/2017 19:48	WG1026247
1,1-Dichloroethene	U		0.349	1.15	1000	09/29/2017 19:48	WG1026247
cis-1,2-Dichloroethene	2.56		0.270	1.15	1000	09/29/2017 19:48	WG1026247
trans-1,2-Dichloroethene	U		0.304	1.15	1000	09/29/2017 19:48	WG1026247
1,2-Dichloropropane	U		0.412	1.15	1000	09/29/2017 19:48	WG1026247
1,1-Dichloropropene	U		0.365	1.15	1000	09/29/2017 19:48	WG1026247
1,3-Dichloropropane	U		0.238	1.15	1000	09/29/2017 19:48	WG1026247
cis-1,3-Dichloropropene	U		0.301	1.15	1000	09/29/2017 19:48	WG1026247
trans-1,3-Dichloropropene	U		0.307	1.15	1000	09/29/2017 19:48	WG1026247
trans-1,4-Dichloro-2-butene	U		0.895	2.88	1000	09/29/2017 19:48	WG1026247
2,2-Dichloropropane	U		0.321	1.15	1000	09/29/2017 19:48	WG1026247
Di-isopropyl ether	U		0.285	1.15	1000	09/29/2017 19:48	WG1026247
Ethylbenzene	U		0.342	1.15	1000	09/29/2017 19:48	WG1026247
Hexachloro-1,3-butadiene	U		0.393	1.15	1000	09/29/2017 19:48	WG1026247
2-Hexanone	U	JO	1.58	11.5	1000	09/29/2017 19:48	WG1026247
n-Hexane	U		0.334	11.5	1000	09/29/2017 19:48	WG1026247
Iodomethane	U		2.91	11.5	1000	09/29/2017 19:48	WG1026247
Isopropylbenzene	U		0.280	1.15	1000	09/29/2017 19:48	WG1026247
p-Isopropyltoluene	U		0.235	1.15	1000	09/29/2017 19:48	WG1026247
2-Butanone (MEK)	U	JO	5.38	11.5	1000	09/29/2017 19:48	WG1026247
Methylene Chloride	U		1.15	5.75	1000	09/29/2017 19:48	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	2.16	11.5	1000	09/29/2017 19:48	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/20/17 14:55

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U	<u>JO</u>	0.244	1.15	1000	09/29/2017 19:48	WG1026247
Naphthalene	U		1.15	5.75	1000	09/29/2017 19:48	WG1026247
n-Propylbenzene	U		0.237	1.15	1000	09/29/2017 19:48	WG1026247
Styrene	U		0.269	1.15	1000	09/29/2017 19:48	WG1026247
1,1,1,2-Tetrachloroethane	U		0.304	1.15	1000	09/29/2017 19:48	WG1026247
1,1,2,2-Tetrachloroethane	U		0.420	1.15	1000	09/29/2017 19:48	WG1026247
1,1,2-Trichlorotrifluoroethane	U		0.420	1.15	1000	09/29/2017 19:48	WG1026247
Tetrachloroethene	25.8		0.318	1.15	1000	09/29/2017 19:48	WG1026247
Toluene	U		0.499	5.75	1000	09/29/2017 19:48	WG1026247
1,2,3-Trichlorobenzene	U		0.352	1.15	1000	09/29/2017 19:48	WG1026247
1,2,4-Trichlorobenzene	U		0.446	1.15	1000	09/29/2017 19:48	WG1026247
1,1,1-Trichloroethane	U		0.329	1.15	1000	09/29/2017 19:48	WG1026247
1,1,2-Trichloroethane	U		0.319	1.15	1000	09/29/2017 19:48	WG1026247
Trichloroethene	0.984	<u>J</u>	0.321	1.15	1000	09/29/2017 19:48	WG1026247
Trichlorofluoromethane	U		0.439	5.75	1000	09/29/2017 19:48	WG1026247
1,2,3-Trichloropropane	U		0.852	2.88	1000	09/29/2017 19:48	WG1026247
1,2,4-Trimethylbenzene	U		0.243	1.15	1000	09/29/2017 19:48	WG1026247
1,2,3-Trimethylbenzene	U		0.330	1.15	1000	09/29/2017 19:48	WG1026247
1,3,5-Trimethylbenzene	U		0.306	1.15	1000	09/29/2017 19:48	WG1026247
Vinyl acetate	U		2.75	11.5	1000	09/29/2017 19:48	WG1026247
Vinyl chloride	U		0.335	1.15	1000	09/29/2017 19:48	WG1026247
Xylenes, Total	U		0.803	3.45	1000	09/29/2017 19:48	WG1026247
(S) Toluene-d8	116			80.0-120		09/29/2017 19:48	WG1026247
(S) Dibromofluoromethane	99.6			74.0-131		09/29/2017 19:48	WG1026247
(S) 4-Bromofluorobenzene	108			64.0-132		09/29/2017 19:48	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938636-03 WG1026247: Target compound too high to run at a lower dilution.



Collected date/time: 09/20/17 15:15

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	11.2	56.0	1000	09/29/2017 20:08	WG1026247
Acrylonitrile	U	JO	2.00	11.2	1000	09/29/2017 20:08	WG1026247
Benzene	U		0.302	1.12	1000	09/29/2017 20:08	WG1026247
Bromobenzene	U		0.318	1.12	1000	09/29/2017 20:08	WG1026247
Bromodichloromethane	U		0.284	1.12	1000	09/29/2017 20:08	WG1026247
Bromochloromethane	U		0.437	5.60	1000	09/29/2017 20:08	WG1026247
Bromoform	U		0.475	1.12	1000	09/29/2017 20:08	WG1026247
Bromomethane	U	JO	1.50	5.60	1000	09/29/2017 20:08	WG1026247
n-Butylbenzene	U		0.289	1.12	1000	09/29/2017 20:08	WG1026247
sec-Butylbenzene	U		0.225	1.12	1000	09/29/2017 20:08	WG1026247
tert-Butylbenzene	U		0.231	1.12	1000	09/29/2017 20:08	WG1026247
Carbon disulfide	U		0.247	1.12	1000	09/29/2017 20:08	WG1026247
Carbon tetrachloride	U		0.367	1.12	1000	09/29/2017 20:08	WG1026247
Chlorobenzene	U		0.237	1.12	1000	09/29/2017 20:08	WG1026247
Chlorodibromomethane	U		0.418	1.12	1000	09/29/2017 20:08	WG1026247
Chloroethane	U		1.06	5.60	1000	09/29/2017 20:08	WG1026247
Chloroform	U		0.256	5.60	1000	09/29/2017 20:08	WG1026247
Chloromethane	U		0.420	2.80	1000	09/29/2017 20:08	WG1026247
2-Chlorotoluene	U		0.337	1.12	1000	09/29/2017 20:08	WG1026247
4-Chlorotoluene	U		0.269	1.12	1000	09/29/2017 20:08	WG1026247
1,2-Dibromo-3-Chloropropane	U		1.18	5.60	1000	09/29/2017 20:08	WG1026247
1,2-Dibromoethane	U		0.384	1.12	1000	09/29/2017 20:08	WG1026247
Dibromomethane	U		0.428	1.12	1000	09/29/2017 20:08	WG1026247
1,2-Dichlorobenzene	U		0.341	1.12	1000	09/29/2017 20:08	WG1026247
1,3-Dichlorobenzene	U		0.268	1.12	1000	09/29/2017 20:08	WG1026247
1,4-Dichlorobenzene	U		0.253	1.12	1000	09/29/2017 20:08	WG1026247
Dichlorodifluoromethane	U		0.798	5.60	1000	09/29/2017 20:08	WG1026247
1,1-Dichloroethane	U		0.223	1.12	1000	09/29/2017 20:08	WG1026247
1,2-Dichloroethane	U		0.297	1.12	1000	09/29/2017 20:08	WG1026247
1,1-Dichloroethene	U		0.339	1.12	1000	09/29/2017 20:08	WG1026247
cis-1,2-Dichloroethene	1.93		0.263	1.12	1000	09/29/2017 20:08	WG1026247
trans-1,2-Dichloroethene	U		0.296	1.12	1000	09/29/2017 20:08	WG1026247
1,2-Dichloropropane	U		0.401	1.12	1000	09/29/2017 20:08	WG1026247
1,1-Dichloropropene	U		0.355	1.12	1000	09/29/2017 20:08	WG1026247
1,3-Dichloropropane	U		0.232	1.12	1000	09/29/2017 20:08	WG1026247
cis-1,3-Dichloropropene	U		0.293	1.12	1000	09/29/2017 20:08	WG1026247
trans-1,3-Dichloropropene	U		0.299	1.12	1000	09/29/2017 20:08	WG1026247
trans-1,4-Dichloro-2-butene	U		0.871	2.80	1000	09/29/2017 20:08	WG1026247
2,2-Dichloropropane	U		0.312	1.12	1000	09/29/2017 20:08	WG1026247
Di-isopropyl ether	U		0.278	1.12	1000	09/29/2017 20:08	WG1026247
Ethylbenzene	U		0.332	1.12	1000	09/29/2017 20:08	WG1026247
Hexachloro-1,3-butadiene	U		0.383	1.12	1000	09/29/2017 20:08	WG1026247
2-Hexanone	U	JO	1.53	11.2	1000	09/29/2017 20:08	WG1026247
n-Hexane	U		0.325	11.2	1000	09/29/2017 20:08	WG1026247
Iodomethane	U		2.83	11.2	1000	09/29/2017 20:08	WG1026247
Isopropylbenzene	U		0.272	1.12	1000	09/29/2017 20:08	WG1026247
p-Isopropyltoluene	U		0.228	1.12	1000	09/29/2017 20:08	WG1026247
2-Butanone (MEK)	U	JO	5.24	11.2	1000	09/29/2017 20:08	WG1026247
Methylene Chloride	U		1.12	5.60	1000	09/29/2017 20:08	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	2.10	11.2	1000	09/29/2017 20:08	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/20/17 15:15

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U	<u>JO</u>	0.237	1.12	1000	09/29/2017 20:08	WG1026247
Naphthalene	U		1.12	5.60	1000	09/29/2017 20:08	WG1026247
n-Propylbenzene	U		0.231	1.12	1000	09/29/2017 20:08	WG1026247
Styrene	U		0.262	1.12	1000	09/29/2017 20:08	WG1026247
1,1,1,2-Tetrachloroethane	U		0.296	1.12	1000	09/29/2017 20:08	WG1026247
1,1,2,2-Tetrachloroethane	U		0.409	1.12	1000	09/29/2017 20:08	WG1026247
1,1,2-Trichlorotrifluoroethane	U		0.409	1.12	1000	09/29/2017 20:08	WG1026247
Tetrachloroethene	21.8		0.309	1.12	1000	09/29/2017 20:08	WG1026247
Toluene	U		0.486	5.60	1000	09/29/2017 20:08	WG1026247
1,2,3-Trichlorobenzene	U		0.343	1.12	1000	09/29/2017 20:08	WG1026247
1,2,4-Trichlorobenzene	U		0.434	1.12	1000	09/29/2017 20:08	WG1026247
1,1,1-Trichloroethane	U		0.320	1.12	1000	09/29/2017 20:08	WG1026247
1,1,2-Trichloroethane	U		0.310	1.12	1000	09/29/2017 20:08	WG1026247
Trichloroethene	0.835	<u>J</u>	0.312	1.12	1000	09/29/2017 20:08	WG1026247
Trichlorofluoromethane	U		0.428	5.60	1000	09/29/2017 20:08	WG1026247
1,2,3-Trichloropropane	U		0.829	2.80	1000	09/29/2017 20:08	WG1026247
1,2,4-Trimethylbenzene	U		0.236	1.12	1000	09/29/2017 20:08	WG1026247
1,2,3-Trimethylbenzene	U		0.321	1.12	1000	09/29/2017 20:08	WG1026247
1,3,5-Trimethylbenzene	U		0.298	1.12	1000	09/29/2017 20:08	WG1026247
Vinyl acetate	U		2.68	11.2	1000	09/29/2017 20:08	WG1026247
Vinyl chloride	U		0.326	1.12	1000	09/29/2017 20:08	WG1026247
Xylenes, Total	U		0.781	3.36	1000	09/29/2017 20:08	WG1026247
(S) Toluene-d8	116			80.0-120		09/29/2017 20:08	WG1026247
(S) Dibromofluoromethane	101			74.0-131		09/29/2017 20:08	WG1026247
(S) 4-Bromofluorobenzene	111			64.0-132		09/29/2017 20:08	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938636-04 WG1026247: Target compound too high to run at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	85.0		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	2.35	11.8	200	10/01/2017 15:21	WG1026247
Acrylonitrile	U		0.421	2.35	200	10/01/2017 15:21	WG1026247
Benzene	U		0.0635	0.235	200	10/01/2017 15:21	WG1026247
Bromobenzene	U		0.0668	0.235	200	10/01/2017 15:21	WG1026247
Bromodichloromethane	U		0.0597	0.235	200	10/01/2017 15:21	WG1026247
Bromochloromethane	U		0.0917	1.18	200	10/01/2017 15:21	WG1026247
Bromoform	U		0.0997	0.235	200	10/01/2017 15:21	WG1026247
Bromomethane	U		0.315	1.18	200	10/01/2017 15:21	WG1026247
n-Butylbenzene	U		0.0607	0.235	200	10/01/2017 15:21	WG1026247
sec-Butylbenzene	U		0.0473	0.235	200	10/01/2017 15:21	WG1026247
tert-Butylbenzene	U		0.0484	0.235	200	10/01/2017 15:21	WG1026247
Carbon disulfide	U		0.0520	0.235	200	10/01/2017 15:21	WG1026247
Carbon tetrachloride	U		0.0771	0.235	200	10/01/2017 15:21	WG1026247
Chlorobenzene	U		0.0499	0.235	200	10/01/2017 15:21	WG1026247
Chlorodibromomethane	U		0.0877	0.235	200	10/01/2017 15:21	WG1026247
Chloroethane	U		0.222	1.18	200	10/01/2017 15:21	WG1026247
Chloroform	U		0.0539	1.18	200	10/01/2017 15:21	WG1026247
Chloromethane	U		0.0882	0.588	200	10/01/2017 15:21	WG1026247
2-Chlorotoluene	U		0.0708	0.235	200	10/01/2017 15:21	WG1026247
4-Chlorotoluene	U		0.0564	0.235	200	10/01/2017 15:21	WG1026247
1,2-Dibromo-3-Chloropropane	U		0.247	1.18	200	10/01/2017 15:21	WG1026247
1,2-Dibromoethane	U		0.0807	0.235	200	10/01/2017 15:21	WG1026247
Dibromomethane	U		0.0898	0.235	200	10/01/2017 15:21	WG1026247
1,2-Dichlorobenzene	U		0.0717	0.235	200	10/01/2017 15:21	WG1026247
1,3-Dichlorobenzene	U		0.0562	0.235	200	10/01/2017 15:21	WG1026247
1,4-Dichlorobenzene	U		0.0531	0.235	200	10/01/2017 15:21	WG1026247
Dichlorodifluoromethane	U		0.168	1.18	200	10/01/2017 15:21	WG1026247
1,1-Dichloroethane	U		0.0468	0.235	200	10/01/2017 15:21	WG1026247
1,2-Dichloroethane	U		0.0623	0.235	200	10/01/2017 15:21	WG1026247
1,1-Dichloroethene	U		0.0713	0.235	200	10/01/2017 15:21	WG1026247
cis-1,2-Dichloroethene	0.438		0.0553	0.235	200	10/01/2017 15:21	WG1026247
trans-1,2-Dichloroethene	U		0.0621	0.235	200	10/01/2017 15:21	WG1026247
1,2-Dichloropropane	U		0.0842	0.235	200	10/01/2017 15:21	WG1026247
1,1-Dichloropropene	U		0.0745	0.235	200	10/01/2017 15:21	WG1026247
1,3-Dichloropropane	U		0.0487	0.235	200	10/01/2017 15:21	WG1026247
cis-1,3-Dichloropropene	U		0.0616	0.235	200	10/01/2017 15:21	WG1026247
trans-1,3-Dichloropropene	U		0.0628	0.235	200	10/01/2017 15:21	WG1026247
trans-1,4-Dichloro-2-butene	U	JO	0.183	0.588	200	10/01/2017 15:21	WG1026247
2,2-Dichloropropane	U	JO	0.0656	0.235	200	10/01/2017 15:21	WG1026247
Di-isopropyl ether	U	JO	0.0583	0.235	200	10/01/2017 15:21	WG1026247
Ethylbenzene	U		0.0698	0.235	200	10/01/2017 15:21	WG1026247
Hexachloro-1,3-butadiene	U		0.0804	0.235	200	10/01/2017 15:21	WG1026247
2-Hexanone	U		0.322	2.35	200	10/01/2017 15:21	WG1026247
n-Hexane	U	JO	0.0682	2.35	200	10/01/2017 15:21	WG1026247
Iodomethane	U		0.595	2.35	200	10/01/2017 15:21	WG1026247
Isopropylbenzene	U		0.0571	0.235	200	10/01/2017 15:21	WG1026247
p-Isopropyltoluene	U		0.0480	0.235	200	10/01/2017 15:21	WG1026247
2-Butanone (MEK)	U		1.10	2.35	200	10/01/2017 15:21	WG1026247
Methylene Chloride	U		0.235	1.18	200	10/01/2017 15:21	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	0.442	2.35	200	10/01/2017 15:21	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/20/17 15:20

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.0499	0.235	200	10/01/2017 15:21	WG1026247
Naphthalene	U		0.235	1.18	200	10/01/2017 15:21	WG1026247
n-Propylbenzene	U		0.0484	0.235	200	10/01/2017 15:21	WG1026247
Styrene	U		0.0550	0.235	200	10/01/2017 15:21	WG1026247
1,1,1,2-Tetrachloroethane	U		0.0621	0.235	200	10/01/2017 15:21	WG1026247
1,1,2,2-Tetrachloroethane	U		0.0858	0.235	200	10/01/2017 15:21	WG1026247
1,1,2-Trichlorotrifluoroethane	U		0.0858	0.235	200	10/01/2017 15:21	WG1026247
Tetrachloroethene	9.02		0.0649	0.235	200	10/01/2017 15:21	WG1026247
Toluene	U		0.102	1.18	200	10/01/2017 15:21	WG1026247
1,2,3-Trichlorobenzene	U		0.0720	0.235	200	10/01/2017 15:21	WG1026247
1,2,4-Trichlorobenzene	U		0.0912	0.235	200	10/01/2017 15:21	WG1026247
1,1,1-Trichloroethane	U		0.0673	0.235	200	10/01/2017 15:21	WG1026247
1,1,2-Trichloroethane	U		0.0651	0.235	200	10/01/2017 15:21	WG1026247
Trichloroethene	0.447		0.0656	0.235	200	10/01/2017 15:21	WG1026247
Trichlorofluoromethane	U		0.0898	1.18	200	10/01/2017 15:21	WG1026247
1,2,3-Trichloropropane	U		0.174	0.588	200	10/01/2017 15:21	WG1026247
1,2,4-Trimethylbenzene	U		0.0496	0.235	200	10/01/2017 15:21	WG1026247
1,2,3-Trimethylbenzene	U		0.0675	0.235	200	10/01/2017 15:21	WG1026247
1,3,5-Trimethylbenzene	U		0.0626	0.235	200	10/01/2017 15:21	WG1026247
Vinyl acetate	U		0.562	2.35	200	10/01/2017 15:21	WG1026247
Vinyl chloride	U		0.0684	0.235	200	10/01/2017 15:21	WG1026247
Xylenes, Total	U		0.165	0.705	200	10/01/2017 15:21	WG1026247
(S) Toluene-d8	104			80.0-120		10/01/2017 15:21	WG1026247
(S) Dibromofluoromethane	103			74.0-131		10/01/2017 15:21	WG1026247
(S) 4-Bromofluorobenzene	102			64.0-132		10/01/2017 15:21	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938636-05 WG1026247: Target compound too high to run at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.2		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	110	548	10000	09/29/2017 20:47	WG1026247
Acrylonitrile	U	JO	19.6	110	10000	09/29/2017 20:47	WG1026247
Benzene	U		2.96	11.0	10000	09/29/2017 20:47	WG1026247
Bromobenzene	U		3.11	11.0	10000	09/29/2017 20:47	WG1026247
Bromodichloromethane	U		2.79	11.0	10000	09/29/2017 20:47	WG1026247
Bromochloromethane	U		4.28	54.8	10000	09/29/2017 20:47	WG1026247
Bromoform	U		4.65	11.0	10000	09/29/2017 20:47	WG1026247
Bromomethane	U	JO	14.7	54.8	10000	09/29/2017 20:47	WG1026247
n-Butylbenzene	U		2.83	11.0	10000	09/29/2017 20:47	WG1026247
sec-Butylbenzene	U		2.20	11.0	10000	09/29/2017 20:47	WG1026247
tert-Butylbenzene	U		2.26	11.0	10000	09/29/2017 20:47	WG1026247
Carbon disulfide	U		2.42	11.0	10000	09/29/2017 20:47	WG1026247
Carbon tetrachloride	U		3.60	11.0	10000	09/29/2017 20:47	WG1026247
Chlorobenzene	U		2.33	11.0	10000	09/29/2017 20:47	WG1026247
Chlorodibromomethane	U		4.09	11.0	10000	09/29/2017 20:47	WG1026247
Chloroethane	U		10.4	54.8	10000	09/29/2017 20:47	WG1026247
Chloroform	U		2.51	54.8	10000	09/29/2017 20:47	WG1026247
Chloromethane	U		4.11	27.4	10000	09/29/2017 20:47	WG1026247
2-Chlorotoluene	U		3.30	11.0	10000	09/29/2017 20:47	WG1026247
4-Chlorotoluene	U		2.63	11.0	10000	09/29/2017 20:47	WG1026247
1,2-Dibromo-3-Chloropropane	U		11.5	54.8	10000	09/29/2017 20:47	WG1026247
1,2-Dibromoethane	U		3.76	11.0	10000	09/29/2017 20:47	WG1026247
Dibromomethane	U		4.19	11.0	10000	09/29/2017 20:47	WG1026247
1,2-Dichlorobenzene	U		3.35	11.0	10000	09/29/2017 20:47	WG1026247
1,3-Dichlorobenzene	U		2.62	11.0	10000	09/29/2017 20:47	WG1026247
1,4-Dichlorobenzene	U		2.48	11.0	10000	09/29/2017 20:47	WG1026247
Dichlorodifluoromethane	U		7.82	54.8	10000	09/29/2017 20:47	WG1026247
1,1-Dichloroethane	U		2.18	11.0	10000	09/29/2017 20:47	WG1026247
1,2-Dichloroethane	U		2.91	11.0	10000	09/29/2017 20:47	WG1026247
1,1-Dichloroethene	U		3.32	11.0	10000	09/29/2017 20:47	WG1026247
cis-1,2-Dichloroethene	U		2.58	11.0	10000	09/29/2017 20:47	WG1026247
trans-1,2-Dichloroethene	U		2.90	11.0	10000	09/29/2017 20:47	WG1026247
1,2-Dichloropropane	U		3.93	11.0	10000	09/29/2017 20:47	WG1026247
1,1-Dichloropropene	U		3.48	11.0	10000	09/29/2017 20:47	WG1026247
1,3-Dichloropropane	U		2.27	11.0	10000	09/29/2017 20:47	WG1026247
cis-1,3-Dichloropropene	U		2.87	11.0	10000	09/29/2017 20:47	WG1026247
trans-1,3-Dichloropropene	U		2.93	11.0	10000	09/29/2017 20:47	WG1026247
trans-1,4-Dichloro-2-butene	U		8.53	27.4	10000	09/29/2017 20:47	WG1026247
2,2-Dichloropropane	U		3.06	11.0	10000	09/29/2017 20:47	WG1026247
Di-isopropyl ether	U		2.72	11.0	10000	09/29/2017 20:47	WG1026247
Ethylbenzene	U		3.26	11.0	10000	09/29/2017 20:47	WG1026247
Hexachloro-1,3-butadiene	U		3.75	11.0	10000	09/29/2017 20:47	WG1026247
2-Hexanone	U	JO	15.0	110	10000	09/29/2017 20:47	WG1026247
n-Hexane	U		3.18	110	10000	09/29/2017 20:47	WG1026247
Iodomethane	U		27.7	110	10000	09/29/2017 20:47	WG1026247
Isopropylbenzene	U		2.67	11.0	10000	09/29/2017 20:47	WG1026247
p-Isopropyltoluene	U		2.24	11.0	10000	09/29/2017 20:47	WG1026247
2-Butanone (MEK)	U	JO	51.3	110	10000	09/29/2017 20:47	WG1026247
Methylene Chloride	U		11.0	54.8	10000	09/29/2017 20:47	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	20.6	110	10000	09/29/2017 20:47	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/20/17 15:40

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U	<u>JO</u>	2.33	11.0	10000	09/29/2017 20:47	WG1026247
Naphthalene	U		11.0	54.8	10000	09/29/2017 20:47	WG1026247
n-Propylbenzene	U		2.26	11.0	10000	09/29/2017 20:47	WG1026247
Styrene	U		2.57	11.0	10000	09/29/2017 20:47	WG1026247
1,1,1,2-Tetrachloroethane	U		2.90	11.0	10000	09/29/2017 20:47	WG1026247
1,1,2,2-Tetrachloroethane	U		4.00	11.0	10000	09/29/2017 20:47	WG1026247
1,1,2-Trichlorotrifluoroethane	U		4.00	11.0	10000	09/29/2017 20:47	WG1026247
Tetrachloroethene	8270		60.5	219	200000	10/01/2017 16:20	WG1026247
Toluene	U		4.76	54.8	10000	09/29/2017 20:47	WG1026247
1,2,3-Trichlorobenzene	U		3.36	11.0	10000	09/29/2017 20:47	WG1026247
1,2,4-Trichlorobenzene	U		4.26	11.0	10000	09/29/2017 20:47	WG1026247
1,1,1-Trichloroethane	U		3.14	11.0	10000	09/29/2017 20:47	WG1026247
1,1,2-Trichloroethane	U		3.04	11.0	10000	09/29/2017 20:47	WG1026247
Trichloroethene	4.43	<u>J</u>	3.06	11.0	10000	09/29/2017 20:47	WG1026247
Trichlorofluoromethane	U		4.19	54.8	10000	09/29/2017 20:47	WG1026247
1,2,3-Trichloropropane	U		8.13	27.4	10000	09/29/2017 20:47	WG1026247
1,2,4-Trimethylbenzene	U		2.31	11.0	10000	09/29/2017 20:47	WG1026247
1,2,3-Trimethylbenzene	U		3.15	11.0	10000	09/29/2017 20:47	WG1026247
1,3,5-Trimethylbenzene	U		2.92	11.0	10000	09/29/2017 20:47	WG1026247
Vinyl acetate	U		26.2	110	10000	09/29/2017 20:47	WG1026247
Vinyl chloride	U		3.19	11.0	10000	09/29/2017 20:47	WG1026247
Xylenes, Total	U		7.66	32.9	10000	09/29/2017 20:47	WG1026247
(S) Toluene-d8	108			80.0-120		10/01/2017 16:20	WG1026247
(S) Toluene-d8	116			80.0-120		09/29/2017 20:47	WG1026247
(S) Dibromofluoromethane	99.5			74.0-131		10/01/2017 16:20	WG1026247
(S) Dibromofluoromethane	102			74.0-131		09/29/2017 20:47	WG1026247
(S) 4-Bromofluorobenzene	110			64.0-132		09/29/2017 20:47	WG1026247
(S) 4-Bromofluorobenzene	103			64.0-132		10/01/2017 16:20	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938636-06 WG1026247: Target compound too high to run at a lower dilution.



Collected date/time: 09/20/17 15:45

L938636

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	91.9		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	5.44	27.2	500	10/01/2017 15:41	WG1026247
Acrylonitrile	U		0.973	5.44	500	10/01/2017 15:41	WG1026247
Benzene	U		0.147	0.544	500	10/01/2017 15:41	WG1026247
Bromobenzene	U		0.154	0.544	500	10/01/2017 15:41	WG1026247
Bromodichloromethane	U		0.138	0.544	500	10/01/2017 15:41	WG1026247
Bromochloromethane	U		0.212	2.72	500	10/01/2017 15:41	WG1026247
Bromoform	U		0.231	0.544	500	10/01/2017 15:41	WG1026247
Bromomethane	U		0.729	2.72	500	10/01/2017 15:41	WG1026247
n-Butylbenzene	U		0.140	0.544	500	10/01/2017 15:41	WG1026247
sec-Butylbenzene	U		0.109	0.544	500	10/01/2017 15:41	WG1026247
tert-Butylbenzene	U		0.112	0.544	500	10/01/2017 15:41	WG1026247
Carbon disulfide	U		0.120	0.544	500	10/01/2017 15:41	WG1026247
Carbon tetrachloride	U		0.178	0.544	500	10/01/2017 15:41	WG1026247
Chlorobenzene	U		0.115	0.544	500	10/01/2017 15:41	WG1026247
Chlorodibromomethane	U		0.202	0.544	500	10/01/2017 15:41	WG1026247
Chloroethane	U		0.514	2.72	500	10/01/2017 15:41	WG1026247
Chloroform	U		0.124	2.72	500	10/01/2017 15:41	WG1026247
Chloromethane	U		0.204	1.36	500	10/01/2017 15:41	WG1026247
2-Chlorotoluene	U		0.163	0.544	500	10/01/2017 15:41	WG1026247
4-Chlorotoluene	U		0.131	0.544	500	10/01/2017 15:41	WG1026247
1,2-Dibromo-3-Chloropropane	U		0.571	2.72	500	10/01/2017 15:41	WG1026247
1,2-Dibromoethane	U		0.187	0.544	500	10/01/2017 15:41	WG1026247
Dibromomethane	U		0.208	0.544	500	10/01/2017 15:41	WG1026247
1,2-Dichlorobenzene	U		0.165	0.544	500	10/01/2017 15:41	WG1026247
1,3-Dichlorobenzene	U		0.131	0.544	500	10/01/2017 15:41	WG1026247
1,4-Dichlorobenzene	U		0.123	0.544	500	10/01/2017 15:41	WG1026247
Dichlorodifluoromethane	U		0.387	2.72	500	10/01/2017 15:41	WG1026247
1,1-Dichloroethane	U		0.108	0.544	500	10/01/2017 15:41	WG1026247
1,2-Dichloroethane	U		0.144	0.544	500	10/01/2017 15:41	WG1026247
1,1-Dichloroethene	U		0.165	0.544	500	10/01/2017 15:41	WG1026247
cis-1,2-Dichloroethene	0.561		0.128	0.544	500	10/01/2017 15:41	WG1026247
trans-1,2-Dichloroethene	U		0.144	0.544	500	10/01/2017 15:41	WG1026247
1,2-Dichloropropane	U		0.195	0.544	500	10/01/2017 15:41	WG1026247
1,1-Dichloropropene	U		0.172	0.544	500	10/01/2017 15:41	WG1026247
1,3-Dichloropropane	U		0.113	0.544	500	10/01/2017 15:41	WG1026247
cis-1,3-Dichloropropene	U		0.142	0.544	500	10/01/2017 15:41	WG1026247
trans-1,3-Dichloropropene	U		0.146	0.544	500	10/01/2017 15:41	WG1026247
trans-1,4-Dichloro-2-butene	U	JO	0.423	1.36	500	10/01/2017 15:41	WG1026247
2,2-Dichloropropane	U	JO	0.152	0.544	500	10/01/2017 15:41	WG1026247
Di-isopropyl ether	U	JO	0.135	0.544	500	10/01/2017 15:41	WG1026247
Ethylbenzene	U		0.161	0.544	500	10/01/2017 15:41	WG1026247
Hexachloro-1,3-butadiene	U		0.186	0.544	500	10/01/2017 15:41	WG1026247
2-Hexanone	U		0.745	5.44	500	10/01/2017 15:41	WG1026247
n-Hexane	U	JO	0.158	5.44	500	10/01/2017 15:41	WG1026247
Iodomethane	U		1.37	5.44	500	10/01/2017 15:41	WG1026247
Isopropylbenzene	U		0.133	0.544	500	10/01/2017 15:41	WG1026247
p-Isopropyltoluene	U		0.111	0.544	500	10/01/2017 15:41	WG1026247
2-Butanone (MEK)	U		2.54	5.44	500	10/01/2017 15:41	WG1026247
Methylene Chloride	U		0.544	2.72	500	10/01/2017 15:41	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	1.02	5.44	500	10/01/2017 15:41	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/20/17 15:45

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.115	0.544	500	10/01/2017 15:41	WG1026247
Naphthalene	U		0.544	2.72	500	10/01/2017 15:41	WG1026247
n-Propylbenzene	U		0.112	0.544	500	10/01/2017 15:41	WG1026247
Styrene	U		0.127	0.544	500	10/01/2017 15:41	WG1026247
1,1,1,2-Tetrachloroethane	U		0.144	0.544	500	10/01/2017 15:41	WG1026247
1,1,2,2-Tetrachloroethane	U		0.198	0.544	500	10/01/2017 15:41	WG1026247
1,1,2-Trichlorotrifluoroethane	U		0.198	0.544	500	10/01/2017 15:41	WG1026247
Tetrachloroethene	30.4		0.150	0.544	500	10/01/2017 15:41	WG1026247
Toluene	U		0.236	2.72	500	10/01/2017 15:41	WG1026247
1,2,3-Trichlorobenzene	U		0.166	0.544	500	10/01/2017 15:41	WG1026247
1,2,4-Trichlorobenzene	U		0.211	0.544	500	10/01/2017 15:41	WG1026247
1,1,1-Trichloroethane	U		0.156	0.544	500	10/01/2017 15:41	WG1026247
1,1,2-Trichloroethane	U		0.150	0.544	500	10/01/2017 15:41	WG1026247
Trichloroethene	0.618		0.152	0.544	500	10/01/2017 15:41	WG1026247
Trichlorofluoromethane	U		0.208	2.72	500	10/01/2017 15:41	WG1026247
1,2,3-Trichloropropane	U		0.402	1.36	500	10/01/2017 15:41	WG1026247
1,2,4-Trimethylbenzene	U		0.115	0.544	500	10/01/2017 15:41	WG1026247
1,2,3-Trimethylbenzene	U		0.157	0.544	500	10/01/2017 15:41	WG1026247
1,3,5-Trimethylbenzene	U		0.145	0.544	500	10/01/2017 15:41	WG1026247
Vinyl acetate	U		1.31	5.44	500	10/01/2017 15:41	WG1026247
Vinyl chloride	U		0.159	0.544	500	10/01/2017 15:41	WG1026247
Xylenes, Total	U		0.380	1.63	500	10/01/2017 15:41	WG1026247
(S) Toluene-d8	103			80.0-120		10/01/2017 15:41	WG1026247
(S) Dibromofluoromethane	102			74.0-131		10/01/2017 15:41	WG1026247
(S) 4-Bromofluorobenzene	102			64.0-132		10/01/2017 15:41	WG1026247

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

L938636-07 WG1026247: Target compound too high to run at a lower dilution.



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	63.3	J	31.6	100	1	09/27/2017 19:54	WG1024796
(S) a,a,a-Trifluorotoluene(FID)	96.8			77.0-122		09/27/2017 19:54	WG1024796

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	5.55	J	2.10	50.0	2	09/27/2017 07:22	WG1024893
Acrylonitrile	U		1.75	10.0	2	09/27/2017 07:22	WG1024893
Benzene	U		0.179	1.00	2	09/27/2017 07:22	WG1024893
Bromobenzene	U		0.266	1.00	2	09/27/2017 07:22	WG1024893
Bromodichloromethane	U		0.160	1.00	2	09/27/2017 07:22	WG1024893
Bromochloromethane	U		0.290	1.00	2	09/27/2017 07:22	WG1024893
Bromoform	U		0.372	1.00	2	09/27/2017 07:22	WG1024893
Bromomethane	U		0.314	5.00	2	09/27/2017 07:22	WG1024893
n-Butylbenzene	U		0.286	1.00	2	09/27/2017 07:22	WG1024893
sec-Butylbenzene	U		0.268	1.00	2	09/27/2017 07:22	WG1024893
tert-Butylbenzene	U		0.366	1.00	2	09/27/2017 07:22	WG1024893
Carbon disulfide	U		0.202	1.00	2	09/27/2017 07:22	WG1024893
Carbon tetrachloride	U		0.318	1.00	2	09/27/2017 07:22	WG1024893
Chlorobenzene	U		0.280	1.00	2	09/27/2017 07:22	WG1024893
Chlorodibromomethane	U		0.256	1.00	2	09/27/2017 07:22	WG1024893
Chloroethane	U		0.282	5.00	2	09/27/2017 07:22	WG1024893
Chloroform	U		0.172	1.00	2	09/27/2017 07:22	WG1024893
Chloromethane	U		0.306	2.50	2	09/27/2017 07:22	WG1024893
2-Chlorotoluene	U		0.222	1.00	2	09/27/2017 07:22	WG1024893
4-Chlorotoluene	U		0.194	1.00	2	09/27/2017 07:22	WG1024893
1,2-Dibromo-3-Chloropropane	U		0.650	5.00	2	09/27/2017 07:22	WG1024893
1,2-Dibromoethane	U		0.386	1.00	2	09/27/2017 07:22	WG1024893
Dibromomethane	U		0.234	1.00	2	09/27/2017 07:22	WG1024893
1,2-Dichlorobenzene	U		0.202	1.00	2	09/27/2017 07:22	WG1024893
1,3-Dichlorobenzene	U		0.260	1.00	2	09/27/2017 07:22	WG1024893
1,4-Dichlorobenzene	U		0.242	1.00	2	09/27/2017 07:22	WG1024893
Dichlorodifluoromethane	U		0.254	5.00	2	09/27/2017 07:22	WG1024893
1,1-Dichloroethane	U		0.228	1.00	2	09/27/2017 07:22	WG1024893
1,2-Dichloroethane	U		0.216	1.00	2	09/27/2017 07:22	WG1024893
1,1-Dichloroethene	U		0.376	1.00	2	09/27/2017 07:22	WG1024893
cis-1,2-Dichloroethene	U		0.187	1.00	2	09/27/2017 07:22	WG1024893
trans-1,2-Dichloroethene	U		0.304	1.00	2	09/27/2017 07:22	WG1024893
1,2-Dichloropropane	U		0.380	1.00	2	09/27/2017 07:22	WG1024893
1,1-Dichloropropene	U		0.256	1.00	2	09/27/2017 07:22	WG1024893
1,3-Dichloropropane	U		0.294	2.00	2	09/27/2017 07:22	WG1024893
cis-1,3-Dichloropropene	U		0.195	1.00	2	09/27/2017 07:22	WG1024893
trans-1,3-Dichloropropene	U		0.444	1.00	2	09/27/2017 07:22	WG1024893
trans-1,4-Dichloro-2-butene	U		0.514	10.0	2	09/27/2017 07:22	WG1024893
2,2-Dichloropropane	U		0.186	1.00	2	09/27/2017 07:22	WG1024893
Di-isopropyl ether	U		0.185	1.00	2	09/27/2017 07:22	WG1024893
Ethylbenzene	U		0.316	1.00	2	09/27/2017 07:22	WG1024893
Hexachloro-1,3-butadiene	U		0.314	2.00	2	09/27/2017 07:22	WG1024893
2-Hexanone	U		1.51	10.0	2	09/27/2017 07:22	WG1024893
n-Hexane	1.91	J	0.610	10.0	2	09/27/2017 07:22	WG1024893
Iodomethane	U		0.754	20.0	2	09/27/2017 07:22	WG1024893
Isopropylbenzene	U		0.252	1.00	2	09/27/2017 07:22	WG1024893
p-Isopropyltoluene	U		0.276	1.00	2	09/27/2017 07:22	WG1024893
2-Butanone (MEK)	U		2.56	10.0	2	09/27/2017 07:22	WG1024893



Collected date/time: 09/21/17 10:10

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		2.14	5.00	2	09/27/2017 07:22	WG1024893
4-Methyl-2-pentanone (MIBK)	U		1.65	10.0	2	09/27/2017 07:22	WG1024893
Methyl tert-butyl ether	U		0.204	1.00	2	09/27/2017 07:22	WG1024893
Naphthalene	U		0.348	5.00	2	09/27/2017 07:22	WG1024893
n-Propylbenzene	U		0.324	1.00	2	09/27/2017 07:22	WG1024893
Styrene	U		0.234	1.00	2	09/27/2017 07:22	WG1024893
1,1,1,2-Tetrachloroethane	U		0.240	1.00	2	09/27/2017 07:22	WG1024893
1,1,2,2-Tetrachloroethane	U		0.260	1.00	2	09/27/2017 07:22	WG1024893
1,1,2-Trichlorotrifluoroethane	U		0.328	1.00	2	09/27/2017 07:22	WG1024893
Tetrachloroethene	U		0.398	1.00	2	09/27/2017 07:22	WG1024893
Toluene	2.60		0.824	1.00	2	09/27/2017 07:22	WG1024893
1,2,3-Trichlorobenzene	U		0.328	1.00	2	09/27/2017 07:22	WG1024893
1,2,4-Trichlorobenzene	U		0.710	1.00	2	09/27/2017 07:22	WG1024893
1,1,1-Trichloroethane	U		0.188	1.00	2	09/27/2017 07:22	WG1024893
1,1,2-Trichloroethane	U		0.372	1.00	2	09/27/2017 07:22	WG1024893
Trichloroethene	U		0.306	1.00	2	09/27/2017 07:22	WG1024893
Trichlorofluoromethane	U		0.260	5.00	2	09/27/2017 07:22	WG1024893
1,2,3-Trichloropropane	U		0.494	5.00	2	09/27/2017 07:22	WG1024893
1,2,4-Trimethylbenzene	U		0.246	1.00	2	09/27/2017 07:22	WG1024893
1,2,3-Trimethylbenzene	U		0.148	1.00	2	09/27/2017 07:22	WG1024893
1,3,5-Trimethylbenzene	U		0.248	1.00	2	09/27/2017 07:22	WG1024893
Vinyl acetate	U		1.29	10.0	2	09/27/2017 07:22	WG1024893
Vinyl chloride	U		0.236	1.00	2	09/27/2017 07:22	WG1024893
Xylenes, Total	U		0.632	3.00	2	09/27/2017 07:22	WG1024893
(S) Toluene-d8	105			80.0-120		09/27/2017 07:22	WG1024893
(S) Dibromofluoromethane	103			76.0-123		09/27/2017 07:22	WG1024893
(S) 4-Bromofluorobenzene	90.4			80.0-120		09/27/2017 07:22	WG1024893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938636-08 WG1024893: Lowest possible dilution due to sediment in sample vial.



Collected date/time: 09/20/17 17:20

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.5		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO J3	5.53	27.6	500	10/01/2017 16:01	WG1026247
Acrylonitrile	U		0.989	5.53	500	10/01/2017 16:01	WG1026247
Benzene	U		0.149	0.553	500	10/01/2017 16:01	WG1026247
Bromobenzene	U		0.157	0.553	500	10/01/2017 16:01	WG1026247
Bromodichloromethane	U		0.140	0.553	500	10/01/2017 16:01	WG1026247
Bromochloromethane	U		0.215	2.76	500	10/01/2017 16:01	WG1026247
Bromoform	U		0.234	0.553	500	10/01/2017 16:01	WG1026247
Bromomethane	U		0.740	2.76	500	10/01/2017 16:01	WG1026247
n-Butylbenzene	U		0.143	0.553	500	10/01/2017 16:01	WG1026247
sec-Butylbenzene	U		0.111	0.553	500	10/01/2017 16:01	WG1026247
tert-Butylbenzene	U		0.114	0.553	500	10/01/2017 16:01	WG1026247
Carbon disulfide	U		0.122	0.553	500	10/01/2017 16:01	WG1026247
Carbon tetrachloride	U		0.181	0.553	500	10/01/2017 16:01	WG1026247
Chlorobenzene	U		0.117	0.553	500	10/01/2017 16:01	WG1026247
Chlorodibromomethane	U		0.206	0.553	500	10/01/2017 16:01	WG1026247
Chloroethane	U		0.523	2.76	500	10/01/2017 16:01	WG1026247
Chloroform	U		0.126	2.76	500	10/01/2017 16:01	WG1026247
Chloromethane	U		0.208	1.38	500	10/01/2017 16:01	WG1026247
2-Chlorotoluene	U		0.166	0.553	500	10/01/2017 16:01	WG1026247
4-Chlorotoluene	U		0.133	0.553	500	10/01/2017 16:01	WG1026247
1,2-Dibromo-3-Chloropropane	U		0.580	2.76	500	10/01/2017 16:01	WG1026247
1,2-Dibromoethane	U		0.190	0.553	500	10/01/2017 16:01	WG1026247
Dibromomethane	U		0.211	0.553	500	10/01/2017 16:01	WG1026247
1,2-Dichlorobenzene	U		0.168	0.553	500	10/01/2017 16:01	WG1026247
1,3-Dichlorobenzene	U		0.133	0.553	500	10/01/2017 16:01	WG1026247
1,4-Dichlorobenzene	U		0.125	0.553	500	10/01/2017 16:01	WG1026247
Dichlorodifluoromethane	U		0.393	2.76	500	10/01/2017 16:01	WG1026247
1,1-Dichloroethane	U		0.110	0.553	500	10/01/2017 16:01	WG1026247
1,2-Dichloroethane	U		0.146	0.553	500	10/01/2017 16:01	WG1026247
1,1-Dichloroethene	U		0.168	0.553	500	10/01/2017 16:01	WG1026247
cis-1,2-Dichloroethene	1.41		0.130	0.553	500	10/01/2017 16:01	WG1026247
trans-1,2-Dichloroethene	U		0.146	0.553	500	10/01/2017 16:01	WG1026247
1,2-Dichloropropane	U		0.198	0.553	500	10/01/2017 16:01	WG1026247
1,1-Dichloropropene	U		0.175	0.553	500	10/01/2017 16:01	WG1026247
1,3-Dichloropropane	U		0.115	0.553	500	10/01/2017 16:01	WG1026247
cis-1,3-Dichloropropene	U		0.145	0.553	500	10/01/2017 16:01	WG1026247
trans-1,3-Dichloropropene	U		0.148	0.553	500	10/01/2017 16:01	WG1026247
trans-1,4-Dichloro-2-butene	U	JO	0.430	1.38	500	10/01/2017 16:01	WG1026247
2,2-Dichloropropane	U	JO	0.155	0.553	500	10/01/2017 16:01	WG1026247
Di-isopropyl ether	U	JO	0.137	0.553	500	10/01/2017 16:01	WG1026247
Ethylbenzene	U		0.164	0.553	500	10/01/2017 16:01	WG1026247
Hexachloro-1,3-butadiene	U		0.189	0.553	500	10/01/2017 16:01	WG1026247
2-Hexanone	U		0.757	5.53	500	10/01/2017 16:01	WG1026247
n-Hexane	U	JO	0.160	5.53	500	10/01/2017 16:01	WG1026247
Iodomethane	U		1.39	5.53	500	10/01/2017 16:01	WG1026247
Isopropylbenzene	U		0.135	0.553	500	10/01/2017 16:01	WG1026247
p-Isopropyltoluene	U		0.113	0.553	500	10/01/2017 16:01	WG1026247
2-Butanone (MEK)	U		2.59	5.53	500	10/01/2017 16:01	WG1026247
Methylene Chloride	U		0.553	2.76	500	10/01/2017 16:01	WG1026247
4-Methyl-2-pentanone (MIBK)	U	JO	1.04	5.53	500	10/01/2017 16:01	WG1026247

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/20/17 17:20

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.117	0.553	500	10/01/2017 16:01	WG1026247
Naphthalene	U		0.553	2.76	500	10/01/2017 16:01	WG1026247
n-Propylbenzene	U		0.114	0.553	500	10/01/2017 16:01	WG1026247
Styrene	U		0.129	0.553	500	10/01/2017 16:01	WG1026247
1,1,1,2-Tetrachloroethane	U		0.146	0.553	500	10/01/2017 16:01	WG1026247
1,1,2,2-Tetrachloroethane	U		0.201	0.553	500	10/01/2017 16:01	WG1026247
1,1,2-Trichlorotrifluoroethane	U		0.201	0.553	500	10/01/2017 16:01	WG1026247
Tetrachloroethene	14.5		0.152	0.553	500	10/01/2017 16:01	WG1026247
Toluene	U		0.240	2.76	500	10/01/2017 16:01	WG1026247
1,2,3-Trichlorobenzene	U		0.169	0.553	500	10/01/2017 16:01	WG1026247
1,2,4-Trichlorobenzene	U		0.214	0.553	500	10/01/2017 16:01	WG1026247
1,1,1-Trichloroethane	U		0.158	0.553	500	10/01/2017 16:01	WG1026247
1,1,2-Trichloroethane	U		0.152	0.553	500	10/01/2017 16:01	WG1026247
Trichloroethene	0.865		0.155	0.553	500	10/01/2017 16:01	WG1026247
Trichlorofluoromethane	U		0.211	2.76	500	10/01/2017 16:01	WG1026247
1,2,3-Trichloropropane	U		0.409	1.38	500	10/01/2017 16:01	WG1026247
1,2,4-Trimethylbenzene	U		0.117	0.553	500	10/01/2017 16:01	WG1026247
1,2,3-Trimethylbenzene	U		0.159	0.553	500	10/01/2017 16:01	WG1026247
1,3,5-Trimethylbenzene	U		0.147	0.553	500	10/01/2017 16:01	WG1026247
Vinyl acetate	U		1.33	5.53	500	10/01/2017 16:01	WG1026247
Vinyl chloride	U		0.161	0.553	500	10/01/2017 16:01	WG1026247
Xylenes, Total	U		0.386	1.66	500	10/01/2017 16:01	WG1026247
(S) Toluene-d8	109			80.0-120		10/01/2017 16:01	WG1026247
(S) Dibromofluoromethane	100			74.0-131		10/01/2017 16:01	WG1026247
(S) 4-Bromofluorobenzene	102			64.0-132		10/01/2017 16:01	WG1026247

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

L938636-09 WG1026247: Target compound too high to run at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0110	0.0552	1	09/24/2017 06:30	WG1024032
Acrylonitrile	U		0.00198	0.0110	1	09/24/2017 06:30	WG1024032
Benzene	U		0.000298	0.00110	1	09/24/2017 06:30	WG1024032
Bromobenzene	U		0.000313	0.00110	1	09/24/2017 06:30	WG1024032
Bromodichloromethane	U		0.000280	0.00110	1	09/24/2017 06:30	WG1024032
Bromochloromethane	U		0.000431	0.00552	1	09/24/2017 06:30	WG1024032
Bromoform	U		0.000468	0.00110	1	09/24/2017 06:30	WG1024032
Bromomethane	U		0.00148	0.00552	1	09/24/2017 06:30	WG1024032
n-Butylbenzene	U		0.000285	0.00110	1	09/24/2017 06:30	WG1024032
sec-Butylbenzene	U		0.000222	0.00110	1	09/24/2017 06:30	WG1024032
tert-Butylbenzene	U		0.000227	0.00110	1	09/24/2017 06:30	WG1024032
Carbon disulfide	0.000317	J	0.000244	0.00110	1	09/24/2017 06:30	WG1024032
Carbon tetrachloride	U		0.000362	0.00110	1	09/24/2017 06:30	WG1024032
Chlorobenzene	U		0.000234	0.00110	1	09/24/2017 06:30	WG1024032
Chlorodibromomethane	U		0.000412	0.00110	1	09/24/2017 06:30	WG1024032
Chloroethane	U		0.00104	0.00552	1	09/24/2017 06:30	WG1024032
Chloroform	U		0.000253	0.00552	1	09/24/2017 06:30	WG1024032
Chloromethane	U		0.000414	0.00276	1	09/24/2017 06:30	WG1024032
2-Chlorotoluene	U		0.000332	0.00110	1	09/24/2017 06:30	WG1024032
4-Chlorotoluene	U		0.000265	0.00110	1	09/24/2017 06:30	WG1024032
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00552	1	09/24/2017 06:30	WG1024032
1,2-Dibromoethane	U		0.000379	0.00110	1	09/24/2017 06:30	WG1024032
Dibromomethane	U		0.000422	0.00110	1	09/24/2017 06:30	WG1024032
1,2-Dichlorobenzene	U		0.000337	0.00110	1	09/24/2017 06:30	WG1024032
1,3-Dichlorobenzene	U		0.000264	0.00110	1	09/24/2017 06:30	WG1024032
1,4-Dichlorobenzene	U		0.000249	0.00110	1	09/24/2017 06:30	WG1024032
Dichlorodifluoromethane	U		0.000787	0.00552	1	09/24/2017 06:30	WG1024032
1,1-Dichloroethane	U		0.000220	0.00110	1	09/24/2017 06:30	WG1024032
1,2-Dichloroethane	U		0.000293	0.00110	1	09/24/2017 06:30	WG1024032
1,1-Dichloroethene	U		0.000334	0.00110	1	09/24/2017 06:30	WG1024032
cis-1,2-Dichloroethene	0.00582		0.000259	0.00110	1	09/24/2017 06:30	WG1024032
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	09/24/2017 06:30	WG1024032
1,2-Dichloropropane	U		0.000395	0.00110	1	09/24/2017 06:30	WG1024032
1,1-Dichloropropene	U		0.000350	0.00110	1	09/24/2017 06:30	WG1024032
1,3-Dichloropropane	U		0.000228	0.00110	1	09/24/2017 06:30	WG1024032
cis-1,3-Dichloropropene	U	J4	0.000289	0.00110	1	09/24/2017 06:30	WG1024032
trans-1,3-Dichloropropene	U		0.000295	0.00110	1	09/24/2017 06:30	WG1024032
trans-1,4-Dichloro-2-butene	U		0.000859	0.00276	1	09/24/2017 06:30	WG1024032
2,2-Dichloropropane	U	JO	0.000308	0.00110	1	09/24/2017 06:30	WG1024032
Di-isopropyl ether	U		0.000274	0.00110	1	09/24/2017 06:30	WG1024032
Ethylbenzene	U		0.000328	0.00110	1	09/24/2017 06:30	WG1024032
Hexachloro-1,3-butadiene	U		0.000378	0.00110	1	09/24/2017 06:30	WG1024032
2-Hexanone	U		0.00151	0.0110	1	09/24/2017 06:30	WG1024032
n-Hexane	U		0.000320	0.0110	1	09/24/2017 06:30	WG1024032
Iodomethane	U		0.00279	0.0110	1	09/24/2017 06:30	WG1024032
Isopropylbenzene	U		0.000268	0.00110	1	09/24/2017 06:30	WG1024032
p-Isopropyltoluene	U		0.000225	0.00110	1	09/24/2017 06:30	WG1024032
2-Butanone (MEK)	U		0.00517	0.0110	1	09/24/2017 06:30	WG1024032
Methylene Chloride	U		0.00110	0.00552	1	09/24/2017 06:30	WG1024032
4-Methyl-2-pentanone (MIBK)	U		0.00208	0.0110	1	09/24/2017 06:30	WG1024032

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/21/17 08:50

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	09/24/2017 06:30	WG1024032
Naphthalene	U		0.00110	0.00552	1	09/24/2017 06:30	WG1024032
n-Propylbenzene	U		0.000227	0.00110	1	09/24/2017 06:30	WG1024032
Styrene	U		0.000258	0.00110	1	09/24/2017 06:30	WG1024032
1,1,1-Tetrachloroethane	U		0.000291	0.00110	1	09/24/2017 06:30	WG1024032
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	09/24/2017 06:30	WG1024032
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	09/24/2017 06:30	WG1024032
Tetrachloroethene	0.0853	<u>JO</u>	0.000305	0.00110	1	09/24/2017 06:30	WG1024032
Toluene	U		0.000479	0.00552	1	09/24/2017 06:30	WG1024032
1,2,3-Trichlorobenzene	U		0.000338	0.00110	1	09/24/2017 06:30	WG1024032
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	09/24/2017 06:30	WG1024032
1,1,1-Trichloroethane	U		0.000316	0.00110	1	09/24/2017 06:30	WG1024032
1,1,2-Trichloroethane	U		0.000306	0.00110	1	09/24/2017 06:30	WG1024032
Trichloroethene	0.00152		0.000308	0.00110	1	09/24/2017 06:30	WG1024032
Trichlorofluoromethane	U		0.000422	0.00552	1	09/24/2017 06:30	WG1024032
1,2,3-Trichloropropane	U		0.000818	0.00276	1	09/24/2017 06:30	WG1024032
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	09/24/2017 06:30	WG1024032
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	09/24/2017 06:30	WG1024032
1,3,5-Trimethylbenzene	U		0.000294	0.00110	1	09/24/2017 06:30	WG1024032
Vinyl acetate	U		0.00264	0.0110	1	09/24/2017 06:30	WG1024032
Vinyl chloride	0.00153		0.000321	0.00110	1	09/24/2017 06:30	WG1024032
Xylenes, Total	U		0.000770	0.00331	1	09/24/2017 06:30	WG1024032
(S) Toluene-d8	106			80.0-120		09/24/2017 06:30	WG1024032
(S) Dibromofluoromethane	111			74.0-131		09/24/2017 06:30	WG1024032
(S) 4-Bromofluorobenzene	113			64.0-132		09/24/2017 06:30	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	09/26/2017 08:36	WG1024280

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0113	0.0567	1	09/24/2017 06:50	WG1024032
Acrylonitrile	U		0.00203	0.0113	1	09/24/2017 06:50	WG1024032
Benzene	U		0.000306	0.00113	1	09/24/2017 06:50	WG1024032
Bromobenzene	U		0.000322	0.00113	1	09/24/2017 06:50	WG1024032
Bromodichloromethane	U		0.000288	0.00113	1	09/24/2017 06:50	WG1024032
Bromochloromethane	U		0.000442	0.00567	1	09/24/2017 06:50	WG1024032
Bromoform	U		0.000481	0.00113	1	09/24/2017 06:50	WG1024032
Bromomethane	U		0.00152	0.00567	1	09/24/2017 06:50	WG1024032
n-Butylbenzene	U		0.000293	0.00113	1	09/24/2017 06:50	WG1024032
sec-Butylbenzene	U		0.000228	0.00113	1	09/24/2017 06:50	WG1024032
tert-Butylbenzene	U		0.000234	0.00113	1	09/24/2017 06:50	WG1024032
Carbon disulfide	0.000299	J	0.000251	0.00113	1	09/24/2017 06:50	WG1024032
Carbon tetrachloride	U		0.000372	0.00113	1	09/24/2017 06:50	WG1024032
Chlorobenzene	U		0.000240	0.00113	1	09/24/2017 06:50	WG1024032
Chlorodibromomethane	U		0.000423	0.00113	1	09/24/2017 06:50	WG1024032
Chloroethane	U		0.00107	0.00567	1	09/24/2017 06:50	WG1024032
Chloroform	U		0.000260	0.00567	1	09/24/2017 06:50	WG1024032
Chloromethane	U		0.000425	0.00283	1	09/24/2017 06:50	WG1024032
2-Chlorotoluene	U		0.000341	0.00113	1	09/24/2017 06:50	WG1024032
4-Chlorotoluene	U		0.000272	0.00113	1	09/24/2017 06:50	WG1024032
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00567	1	09/24/2017 06:50	WG1024032
1,2-Dibromoethane	U		0.000389	0.00113	1	09/24/2017 06:50	WG1024032
Dibromomethane	U		0.000433	0.00113	1	09/24/2017 06:50	WG1024032
1,2-Dichlorobenzene	U		0.000346	0.00113	1	09/24/2017 06:50	WG1024032
1,3-Dichlorobenzene	U		0.000271	0.00113	1	09/24/2017 06:50	WG1024032
1,4-Dichlorobenzene	U		0.000256	0.00113	1	09/24/2017 06:50	WG1024032
Dichlorodifluoromethane	U		0.000808	0.00567	1	09/24/2017 06:50	WG1024032
1,1-Dichloroethane	U		0.000226	0.00113	1	09/24/2017 06:50	WG1024032
1,2-Dichloroethane	U		0.000300	0.00113	1	09/24/2017 06:50	WG1024032
1,1-Dichloroethene	0.0110		0.000344	0.00113	1	09/24/2017 06:50	WG1024032
cis-1,2-Dichloroethene	U		0.000266	0.00113	1	09/24/2017 06:50	WG1024032
trans-1,2-Dichloroethene	0.00481		0.000299	0.00113	1	09/24/2017 06:50	WG1024032
1,2-Dichloropropane	U		0.000406	0.00113	1	09/24/2017 06:50	WG1024032
1,1-Dichloropropene	U		0.000359	0.00113	1	09/24/2017 06:50	WG1024032
1,3-Dichloropropane	U		0.000235	0.00113	1	09/24/2017 06:50	WG1024032
cis-1,3-Dichloropropene	U	J4	0.000297	0.00113	1	09/24/2017 06:50	WG1024032
trans-1,3-Dichloropropene	U		0.000303	0.00113	1	09/24/2017 06:50	WG1024032
trans-1,4-Dichloro-2-butene	U		0.000882	0.00283	1	09/24/2017 06:50	WG1024032
2,2-Dichloropropane	U	JO	0.000316	0.00113	1	09/24/2017 06:50	WG1024032
Di-isopropyl ether	U		0.000281	0.00113	1	09/24/2017 06:50	WG1024032
Ethylbenzene	U		0.000337	0.00113	1	09/24/2017 06:50	WG1024032
Hexachloro-1,3-butadiene	U		0.000388	0.00113	1	09/24/2017 06:50	WG1024032
2-Hexanone	U		0.00155	0.0113	1	09/24/2017 06:50	WG1024032
n-Hexane	U		0.000329	0.0113	1	09/24/2017 06:50	WG1024032
Iodomethane	U		0.00287	0.0113	1	09/24/2017 06:50	WG1024032
Isopropylbenzene	U		0.000276	0.00113	1	09/24/2017 06:50	WG1024032
p-Isopropyltoluene	U		0.000231	0.00113	1	09/24/2017 06:50	WG1024032
2-Butanone (MEK)	U		0.00531	0.0113	1	09/24/2017 06:50	WG1024032
Methylene Chloride	U		0.00113	0.00567	1	09/24/2017 06:50	WG1024032
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	09/24/2017 06:50	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 11:35

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	09/24/2017 06:50	WG1024032
Naphthalene	U		0.00113	0.00567	1	09/24/2017 06:50	WG1024032
n-Propylbenzene	U		0.000234	0.00113	1	09/24/2017 06:50	WG1024032
Styrene	U		0.000265	0.00113	1	09/24/2017 06:50	WG1024032
1,1,1-Tetrachloroethane	U		0.000299	0.00113	1	09/24/2017 06:50	WG1024032
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	09/24/2017 06:50	WG1024032
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	09/24/2017 06:50	WG1024032
Tetrachloroethene	1.01		0.0156	0.0567	50	10/01/2017 18:25	WG1024032
Toluene	U		0.000492	0.00567	1	09/24/2017 06:50	WG1024032
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	09/24/2017 06:50	WG1024032
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	09/24/2017 06:50	WG1024032
1,1,1-Trichloroethane	U		0.000324	0.00113	1	09/24/2017 06:50	WG1024032
1,1,2-Trichloroethane	U		0.000314	0.00113	1	09/24/2017 06:50	WG1024032
Trichloroethene	0.815		0.0159	0.0567	50	10/01/2017 18:25	WG1024032
Trichlorofluoromethane	U		0.000433	0.00567	1	09/24/2017 06:50	WG1024032
1,2,3-Trichloropropane	U		0.000840	0.00283	1	09/24/2017 06:50	WG1024032
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	09/24/2017 06:50	WG1024032
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	09/24/2017 06:50	WG1024032
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	09/24/2017 06:50	WG1024032
Vinyl acetate	U		0.00271	0.0113	1	09/24/2017 06:50	WG1024032
Vinyl chloride	0.00907		0.000330	0.00113	1	09/24/2017 06:50	WG1024032
Xylenes, Total	U		0.000791	0.00340	1	09/24/2017 06:50	WG1024032
(S) Toluene-d8	107			80.0-120		09/24/2017 06:50	WG1024032
(S) Toluene-d8	108			80.0-120		10/01/2017 18:25	WG1024032
(S) Dibromofluoromethane	101			74.0-131		10/01/2017 18:25	WG1024032
(S) Dibromofluoromethane	108			74.0-131		09/24/2017 06:50	WG1024032
(S) 4-Bromofluorobenzene	100			64.0-132		10/01/2017 18:25	WG1024032
(S) 4-Bromofluorobenzene	109			64.0-132		09/24/2017 06:50	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.5		1	09/26/2017 08:27	WG1024282

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0116	0.0578	1	09/24/2017 07:09	WG1024032
Acrylonitrile	U		0.00207	0.0116	1	09/24/2017 07:09	WG1024032
Benzene	U		0.000312	0.00116	1	09/24/2017 07:09	WG1024032
Bromobenzene	U		0.000328	0.00116	1	09/24/2017 07:09	WG1024032
Bromodichloromethane	U		0.000294	0.00116	1	09/24/2017 07:09	WG1024032
Bromochloromethane	U		0.000451	0.00578	1	09/24/2017 07:09	WG1024032
Bromoform	U		0.000490	0.00116	1	09/24/2017 07:09	WG1024032
Bromomethane	U		0.00155	0.00578	1	09/24/2017 07:09	WG1024032
n-Butylbenzene	U		0.000298	0.00116	1	09/24/2017 07:09	WG1024032
sec-Butylbenzene	U		0.000232	0.00116	1	09/24/2017 07:09	WG1024032
tert-Butylbenzene	U		0.000238	0.00116	1	09/24/2017 07:09	WG1024032
Carbon disulfide	U		0.000255	0.00116	1	09/24/2017 07:09	WG1024032
Carbon tetrachloride	U		0.000379	0.00116	1	09/24/2017 07:09	WG1024032
Chlorobenzene	U		0.000245	0.00116	1	09/24/2017 07:09	WG1024032
Chlorodibromomethane	U		0.000431	0.00116	1	09/24/2017 07:09	WG1024032
Chloroethane	U		0.00109	0.00578	1	09/24/2017 07:09	WG1024032
Chloroform	U		0.000265	0.00578	1	09/24/2017 07:09	WG1024032
Chloromethane	U		0.000433	0.00289	1	09/24/2017 07:09	WG1024032
2-Chlorotoluene	U		0.000348	0.00116	1	09/24/2017 07:09	WG1024032
4-Chlorotoluene	U		0.000277	0.00116	1	09/24/2017 07:09	WG1024032
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00578	1	09/24/2017 07:09	WG1024032
1,2-Dibromoethane	U		0.000396	0.00116	1	09/24/2017 07:09	WG1024032
Dibromomethane	U		0.000442	0.00116	1	09/24/2017 07:09	WG1024032
1,2-Dichlorobenzene	U		0.000353	0.00116	1	09/24/2017 07:09	WG1024032
1,3-Dichlorobenzene	U		0.000276	0.00116	1	09/24/2017 07:09	WG1024032
1,4-Dichlorobenzene	U		0.000261	0.00116	1	09/24/2017 07:09	WG1024032
Dichlorodifluoromethane	U		0.000824	0.00578	1	09/24/2017 07:09	WG1024032
1,1-Dichloroethane	U		0.000230	0.00116	1	09/24/2017 07:09	WG1024032
1,2-Dichloroethane	U		0.000306	0.00116	1	09/24/2017 07:09	WG1024032
1,1-Dichloroethene	0.00119		0.000350	0.00116	1	09/24/2017 07:09	WG1024032
cis-1,2-Dichloroethene	0.109		0.000272	0.00116	1	09/24/2017 07:09	WG1024032
trans-1,2-Dichloroethene	0.00171		0.000305	0.00116	1	09/24/2017 07:09	WG1024032
1,2-Dichloropropane	U		0.000414	0.00116	1	09/24/2017 07:09	WG1024032
1,1-Dichloropropene	U		0.000366	0.00116	1	09/24/2017 07:09	WG1024032
1,3-Dichloropropane	U		0.000239	0.00116	1	09/24/2017 07:09	WG1024032
cis-1,3-Dichloropropene	U	J4	0.000303	0.00116	1	09/24/2017 07:09	WG1024032
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	09/24/2017 07:09	WG1024032
trans-1,4-Dichloro-2-butene	U		0.000899	0.00289	1	09/24/2017 07:09	WG1024032
2,2-Dichloropropane	U	JO	0.000322	0.00116	1	09/24/2017 07:09	WG1024032
Di-isopropyl ether	U		0.000287	0.00116	1	09/24/2017 07:09	WG1024032
Ethylbenzene	U		0.000343	0.00116	1	09/24/2017 07:09	WG1024032
Hexachloro-1,3-butadiene	U		0.000395	0.00116	1	09/24/2017 07:09	WG1024032
2-Hexanone	U		0.00158	0.0116	1	09/24/2017 07:09	WG1024032
n-Hexane	U		0.000335	0.0116	1	09/24/2017 07:09	WG1024032
Iodomethane	U		0.00292	0.0116	1	09/24/2017 07:09	WG1024032
Isopropylbenzene	U		0.000281	0.00116	1	09/24/2017 07:09	WG1024032
p-Isopropyltoluene	U		0.000236	0.00116	1	09/24/2017 07:09	WG1024032
2-Butanone (MEK)	U		0.00541	0.0116	1	09/24/2017 07:09	WG1024032
Methylene Chloride	U		0.00116	0.00578	1	09/24/2017 07:09	WG1024032
4-Methyl-2-pentanone (MIBK)	U		0.00217	0.0116	1	09/24/2017 07:09	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 11:55

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00116	1	09/24/2017 07:09	WG1024032
Naphthalene	U		0.00116	0.00578	1	09/24/2017 07:09	WG1024032
n-Propylbenzene	U		0.000238	0.00116	1	09/24/2017 07:09	WG1024032
Styrene	U		0.000270	0.00116	1	09/24/2017 07:09	WG1024032
1,1,1-Tetrachloroethane	U		0.000305	0.00116	1	09/24/2017 07:09	WG1024032
1,1,2,2-Tetrachloroethane	U		0.000422	0.00116	1	09/24/2017 07:09	WG1024032
1,1,2-Trichlorotrifluoroethane	U		0.000422	0.00116	1	09/24/2017 07:09	WG1024032
Tetrachloroethene	0.714		0.00797	0.0289	25	10/01/2017 18:45	WG1024032
Toluene	U		0.000502	0.00578	1	09/24/2017 07:09	WG1024032
1,2,3-Trichlorobenzene	U		0.000354	0.00116	1	09/24/2017 07:09	WG1024032
1,2,4-Trichlorobenzene	U		0.000448	0.00116	1	09/24/2017 07:09	WG1024032
1,1,1-Trichloroethane	U		0.000331	0.00116	1	09/24/2017 07:09	WG1024032
1,1,2-Trichloroethane	U		0.000320	0.00116	1	09/24/2017 07:09	WG1024032
Trichloroethene	0.130		0.000322	0.00116	1	09/24/2017 07:09	WG1024032
Trichlorofluoromethane	U		0.000442	0.00578	1	09/24/2017 07:09	WG1024032
1,2,3-Trichloropropane	U		0.000856	0.00289	1	09/24/2017 07:09	WG1024032
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	09/24/2017 07:09	WG1024032
1,2,3-Trimethylbenzene	U		0.000332	0.00116	1	09/24/2017 07:09	WG1024032
1,3,5-Trimethylbenzene	U		0.000307	0.00116	1	09/24/2017 07:09	WG1024032
Vinyl acetate	U		0.00276	0.0116	1	09/24/2017 07:09	WG1024032
Vinyl chloride	0.0116		0.000336	0.00116	1	09/24/2017 07:09	WG1024032
Xylenes, Total	U		0.000807	0.00347	1	09/24/2017 07:09	WG1024032
(S) Toluene-d8	107			80.0-120		09/24/2017 07:09	WG1024032
(S) Toluene-d8	110			80.0-120		10/01/2017 18:45	WG1024032
(S) Dibromofluoromethane	108			74.0-131		09/24/2017 07:09	WG1024032
(S) Dibromofluoromethane	96.6			74.0-131		10/01/2017 18:45	WG1024032
(S) 4-Bromofluorobenzene	109			64.0-132		09/24/2017 07:09	WG1024032
(S) 4-Bromofluorobenzene	104			64.0-132		10/01/2017 18:45	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	89.3		1	09/26/2017 08:27	WG1024282

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0112	0.0560	1	09/24/2017 07:29	WG1024032
Acrylonitrile	U		0.00201	0.0112	1	09/24/2017 07:29	WG1024032
Benzene	U		0.000303	0.00112	1	09/24/2017 07:29	WG1024032
Bromobenzene	U		0.000318	0.00112	1	09/24/2017 07:29	WG1024032
Bromodichloromethane	U		0.000285	0.00112	1	09/24/2017 07:29	WG1024032
Bromochloromethane	U		0.000437	0.00560	1	09/24/2017 07:29	WG1024032
Bromoform	U		0.000475	0.00112	1	09/24/2017 07:29	WG1024032
Bromomethane	U		0.00150	0.00560	1	09/24/2017 07:29	WG1024032
n-Butylbenzene	U		0.000289	0.00112	1	09/24/2017 07:29	WG1024032
sec-Butylbenzene	U		0.000225	0.00112	1	09/24/2017 07:29	WG1024032
tert-Butylbenzene	U		0.000231	0.00112	1	09/24/2017 07:29	WG1024032
Carbon disulfide	U		0.000248	0.00112	1	09/24/2017 07:29	WG1024032
Carbon tetrachloride	U		0.000368	0.00112	1	09/24/2017 07:29	WG1024032
Chlorobenzene	U		0.000238	0.00112	1	09/24/2017 07:29	WG1024032
Chlorodibromomethane	U		0.000418	0.00112	1	09/24/2017 07:29	WG1024032
Chloroethane	0.00230	J	0.00106	0.00560	1	09/24/2017 07:29	WG1024032
Chloroform	U		0.000257	0.00560	1	09/24/2017 07:29	WG1024032
Chloromethane	U		0.000420	0.00280	1	09/24/2017 07:29	WG1024032
2-Chlorotoluene	U		0.000337	0.00112	1	09/24/2017 07:29	WG1024032
4-Chlorotoluene	U		0.000269	0.00112	1	09/24/2017 07:29	WG1024032
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00560	1	09/24/2017 07:29	WG1024032
1,2-Dibromoethane	U		0.000384	0.00112	1	09/24/2017 07:29	WG1024032
Dibromomethane	U		0.000428	0.00112	1	09/24/2017 07:29	WG1024032
1,2-Dichlorobenzene	U		0.000342	0.00112	1	09/24/2017 07:29	WG1024032
1,3-Dichlorobenzene	U		0.000268	0.00112	1	09/24/2017 07:29	WG1024032
1,4-Dichlorobenzene	U		0.000253	0.00112	1	09/24/2017 07:29	WG1024032
Dichlorodifluoromethane	U		0.000799	0.00560	1	09/24/2017 07:29	WG1024032
1,1-Dichloroethane	U		0.000223	0.00112	1	09/24/2017 07:29	WG1024032
1,2-Dichloroethane	U		0.000297	0.00112	1	09/24/2017 07:29	WG1024032
1,1-Dichloroethene	U		0.000339	0.00112	1	09/24/2017 07:29	WG1024032
cis-1,2-Dichloroethene	0.0255		0.000263	0.00112	1	09/24/2017 07:29	WG1024032
trans-1,2-Dichloroethene	0.000980	J	0.000296	0.00112	1	09/24/2017 07:29	WG1024032
1,2-Dichloropropane	U		0.000401	0.00112	1	09/24/2017 07:29	WG1024032
1,1-Dichloropropene	U		0.000355	0.00112	1	09/24/2017 07:29	WG1024032
1,3-Dichloropropane	U		0.000232	0.00112	1	09/24/2017 07:29	WG1024032
cis-1,3-Dichloropropene	U	J4	0.000294	0.00112	1	09/24/2017 07:29	WG1024032
trans-1,3-Dichloropropene	U		0.000299	0.00112	1	09/24/2017 07:29	WG1024032
trans-1,4-Dichloro-2-butene	U		0.000872	0.00280	1	09/24/2017 07:29	WG1024032
2,2-Dichloropropane	U	JO	0.000313	0.00112	1	09/24/2017 07:29	WG1024032
Di-isopropyl ether	U		0.000278	0.00112	1	09/24/2017 07:29	WG1024032
Ethylbenzene	U		0.000333	0.00112	1	09/24/2017 07:29	WG1024032
Hexachloro-1,3-butadiene	U		0.000383	0.00112	1	09/24/2017 07:29	WG1024032
2-Hexanone	U		0.00153	0.0112	1	09/24/2017 07:29	WG1024032
n-Hexane	U		0.000325	0.0112	1	09/24/2017 07:29	WG1024032
Iodomethane	U		0.00283	0.0112	1	09/24/2017 07:29	WG1024032
Isopropylbenzene	U		0.000272	0.00112	1	09/24/2017 07:29	WG1024032
p-Isopropyltoluene	U		0.000229	0.00112	1	09/24/2017 07:29	WG1024032
2-Butanone (MEK)	0.00629	J	0.00524	0.0112	1	09/24/2017 07:29	WG1024032
Methylene Chloride	U		0.00112	0.00560	1	09/24/2017 07:29	WG1024032
4-Methyl-2-pentanone (MIBK)	U		0.00211	0.0112	1	09/24/2017 07:29	WG1024032

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/21/17 13:10

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000238	0.00112	1	09/24/2017 07:29	WG1024032
Naphthalene	U		0.00112	0.00560	1	09/24/2017 07:29	WG1024032
n-Propylbenzene	U		0.000231	0.00112	1	09/24/2017 07:29	WG1024032
Styrene	U		0.000262	0.00112	1	09/24/2017 07:29	WG1024032
1,1,1-Tetrachloroethane	U		0.000296	0.00112	1	09/24/2017 07:29	WG1024032
1,1,2,2-Tetrachloroethane	U		0.000409	0.00112	1	09/24/2017 07:29	WG1024032
1,1,2-Trichlorotrifluoroethane	U		0.000409	0.00112	1	09/24/2017 07:29	WG1024032
Tetrachloroethene	0.0190	<u>JO</u>	0.000309	0.00112	1	09/24/2017 07:29	WG1024032
Toluene	U		0.000486	0.00560	1	09/24/2017 07:29	WG1024032
1,2,3-Trichlorobenzene	U		0.000343	0.00112	1	09/24/2017 07:29	WG1024032
1,2,4-Trichlorobenzene	U		0.000435	0.00112	1	09/24/2017 07:29	WG1024032
1,1,1-Trichloroethane	U		0.000320	0.00112	1	09/24/2017 07:29	WG1024032
1,1,2-Trichloroethane	U		0.000310	0.00112	1	09/24/2017 07:29	WG1024032
Trichloroethene	0.00506		0.000313	0.00112	1	09/24/2017 07:29	WG1024032
Trichlorofluoromethane	U		0.000428	0.00560	1	09/24/2017 07:29	WG1024032
1,2,3-Trichloropropane	U		0.000830	0.00280	1	09/24/2017 07:29	WG1024032
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	09/24/2017 07:29	WG1024032
1,2,3-Trimethylbenzene	U		0.000322	0.00112	1	09/24/2017 07:29	WG1024032
1,3,5-Trimethylbenzene	U		0.000298	0.00112	1	09/24/2017 07:29	WG1024032
Vinyl acetate	U		0.00268	0.0112	1	09/24/2017 07:29	WG1024032
Vinyl chloride	0.0120		0.000326	0.00112	1	09/24/2017 07:29	WG1024032
Xylenes, Total	U		0.000782	0.00336	1	09/24/2017 07:29	WG1024032
(S) Toluene-d8	106			80.0-120		09/24/2017 07:29	WG1024032
(S) Dibromofluoromethane	108			74.0-131		09/24/2017 07:29	WG1024032
(S) 4-Bromofluorobenzene	108			64.0-132		09/24/2017 07:29	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	80.6		1	09/26/2017 08:27	WG1024282

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0124	0.0620	1	09/24/2017 07:48	WG1024032
Acrylonitrile	U		0.00222	0.0124	1	09/24/2017 07:48	WG1024032
Benzene	0.000387	J	0.000335	0.00124	1	09/24/2017 07:48	WG1024032
Bromobenzene	U		0.000352	0.00124	1	09/24/2017 07:48	WG1024032
Bromodichloromethane	U		0.000315	0.00124	1	09/24/2017 07:48	WG1024032
Bromochloromethane	U		0.000484	0.00620	1	09/24/2017 07:48	WG1024032
Bromoform	U		0.000526	0.00124	1	09/24/2017 07:48	WG1024032
Bromomethane	U		0.00166	0.00620	1	09/24/2017 07:48	WG1024032
n-Butylbenzene	U		0.000320	0.00124	1	09/24/2017 07:48	WG1024032
sec-Butylbenzene	U		0.000249	0.00124	1	09/24/2017 07:48	WG1024032
tert-Butylbenzene	U		0.000255	0.00124	1	09/24/2017 07:48	WG1024032
Carbon disulfide	0.00400		0.000274	0.00124	1	09/24/2017 07:48	WG1024032
Carbon tetrachloride	U		0.000407	0.00124	1	09/24/2017 07:48	WG1024032
Chlorobenzene	U		0.000263	0.00124	1	09/24/2017 07:48	WG1024032
Chlorodibromomethane	U		0.000463	0.00124	1	09/24/2017 07:48	WG1024032
Chloroethane	U		0.00117	0.00620	1	09/24/2017 07:48	WG1024032
Chloroform	U		0.000284	0.00620	1	09/24/2017 07:48	WG1024032
Chloromethane	U		0.000465	0.00310	1	09/24/2017 07:48	WG1024032
2-Chlorotoluene	U		0.000373	0.00124	1	09/24/2017 07:48	WG1024032
4-Chlorotoluene	U		0.000298	0.00124	1	09/24/2017 07:48	WG1024032
1,2-Dibromo-3-Chloropropane	U		0.00130	0.00620	1	09/24/2017 07:48	WG1024032
1,2-Dibromoethane	U		0.000425	0.00124	1	09/24/2017 07:48	WG1024032
Dibromomethane	U		0.000474	0.00124	1	09/24/2017 07:48	WG1024032
1,2-Dichlorobenzene	U		0.000378	0.00124	1	09/24/2017 07:48	WG1024032
1,3-Dichlorobenzene	U		0.000296	0.00124	1	09/24/2017 07:48	WG1024032
1,4-Dichlorobenzene	U		0.000280	0.00124	1	09/24/2017 07:48	WG1024032
Dichlorodifluoromethane	U		0.000884	0.00620	1	09/24/2017 07:48	WG1024032
1,1-Dichloroethane	U		0.000247	0.00124	1	09/24/2017 07:48	WG1024032
1,2-Dichloroethane	U		0.000329	0.00124	1	09/24/2017 07:48	WG1024032
1,1-Dichloroethene	0.00666		0.000376	0.00124	1	09/24/2017 07:48	WG1024032
cis-1,2-Dichloroethene	7.34		0.0291	0.124	100	10/01/2017 19:04	WG1024032
trans-1,2-Dichloroethene	0.0431		0.000327	0.00124	1	09/24/2017 07:48	WG1024032
1,2-Dichloropropane	U		0.000444	0.00124	1	09/24/2017 07:48	WG1024032
1,1-Dichloropropene	U		0.000393	0.00124	1	09/24/2017 07:48	WG1024032
1,3-Dichloropropane	U		0.000257	0.00124	1	09/24/2017 07:48	WG1024032
cis-1,3-Dichloropropene	U	J4	0.000325	0.00124	1	09/24/2017 07:48	WG1024032
trans-1,3-Dichloropropene	U		0.000331	0.00124	1	09/24/2017 07:48	WG1024032
trans-1,4-Dichloro-2-butene	U		0.000965	0.00310	1	09/24/2017 07:48	WG1024032
2,2-Dichloropropane	U	J0	0.000346	0.00124	1	09/24/2017 07:48	WG1024032
Di-isopropyl ether	U		0.000308	0.00124	1	09/24/2017 07:48	WG1024032
Ethylbenzene	U		0.000368	0.00124	1	09/24/2017 07:48	WG1024032
Hexachloro-1,3-butadiene	U		0.000424	0.00124	1	09/24/2017 07:48	WG1024032
2-Hexanone	U		0.00170	0.0124	1	09/24/2017 07:48	WG1024032
n-Hexane	0.00395	J	0.000360	0.0124	1	09/24/2017 07:48	WG1024032
Iodomethane	U		0.00314	0.0124	1	09/24/2017 07:48	WG1024032
Isopropylbenzene	U		0.000301	0.00124	1	09/24/2017 07:48	WG1024032
p-Isopropyltoluene	U		0.000253	0.00124	1	09/24/2017 07:48	WG1024032
2-Butanone (MEK)	U		0.00580	0.0124	1	09/24/2017 07:48	WG1024032
Methylene Chloride	U		0.00124	0.00620	1	09/24/2017 07:48	WG1024032
4-Methyl-2-pentanone (MIBK)	U		0.00233	0.0124	1	09/24/2017 07:48	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 13:00

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000263	0.00124	1	09/24/2017 07:48	WG1024032
Naphthalene	U		0.00124	0.00620	1	09/24/2017 07:48	WG1024032
n-Propylbenzene	U		0.000255	0.00124	1	09/24/2017 07:48	WG1024032
Styrene	U		0.000290	0.00124	1	09/24/2017 07:48	WG1024032
1,1,1,2-Tetrachloroethane	U		0.000327	0.00124	1	09/24/2017 07:48	WG1024032
1,1,2,2-Tetrachloroethane	U		0.000453	0.00124	1	09/24/2017 07:48	WG1024032
1,1,2-Trichlorotrifluoroethane	U		0.000453	0.00124	1	09/24/2017 07:48	WG1024032
Tetrachloroethene	0.0557	JO	0.000342	0.00124	1	09/24/2017 07:48	WG1024032
Toluene	U		0.000538	0.00620	1	09/24/2017 07:48	WG1024032
1,2,3-Trichlorobenzene	U		0.000380	0.00124	1	09/24/2017 07:48	WG1024032
1,2,4-Trichlorobenzene	U		0.000481	0.00124	1	09/24/2017 07:48	WG1024032
1,1,1-Trichloroethane	U		0.000355	0.00124	1	09/24/2017 07:48	WG1024032
1,1,2-Trichloroethane	U		0.000344	0.00124	1	09/24/2017 07:48	WG1024032
Trichloroethene	0.00699		0.000346	0.00124	1	09/24/2017 07:48	WG1024032
Trichlorofluoromethane	U		0.000474	0.00620	1	09/24/2017 07:48	WG1024032
1,2,3-Trichloropropane	U		0.000919	0.00310	1	09/24/2017 07:48	WG1024032
1,2,4-Trimethylbenzene	U		0.000262	0.00124	1	09/24/2017 07:48	WG1024032
1,2,3-Trimethylbenzene	U		0.000356	0.00124	1	09/24/2017 07:48	WG1024032
1,3,5-Trimethylbenzene	U		0.000330	0.00124	1	09/24/2017 07:48	WG1024032
Vinyl acetate	U		0.00296	0.0124	1	09/24/2017 07:48	WG1024032
Vinyl chloride	0.127		0.000361	0.00124	1	09/24/2017 07:48	WG1024032
Xylenes, Total	U		0.000866	0.00372	1	09/24/2017 07:48	WG1024032
(S) Toluene-d8	106			80.0-120		09/24/2017 07:48	WG1024032
(S) Toluene-d8	107			80.0-120		10/01/2017 19:04	WG1024032
(S) Dibromofluoromethane	102			74.0-131		10/01/2017 19:04	WG1024032
(S) Dibromofluoromethane	108			74.0-131		09/24/2017 07:48	WG1024032
(S) 4-Bromofluorobenzene	112			64.0-132		09/24/2017 07:48	WG1024032
(S) 4-Bromofluorobenzene	103			64.0-132		10/01/2017 19:04	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.2		1	09/26/2017 08:27	WG1024282

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U	JO	0.536	2.68	50	10/01/2017 19:25	WG1024032
Acrylonitrile	U		0.0960	0.536	50	10/01/2017 19:25	WG1024032
Benzene	U		0.0145	0.0536	50	10/01/2017 19:25	WG1024032
Bromobenzene	U		0.0152	0.0536	50	10/01/2017 19:25	WG1024032
Bromodichloromethane	U		0.0136	0.0536	50	10/01/2017 19:25	WG1024032
Bromochloromethane	U		0.0209	0.268	50	10/01/2017 19:25	WG1024032
Bromoform	U		0.0227	0.0536	50	10/01/2017 19:25	WG1024032
Bromomethane	U		0.0719	0.268	50	10/01/2017 19:25	WG1024032
n-Butylbenzene	U		0.0138	0.0536	50	10/01/2017 19:25	WG1024032
sec-Butylbenzene	U		0.0107	0.0536	50	10/01/2017 19:25	WG1024032
tert-Butylbenzene	U		0.0110	0.0536	50	10/01/2017 19:25	WG1024032
Carbon disulfide	U		0.0118	0.0536	50	10/01/2017 19:25	WG1024032
Carbon tetrachloride	U		0.0176	0.0536	50	10/01/2017 19:25	WG1024032
Chlorobenzene	U		0.0114	0.0536	50	10/01/2017 19:25	WG1024032
Chlorodibromomethane	U		0.0199	0.0536	50	10/01/2017 19:25	WG1024032
Chloroethane	U		0.0507	0.268	50	10/01/2017 19:25	WG1024032
Chloroform	U		0.0122	0.268	50	10/01/2017 19:25	WG1024032
Chloromethane	U		0.0202	0.134	50	10/01/2017 19:25	WG1024032
2-Chlorotoluene	U		0.0161	0.0536	50	10/01/2017 19:25	WG1024032
4-Chlorotoluene	U		0.0129	0.0536	50	10/01/2017 19:25	WG1024032
1,2-Dibromo-3-Chloropropane	U		0.0563	0.268	50	10/01/2017 19:25	WG1024032
1,2-Dibromoethane	U		0.0184	0.0536	50	10/01/2017 19:25	WG1024032
Dibromomethane	U		0.0205	0.0536	50	10/01/2017 19:25	WG1024032
1,2-Dichlorobenzene	U		0.0163	0.0536	50	10/01/2017 19:25	WG1024032
1,3-Dichlorobenzene	U		0.0129	0.0536	50	10/01/2017 19:25	WG1024032
1,4-Dichlorobenzene	U		0.0121	0.0536	50	10/01/2017 19:25	WG1024032
Dichlorodifluoromethane	U		0.0382	0.268	50	10/01/2017 19:25	WG1024032
1,1-Dichloroethane	U		0.0107	0.0536	50	10/01/2017 19:25	WG1024032
1,2-Dichloroethane	U		0.0142	0.0536	50	10/01/2017 19:25	WG1024032
1,1-Dichloroethene	U		0.0163	0.0536	50	10/01/2017 19:25	WG1024032
cis-1,2-Dichloroethene	0.498		0.0127	0.0536	50	10/01/2017 19:25	WG1024032
trans-1,2-Dichloroethene	U		0.0142	0.0536	50	10/01/2017 19:25	WG1024032
1,2-Dichloropropane	U		0.0192	0.0536	50	10/01/2017 19:25	WG1024032
1,1-Dichloropropene	U		0.0169	0.0536	50	10/01/2017 19:25	WG1024032
1,3-Dichloropropane	U		0.0112	0.0536	50	10/01/2017 19:25	WG1024032
cis-1,3-Dichloropropene	U	J4	0.0140	0.0536	50	10/01/2017 19:25	WG1024032
trans-1,3-Dichloropropene	U		0.0144	0.0536	50	10/01/2017 19:25	WG1024032
trans-1,4-Dichloro-2-butene	U	JO	0.0417	0.134	50	10/01/2017 19:25	WG1024032
2,2-Dichloropropane	U	JO	0.0150	0.0536	50	10/01/2017 19:25	WG1024032
Di-isopropyl ether	U	JO	0.0133	0.0536	50	10/01/2017 19:25	WG1024032
Ethylbenzene	U		0.0159	0.0536	50	10/01/2017 19:25	WG1024032
Hexachloro-1,3-butadiene	U		0.0183	0.0536	50	10/01/2017 19:25	WG1024032
2-Hexanone	U		0.0735	0.536	50	10/01/2017 19:25	WG1024032
n-Hexane	U	JO	0.0156	0.536	50	10/01/2017 19:25	WG1024032
Iodomethane	U		0.135	0.536	50	10/01/2017 19:25	WG1024032
Isopropylbenzene	U		0.0131	0.0536	50	10/01/2017 19:25	WG1024032
p-Isopropyltoluene	U		0.0109	0.0536	50	10/01/2017 19:25	WG1024032
2-Butanone (MEK)	U		0.251	0.536	50	10/01/2017 19:25	WG1024032
Methylene Chloride	U		0.0536	0.268	50	10/01/2017 19:25	WG1024032
4-Methyl-2-pentanone (MIBK)	U	JO	0.101	0.536	50	10/01/2017 19:25	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 12:55

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.0114	0.0536	50	10/01/2017 19:25	WG1024032
Naphthalene	U		0.0536	0.268	50	10/01/2017 19:25	WG1024032
n-Propylbenzene	U		0.0110	0.0536	50	10/01/2017 19:25	WG1024032
Styrene	U		0.0125	0.0536	50	10/01/2017 19:25	WG1024032
1,1,1,2-Tetrachloroethane	U		0.0142	0.0536	50	10/01/2017 19:25	WG1024032
1,1,2,2-Tetrachloroethane	U		0.0195	0.0536	50	10/01/2017 19:25	WG1024032
1,1,2-Trichlorotrifluoroethane	U		0.0195	0.0536	50	10/01/2017 19:25	WG1024032
Tetrachloroethene	4.09		0.0148	0.0536	50	10/01/2017 19:25	WG1024032
Toluene	U		0.0233	0.268	50	10/01/2017 19:25	WG1024032
1,2,3-Trichlorobenzene	U		0.0164	0.0536	50	10/01/2017 19:25	WG1024032
1,2,4-Trichlorobenzene	U		0.0208	0.0536	50	10/01/2017 19:25	WG1024032
1,1,1-Trichloroethane	U		0.0153	0.0536	50	10/01/2017 19:25	WG1024032
1,1,2-Trichloroethane	U		0.0148	0.0536	50	10/01/2017 19:25	WG1024032
Trichloroethene	1.40		0.0150	0.0536	50	10/01/2017 19:25	WG1024032
Trichlorofluoromethane	U		0.0205	0.268	50	10/01/2017 19:25	WG1024032
1,2,3-Trichloropropane	U		0.0397	0.134	50	10/01/2017 19:25	WG1024032
1,2,4-Trimethylbenzene	U		0.0114	0.0536	50	10/01/2017 19:25	WG1024032
1,2,3-Trimethylbenzene	U		0.0154	0.0536	50	10/01/2017 19:25	WG1024032
1,3,5-Trimethylbenzene	U		0.0143	0.0536	50	10/01/2017 19:25	WG1024032
Vinyl acetate	U		0.129	0.536	50	10/01/2017 19:25	WG1024032
Vinyl chloride	U		0.0157	0.0536	50	10/01/2017 19:25	WG1024032
Xylenes, Total	U		0.0374	0.161	50	10/01/2017 19:25	WG1024032
(S) Toluene-d8	111			80.0-120		10/01/2017 19:25	WG1024032
(S) Dibromofluoromethane	96.9			74.0-131		10/01/2017 19:25	WG1024032
(S) 4-Bromofluorobenzene	102			64.0-132		10/01/2017 19:25	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938636-15 WG1024032: Target compound too high to run at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	94.3		1	09/26/2017 08:27	WG1024282

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0106	0.0530	1	09/24/2017 08:27	WG1024032
Acrylonitrile	U		0.00190	0.0106	1	09/24/2017 08:27	WG1024032
Benzene	U		0.000286	0.00106	1	09/24/2017 08:27	WG1024032
Bromobenzene	U		0.000301	0.00106	1	09/24/2017 08:27	WG1024032
Bromodichloromethane	U		0.000269	0.00106	1	09/24/2017 08:27	WG1024032
Bromochloromethane	U		0.000414	0.00530	1	09/24/2017 08:27	WG1024032
Bromoform	U		0.000450	0.00106	1	09/24/2017 08:27	WG1024032
Bromomethane	U		0.00142	0.00530	1	09/24/2017 08:27	WG1024032
n-Butylbenzene	U		0.000274	0.00106	1	09/24/2017 08:27	WG1024032
sec-Butylbenzene	U		0.000213	0.00106	1	09/24/2017 08:27	WG1024032
tert-Butylbenzene	U		0.000218	0.00106	1	09/24/2017 08:27	WG1024032
Carbon disulfide	0.00171		0.000234	0.00106	1	09/24/2017 08:27	WG1024032
Carbon tetrachloride	U		0.000348	0.00106	1	09/24/2017 08:27	WG1024032
Chlorobenzene	U		0.000225	0.00106	1	09/24/2017 08:27	WG1024032
Chlorodibromomethane	U		0.000396	0.00106	1	09/24/2017 08:27	WG1024032
Chloroethane	U		0.00100	0.00530	1	09/24/2017 08:27	WG1024032
Chloroform	U		0.000243	0.00530	1	09/24/2017 08:27	WG1024032
Chloromethane	U		0.000398	0.00265	1	09/24/2017 08:27	WG1024032
2-Chlorotoluene	U		0.000319	0.00106	1	09/24/2017 08:27	WG1024032
4-Chlorotoluene	U		0.000255	0.00106	1	09/24/2017 08:27	WG1024032
1,2-Dibromo-3-Chloropropane	U		0.00111	0.00530	1	09/24/2017 08:27	WG1024032
1,2-Dibromoethane	U		0.000364	0.00106	1	09/24/2017 08:27	WG1024032
Dibromomethane	U		0.000405	0.00106	1	09/24/2017 08:27	WG1024032
1,2-Dichlorobenzene	U		0.000323	0.00106	1	09/24/2017 08:27	WG1024032
1,3-Dichlorobenzene	U		0.000253	0.00106	1	09/24/2017 08:27	WG1024032
1,4-Dichlorobenzene	U		0.000240	0.00106	1	09/24/2017 08:27	WG1024032
Dichlorodifluoromethane	U		0.000756	0.00530	1	09/24/2017 08:27	WG1024032
1,1-Dichloroethane	U		0.000211	0.00106	1	09/24/2017 08:27	WG1024032
1,2-Dichloroethane	U		0.000281	0.00106	1	09/24/2017 08:27	WG1024032
1,1-Dichloroethene	0.000787	J	0.000321	0.00106	1	09/24/2017 08:27	WG1024032
cis-1,2-Dichloroethene	0.160		0.000249	0.00106	1	09/24/2017 08:27	WG1024032
trans-1,2-Dichloroethene	0.00183		0.000280	0.00106	1	09/24/2017 08:27	WG1024032
1,2-Dichloropropane	U		0.000380	0.00106	1	09/24/2017 08:27	WG1024032
1,1-Dichloropropene	U		0.000336	0.00106	1	09/24/2017 08:27	WG1024032
1,3-Dichloropropane	U		0.000220	0.00106	1	09/24/2017 08:27	WG1024032
cis-1,3-Dichloropropene	U	J4	0.000278	0.00106	1	09/24/2017 08:27	WG1024032
trans-1,3-Dichloropropene	U		0.000283	0.00106	1	09/24/2017 08:27	WG1024032
trans-1,4-Dichloro-2-butene	U		0.000825	0.00265	1	09/24/2017 08:27	WG1024032
2,2-Dichloropropane	U	JO	0.000296	0.00106	1	09/24/2017 08:27	WG1024032
Di-isopropyl ether	U		0.000263	0.00106	1	09/24/2017 08:27	WG1024032
Ethylbenzene	U		0.000315	0.00106	1	09/24/2017 08:27	WG1024032
Hexachloro-1,3-butadiene	U		0.000363	0.00106	1	09/24/2017 08:27	WG1024032
2-Hexanone	U		0.00145	0.0106	1	09/24/2017 08:27	WG1024032
n-Hexane	0.000393	J	0.000308	0.0106	1	09/24/2017 08:27	WG1024032
Iodomethane	U		0.00268	0.0106	1	09/24/2017 08:27	WG1024032
Isopropylbenzene	U		0.000258	0.00106	1	09/24/2017 08:27	WG1024032
p-Isopropyltoluene	U		0.000216	0.00106	1	09/24/2017 08:27	WG1024032
2-Butanone (MEK)	U		0.00496	0.0106	1	09/24/2017 08:27	WG1024032
Methylene Chloride	U		0.00106	0.00530	1	09/24/2017 08:27	WG1024032
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0106	1	09/24/2017 08:27	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 13:30

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000225	0.00106	1	09/24/2017 08:27	WG1024032
Naphthalene	U		0.00106	0.00530	1	09/24/2017 08:27	WG1024032
n-Propylbenzene	U		0.000218	0.00106	1	09/24/2017 08:27	WG1024032
Styrene	U		0.000248	0.00106	1	09/24/2017 08:27	WG1024032
1,1,1-Tetrachloroethane	U		0.000280	0.00106	1	09/24/2017 08:27	WG1024032
1,1,2,2-Tetrachloroethane	U		0.000387	0.00106	1	09/24/2017 08:27	WG1024032
1,1,2-Trichlorotrifluoroethane	U		0.000387	0.00106	1	09/24/2017 08:27	WG1024032
Tetrachloroethene	4.34		0.00732	0.0265	25	10/01/2017 19:44	WG1024032
Toluene	U		0.000460	0.00530	1	09/24/2017 08:27	WG1024032
1,2,3-Trichlorobenzene	U		0.000325	0.00106	1	09/24/2017 08:27	WG1024032
1,2,4-Trichlorobenzene	U		0.000411	0.00106	1	09/24/2017 08:27	WG1024032
1,1,1-Trichloroethane	U		0.000303	0.00106	1	09/24/2017 08:27	WG1024032
1,1,2-Trichloroethane	U		0.000294	0.00106	1	09/24/2017 08:27	WG1024032
Trichloroethene	0.172		0.000296	0.00106	1	09/24/2017 08:27	WG1024032
Trichlorofluoromethane	U		0.000405	0.00530	1	09/24/2017 08:27	WG1024032
1,2,3-Trichloropropane	U		0.000786	0.00265	1	09/24/2017 08:27	WG1024032
1,2,4-Trimethylbenzene	U		0.000224	0.00106	1	09/24/2017 08:27	WG1024032
1,2,3-Trimethylbenzene	U		0.000304	0.00106	1	09/24/2017 08:27	WG1024032
1,3,5-Trimethylbenzene	U		0.000282	0.00106	1	09/24/2017 08:27	WG1024032
Vinyl acetate	U		0.00253	0.0106	1	09/24/2017 08:27	WG1024032
Vinyl chloride	U		0.000309	0.00106	1	09/24/2017 08:27	WG1024032
Xylenes, Total	U		0.000740	0.00318	1	09/24/2017 08:27	WG1024032
(S) Toluene-d8	97.1			80.0-120		10/01/2017 19:44	WG1024032
(S) Toluene-d8	106			80.0-120		09/24/2017 08:27	WG1024032
(S) Dibromofluoromethane	94.2			74.0-131		10/01/2017 19:44	WG1024032
(S) Dibromofluoromethane	110			74.0-131		09/24/2017 08:27	WG1024032
(S) 4-Bromofluorobenzene	112			64.0-132		09/24/2017 08:27	WG1024032
(S) 4-Bromofluorobenzene	102			64.0-132		10/01/2017 19:44	WG1024032

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	09/27/2017 01:35	WG1024893
Acrylonitrile	U		0.873	5.00	1	09/27/2017 01:35	WG1024893
Benzene	U		0.0896	0.500	1	09/27/2017 01:35	WG1024893
Bromobenzene	U		0.133	0.500	1	09/27/2017 01:35	WG1024893
Bromodichloromethane	U		0.0800	0.500	1	09/27/2017 01:35	WG1024893
Bromochloromethane	U		0.145	0.500	1	09/27/2017 01:35	WG1024893
Bromoform	U		0.186	0.500	1	09/27/2017 01:35	WG1024893
Bromomethane	U		0.157	2.50	1	09/27/2017 01:35	WG1024893
n-Butylbenzene	U		0.143	0.500	1	09/27/2017 01:35	WG1024893
sec-Butylbenzene	U		0.134	0.500	1	09/27/2017 01:35	WG1024893
tert-Butylbenzene	U		0.183	0.500	1	09/27/2017 01:35	WG1024893
Carbon disulfide	U		0.101	0.500	1	09/27/2017 01:35	WG1024893
Carbon tetrachloride	U		0.159	0.500	1	09/27/2017 01:35	WG1024893
Chlorobenzene	U		0.140	0.500	1	09/27/2017 01:35	WG1024893
Chlorodibromomethane	U		0.128	0.500	1	09/27/2017 01:35	WG1024893
Chloroethane	U		0.141	2.50	1	09/27/2017 01:35	WG1024893
Chloroform	U		0.0860	0.500	1	09/27/2017 01:35	WG1024893
Chloromethane	U		0.153	1.25	1	09/27/2017 01:35	WG1024893
2-Chlorotoluene	U		0.111	0.500	1	09/27/2017 01:35	WG1024893
4-Chlorotoluene	U		0.0972	0.500	1	09/27/2017 01:35	WG1024893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/27/2017 01:35	WG1024893
1,2-Dibromoethane	U		0.193	0.500	1	09/27/2017 01:35	WG1024893
Dibromomethane	U		0.117	0.500	1	09/27/2017 01:35	WG1024893
1,2-Dichlorobenzene	U		0.101	0.500	1	09/27/2017 01:35	WG1024893
1,3-Dichlorobenzene	U		0.130	0.500	1	09/27/2017 01:35	WG1024893
1,4-Dichlorobenzene	U		0.121	0.500	1	09/27/2017 01:35	WG1024893
Dichlorodifluoromethane	U		0.127	2.50	1	09/27/2017 01:35	WG1024893
1,1-Dichloroethane	U		0.114	0.500	1	09/27/2017 01:35	WG1024893
1,2-Dichloroethane	U		0.108	0.500	1	09/27/2017 01:35	WG1024893
1,1-Dichloroethene	U		0.188	0.500	1	09/27/2017 01:35	WG1024893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/27/2017 01:35	WG1024893
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/27/2017 01:35	WG1024893
1,2-Dichloropropane	U		0.190	0.500	1	09/27/2017 01:35	WG1024893
1,1-Dichloropropene	U		0.128	0.500	1	09/27/2017 01:35	WG1024893
1,3-Dichloropropane	U		0.147	1.00	1	09/27/2017 01:35	WG1024893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/27/2017 01:35	WG1024893
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/27/2017 01:35	WG1024893
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	09/27/2017 01:35	WG1024893
2,2-Dichloropropane	U		0.0929	0.500	1	09/27/2017 01:35	WG1024893
Di-isopropyl ether	U		0.0924	0.500	1	09/27/2017 01:35	WG1024893
Ethylbenzene	U		0.158	0.500	1	09/27/2017 01:35	WG1024893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/02/2017 20:51	WG1024893
2-Hexanone	U		0.757	5.00	1	09/27/2017 01:35	WG1024893
n-Hexane	U		0.305	5.00	1	09/27/2017 01:35	WG1024893
Iodomethane	U		0.377	10.0	1	09/27/2017 01:35	WG1024893
Isopropylbenzene	U		0.126	0.500	1	09/27/2017 01:35	WG1024893
p-Isopropyltoluene	U		0.138	0.500	1	09/27/2017 01:35	WG1024893
2-Butanone (MEK)	U		1.28	5.00	1	09/27/2017 01:35	WG1024893
Methylene Chloride	U		1.07	2.50	1	09/27/2017 01:35	WG1024893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/27/2017 01:35	WG1024893
Methyl tert-butyl ether	U		0.102	0.500	1	09/27/2017 01:35	WG1024893
Naphthalene	U		0.174	2.50	1	09/27/2017 01:35	WG1024893
n-Propylbenzene	U		0.162	0.500	1	09/27/2017 01:35	WG1024893
Styrene	U		0.117	0.500	1	09/27/2017 01:35	WG1024893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/27/2017 01:35	WG1024893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/27/2017 01:35	WG1024893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/15/17 00:00

L938636

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/27/2017 01:35	WG1024893
Tetrachloroethene	U		0.199	0.500	1	09/27/2017 01:35	WG1024893
Toluene	U		0.412	0.500	1	09/27/2017 01:35	WG1024893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/27/2017 01:35	WG1024893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/27/2017 01:35	WG1024893
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/27/2017 01:35	WG1024893
1,1,2-Trichloroethane	U		0.186	0.500	1	09/27/2017 01:35	WG1024893
Trichloroethene	U		0.153	0.500	1	09/27/2017 01:35	WG1024893
Trichlorofluoromethane	U		0.130	2.50	1	09/27/2017 01:35	WG1024893
1,2,3-Trichloropropane	U		0.247	2.50	1	09/27/2017 01:35	WG1024893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/27/2017 01:35	WG1024893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/27/2017 01:35	WG1024893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/27/2017 01:35	WG1024893
Vinyl acetate	U		0.645	5.00	1	09/27/2017 01:35	WG1024893
Vinyl chloride	U		0.118	0.500	1	09/27/2017 01:35	WG1024893
Xylenes, Total	U		0.316	1.50	1	09/27/2017 01:35	WG1024893
(S) Toluene-d8	105			80.0-120		10/02/2017 20:51	WG1024893
(S) Toluene-d8	105			80.0-120		09/27/2017 01:35	WG1024893
(S) Dibromofluoromethane	90.8			76.0-123		10/02/2017 20:51	WG1024893
(S) Dibromofluoromethane	102			76.0-123		09/27/2017 01:35	WG1024893
(S) 4-Bromofluorobenzene	90.6			80.0-120		09/27/2017 01:35	WG1024893
(S) 4-Bromofluorobenzene	99.2			80.0-120		10/02/2017 20:51	WG1024893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3252565-1 09/26/17 08:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000800	%	%	%

L938636-06 Original Sample (OS) • Duplicate (DUP)

(OS) L938636-06 09/26/17 08:36 • (DUP) R3252565-3 09/26/17 08:36

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	91.2	90.8	1	0.422	%	5

Laboratory Control Sample (LCS)

(LCS) R3252565-2 09/26/17 08:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

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Method Blank (MB)

(MB) R3252564-1 09/26/17 08:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000700	%	%	%

L938236-02 Original Sample (OS) • Duplicate (DUP)

(OS) L938236-02 09/26/17 08:27 • (DUP) R3252564-3 09/26/17 08:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	73.0	72.8	1	0.237	%	5

Laboratory Control Sample (LCS)

(LCS) R3252564-2 09/26/17 08:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L938636-08](#)

Method Blank (MB)

(MB) R3253568-3 09/27/17 11:59	
MB Result	MB Qualifier
ug/l	ug/l
MB MDL	MB RDL
ug/l	ug/l
Gasoline Range Organics-NWTPH	U
316	100
^(S) a,a'-Trifluorotoluene(FID)	97.6
	77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3253568-1 09/27/17 10:48 • (LCSD) R3253568-2 09/27/17 11:11									
Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
ug/l	ug/l	ug/l	%	%				%	%
Analyte									
Gasoline Range Organics-NWTPH	5500	4900	5360	89.1	97.5	72.0-134		9.06	20
^(S) a,a'-Trifluorotoluene(FID)				106	106	77.0-122			

L938609-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L938609-04 09/27/17 13:34 • (MS) R3253568-4 09/27/17 20:18 • (MSD) R3253568-5 09/27/17 20:41											
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
ug/l	ug/l	ug/l	ug/l	%	%					%	%
Analyte											
Gasoline Range Organics-NWTPH	5500	ND	7340	10500	134	191	1	23.0-159	J3 J5	35.7	20
^(S) a,a'-Trifluorotoluene(FID)					111	114		77.0-122			

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3253788-3 09/24/17 01:35

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
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8 Al
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Method Blank (MB)

(MB) R3253788-3 09/24/17 01:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	116		80.0-120	
(S) Dibromofluoromethane	103		74.0-131	
(S) 4-Bromofluorobenzene	110		64.0-132	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3253788-1 09/24/17 00:04 • (LCSD) R3253788-2 09/24/17 00:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.114	0.0976	91.6	78.1	11.0-160			16.0	23
Acrylonitrile	0.125	0.111	0.108	88.5	86.5	61.0-143			2.20	20
Benzene	0.0250	0.0249	0.0258	99.7	103	71.0-124			3.49	20
Bromobenzene	0.0250	0.0260	0.0270	104	108	78.0-120			3.64	20
Bromodichloromethane	0.0250	0.0265	0.0270	106	108	75.0-120			1.74	20
Bromoform	0.0250	0.0282	0.0287	113	115	65.0-133			1.76	20
Bromochloromethane	0.0250	0.0281	0.0281	113	113	80.0-121			0.0200	20
Bromomethane	0.0250	0.0230	0.0238	91.9	95.0	26.0-160			3.34	20
n-Butylbenzene	0.0250	0.0249	0.0264	99.6	106	73.0-126			5.94	20
sec-Butylbenzene	0.0250	0.0260	0.0271	104	108	75.0-121			3.95	20
tert-Butylbenzene	0.0250	0.0255	0.0266	102	106	74.0-122			3.97	20
Carbon tetrachloride	0.0250	0.0223	0.0230	89.3	91.8	66.0-123			2.81	20
Carbon disulfide	0.0250	0.0253	0.0261	101	104	53.0-130			3.12	20
Chlorobenzene	0.0250	0.0275	0.0280	110	112	79.0-121			1.62	20
Chlorodibromomethane	0.0250	0.0273	0.0271	109	108	74.0-128			0.670	20
Chloroethane	0.0250	0.0247	0.0254	98.7	102	51.0-147			3.02	20
Chloroform	0.0250	0.0252	0.0256	101	102	73.0-123			1.39	20
Chloromethane	0.0250	0.0227	0.0235	90.7	94.1	51.0-138			3.71	20
2-Chlorotoluene	0.0250	0.0261	0.0270	104	108	72.0-124			3.14	20
4-Chlorotoluene	0.0250	0.0264	0.0270	106	108	78.0-120			2.16	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0238	0.0235	95.3	93.9	65.0-126			1.44	20
1,2-Dibromoethane	0.0250	0.0296	0.0300	118	120	78.0-122			1.42	20
Dibromomethane	0.0250	0.0250	0.0251	99.9	100	79.0-120			0.440	20
1,2-Dichlorobenzene	0.0250	0.0251	0.0261	101	104	80.0-120			3.54	20
1,3-Dichlorobenzene	0.0250	0.0261	0.0270	104	108	72.0-123			3.65	20
1,4-Dichlorobenzene	0.0250	0.0264	0.0273	106	109	77.0-120			3.01	20
Dichlorodifluoromethane	0.0250	0.0266	0.0273	106	109	49.0-155			2.87	20
trans-1,4-Dichloro-2-butene	0.0250	0.0264	0.0252	105	101	68.0-126			4.53	20
1,1-Dichloroethane	0.0250	0.0258	0.0263	103	105	70.0-128			2.03	20
1,2-Dichloroethane	0.0250	0.0263	0.0267	105	107	69.0-128			1.41	20
1,1-Dichloroethene	0.0250	0.0242	0.0250	96.9	99.8	63.0-131			3.00	20
cis-1,2-Dichloroethene	0.0250	0.0256	0.0263	103	105	74.0-123			2.56	20
trans-1,2-Dichloroethene	0.0250	0.0258	0.0269	103	108	72.0-122			4.15	20
1,2-Dichloropropane	0.0250	0.0257	0.0267	103	107	75.0-126			4.15	20
1,1-Dichloropropene	0.0250	0.0247	0.0262	99.0	105	72.0-130			5.60	20
1,3-Dichloropropene	0.0250	0.0285	0.0288	114	115	80.0-121			0.930	20
cis-1,3-Dichloropropene	0.0250	0.0311	0.0319	124	128	80.0-125			2.41	20
trans-1,3-Dichloropropene	0.0250	0.0301	0.0304	121	121	75.0-129			0.730	20
2,2-Dichloropropane	0.0250	0.0180	0.0186	71.9	74.4	60.0-129			3.54	20
Di-isopropyl ether	0.0250	0.0225	0.0230	90.2	91.8	62.0-133			1.85	20

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1 Cp
2 Tc
3 Ss
4 Cn
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3253788-1 09/24/17 00:04 • (LCSD) R3253788-2 09/24/17 00:24

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0268	0.0275	107	110	77.0-120			2.43	20
Hexachloro-1,3-butadiene	0.0250	0.0261	0.0285	104	114	68.0-128			8.93	20
2-Hexanone	0.125	0.127	0.116	102	92.7	61.0-143			9.26	20
Isopropylbenzene	0.0250	0.0258	0.0265	103	106	75.0-120			2.54	20
n-Hexane	0.0250	0.0238	0.0247	95.0	98.9	57.0-125			3.98	20
Iodomethane	0.125	0.128	0.132	102	106	67.0-132			3.37	20
p-Isopropyltoluene	0.0250	0.0268	0.0283	107	113	74.0-125			5.62	20
2-Butanone (MEK)	0.125	0.113	0.102	90.6	81.4	37.0-159			10.7	20
Methylene Chloride	0.0250	0.0239	0.0245	95.5	98.0	67.0-123			2.59	20
4-Methyl-2-pentanone (MIBK)	0.125	0.109	0.106	87.6	84.7	60.0-144			3.37	20
Methyl tert-butyl ether	0.0250	0.0218	0.0215	87.2	86.0	66.0-125			1.40	20
Naphthalene	0.0250	0.0253	0.0260	101	104	64.0-125			2.70	20
n-Propylbenzene	0.0250	0.0265	0.0271	106	109	78.0-120			2.45	20
Styrene	0.0250	0.0283	0.0290	113	116	78.0-124			2.43	20
1,1,1,2-Tetrachloroethane	0.0250	0.0247	0.0248	98.8	99.4	74.0-124			0.580	20
1,1,2,2-Tetrachloroethane	0.0250	0.0250	0.0248	99.9	99.0	73.0-120			0.920	20
Tetrachloroethene	0.0250	0.0299	0.0305	120	122	70.0-127			1.90	20
Toluene	0.0250	0.0263	0.0272	105	109	77.0-120			3.55	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0220	0.0226	88.1	90.3	64.0-135			2.47	20
1,2,3-Trichlorobenzene	0.0250	0.0271	0.0284	108	113	68.0-126			4.62	20
1,2,4-Trichlorobenzene	0.0250	0.0257	0.0267	103	107	70.0-127			3.99	20
1,1,1-Trichloroethane	0.0250	0.0232	0.0240	92.7	96.1	69.0-125			3.62	20
1,1,2-Trichloroethane	0.0250	0.0276	0.0276	110	110	78.0-120			0.000	20
Trichloroethene	0.0250	0.0258	0.0268	103	107	79.0-120			3.78	20
Trichlorofluoromethane	0.0250	0.0244	0.0252	97.6	101	59.0-136			3.14	20
1,2,3-Trichloropropane	0.0250	0.0255	0.0247	102	98.7	73.0-124			3.09	20
1,2,3-Trimethylbenzene	0.0250	0.0234	0.0241	93.6	96.5	76.0-120			3.05	20
1,2,4-Trimethylbenzene	0.0250	0.0253	0.0259	101	104	75.0-120			2.54	20
1,3,5-Trimethylbenzene	0.0250	0.0262	0.0270	105	108	75.0-120			3.01	20
Vinyl chloride	0.0250	0.0253	0.0263	101	105	63.0-134			4.09	20
Xylenes, Total	0.0750	0.0804	0.0825	107	110	77.0-120			2.58	20
Vinyl acetate	0.125	0.141	0.141	113	113	58.0-156			0.380	20
(S) Toluene-d8				113	112	80.0-120				
(S) Dibromofluoromethane				102	101	74.0-131				
(S) 4-Bromofluorobenzene				108	108	64.0-132				

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1 Cp
2 Tc
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Method Blank (MB)

(MB) R3253753-3 09/29/17 12:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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1 Cp
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L938636-01.02.03.04.05.06.07.09](#)

Method Blank (MB)

(MB) R3253753-3 09/29/17 12:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Ethylbenzene	U		0.000297	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	116			80.0-120
(S) Dibromofluoromethane	101			74.0-131
(S) 4-Bromofluorobenzene	110			64.0-132

1 Cp
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3253753-1 09/29/17 10:41 • (LCSD) R3253753-2 09/29/17 11:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0866	0.0631	69.3	50.4	11.0-160		J3	31.4	23
Acrylonitrile	0.125	0.100	0.0879	80.1	70.3	61.0-143			13.0	20
Benzene	0.0250	0.0242	0.0232	96.8	92.9	71.0-124			4.14	20
Bromobenzene	0.0250	0.0253	0.0250	101	100	78.0-120			1.29	20
Bromodichloromethane	0.0250	0.0251	0.0245	101	98.2	75.0-120			2.33	20
Bromoform	0.0250	0.0275	0.0258	110	103	65.0-133			6.39	20
Bromochloromethane	0.0250	0.0270	0.0256	108	103	80.0-121			5.13	20
Bromomethane	0.0250	0.0212	0.0201	84.9	80.4	26.0-160			5.36	20
n-Butylbenzene	0.0250	0.0242	0.0232	96.7	92.7	73.0-126			4.32	20
sec-Butylbenzene	0.0250	0.0255	0.0246	102	98.5	75.0-121			3.62	20
tert-Butylbenzene	0.0250	0.0252	0.0243	101	97.0	74.0-122			3.68	20
Carbon tetrachloride	0.0250	0.0218	0.0211	87.1	84.2	66.0-123			3.40	20
Carbon disulfide	0.0250	0.0254	0.0245	102	98.0	53.0-130			3.77	20
Chlorobenzene	0.0250	0.0282	0.0272	113	109	79.0-121			3.77	20
Chlorodibromomethane	0.0250	0.0273	0.0255	109	102	74.0-128			6.68	20
Chloroethane	0.0250	0.0229	0.0217	91.6	86.8	51.0-147			5.40	20
Chloroform	0.0250	0.0241	0.0233	96.5	93.3	73.0-123			3.37	20
Chloromethane	0.0250	0.0207	0.0196	82.9	78.3	51.0-138			5.66	20
2-Chlorotoluene	0.0250	0.0256	0.0254	102	102	72.0-124			0.720	20
4-Chlorotoluene	0.0250	0.0256	0.0253	102	101	78.0-120			1.05	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0215	0.0209	86.0	83.8	65.0-126			2.68	20
1,2-Dibromoethane	0.0250	0.0294	0.0278	118	111	78.0-122			5.60	20
Dibromomethane	0.0250	0.0231	0.0229	92.2	91.8	79.0-120			0.490	20
1,2-Dichlorobenzene	0.0250	0.0243	0.0243	97.2	97.3	80.0-120			0.0800	20
1,3-Dichlorobenzene	0.0250	0.0254	0.0250	102	99.9	72.0-123			1.57	20
1,4-Dichlorobenzene	0.0250	0.0253	0.0253	101	101	77.0-120			0.0200	20
Dichlorodifluoromethane	0.0250	0.0224	0.0214	89.5	85.4	49.0-155			4.61	20
trans-1,4-Dichloro-2-butene	0.0250	0.0226	0.0212	90.4	85.0	68.0-126			6.23	20
1,1-Dichloroethane	0.0250	0.0251	0.0244	101	97.7	70.0-128			2.89	20
1,2-Dichloroethane	0.0250	0.0249	0.0233	99.5	93.2	69.0-128			6.54	20
1,1-Dichloroethene	0.0250	0.0242	0.0233	96.8	93.1	63.0-131			3.99	20
cis-1,2-Dichloroethene	0.0250	0.0251	0.0238	100	95.4	74.0-123			5.18	20
trans-1,2-Dichloroethene	0.0250	0.0257	0.0252	103	101	72.0-122			2.16	20
1,2-Dichloropropane	0.0250	0.0245	0.0246	97.9	98.5	75.0-126			0.660	20
1,1-Dichloropropene	0.0250	0.0249	0.0235	99.5	94.1	72.0-130			5.66	20
1,3-Dichloropropene	0.0250	0.0283	0.0273	113	109	80.0-121			3.41	20
cis-1,3-Dichloropropene	0.0250	0.0313	0.0303	125	121	80.0-125			3.12	20
trans-1,3-Dichloropropene	0.0250	0.0301	0.0283	120	113	75.0-129			6.25	20
2,2-Dichloropropane	0.0250	0.0177	0.0174	70.8	69.6	60.0-129			1.65	20
Di-isopropyl ether	0.0250	0.0218	0.0205	87.0	82.0	62.0-133			6.01	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3253753-1 09/29/17 10:41 • (LCSD) R3253753-2 09/29/17 11:01

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0275	0.0265	110	106	77.0-120			3.50	20
Hexachloro-1,3-butadiene	0.0250	0.0250	0.0236	99.8	94.4	68.0-128			5.62	20
2-Hexanone	0.125	0.107	0.105	86.0	83.8	61.0-143			2.51	20
Isopropylbenzene	0.0250	0.0254	0.0249	102	99.6	75.0-120			2.01	20
n-Hexane	0.0250	0.0237	0.0222	94.8	88.9	57.0-125			6.44	20
Iodomethane	0.125	0.126	0.123	101	98.1	67.0-132			3.06	20
p-Isopropyltoluene	0.0250	0.0263	0.0255	105	102	74.0-125			2.85	20
2-Butanone (MEK)	0.125	0.0901	0.0810	72.1	64.8	37.0-159			10.7	20
Methylene Chloride	0.0250	0.0240	0.0231	95.8	92.5	67.0-123			3.56	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0987	0.0936	79.0	74.9	60.0-144			5.30	20
Methyl tert-butyl ether	0.0250	0.0201	0.0193	80.2	77.3	66.0-125			3.78	20
Naphthalene	0.0250	0.0235	0.0233	94.0	93.1	64.0-125			0.960	20
n-Propylbenzene	0.0250	0.0260	0.0253	104	101	78.0-120			2.74	20
Styrene	0.0250	0.0282	0.0287	113	115	78.0-124			1.72	20
1,1,1,2-Tetrachloroethane	0.0250	0.0250	0.0238	100	95.3	74.0-124			4.80	20
1,1,2,2-Tetrachloroethane	0.0250	0.0236	0.0228	94.2	91.1	73.0-120			3.36	20
Tetrachloroethene	0.0250	0.0304	0.0292	122	117	70.0-127			4.02	20
Toluene	0.0250	0.0271	0.0262	108	105	77.0-120			3.10	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0215	0.0209	85.8	83.5	64.0-135			2.78	20
1,2,3-Trichlorobenzene	0.0250	0.0254	0.0256	102	102	68.0-126			0.630	20
1,2,4-Trichlorobenzene	0.0250	0.0240	0.0238	95.9	95.3	70.0-127			0.580	20
1,1,1-Trichloroethane	0.0250	0.0227	0.0216	90.9	86.3	69.0-125			5.18	20
1,1,2-Trichloroethane	0.0250	0.0276	0.0264	110	105	78.0-120			4.53	20
Trichloroethene	0.0250	0.0250	0.0245	99.9	97.9	79.0-120			2.05	20
Trichlorofluoromethane	0.0250	0.0222	0.0217	88.8	87.0	59.0-136			2.06	20
1,2,3-Trichloropropane	0.0250	0.0238	0.0221	95.0	88.3	73.0-124			7.34	20
1,2,3-Trimethylbenzene	0.0250	0.0226	0.0224	90.5	89.6	76.0-120			1.06	20
1,2,4-Trimethylbenzene	0.0250	0.0246	0.0241	98.2	96.6	75.0-120			1.68	20
1,3,5-Trimethylbenzene	0.0250	0.0258	0.0249	103	99.7	75.0-120			3.34	20
Vinyl chloride	0.0250	0.0231	0.0220	92.3	88.2	63.0-134			4.62	20
Xylenes, Total	0.0750	0.0821	0.0790	109	105	77.0-120			3.85	20
Vinyl acetate	0.125	0.128	0.121	103	96.9	58.0-156			5.75	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										

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Method Blank (MB)

(MB) R3253957-2 09/27/17 01:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
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Method Blank (MB)

(MB) R3253957-2 09/27/17 01:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.525	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.230	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.238	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	104			80.0-120
(S) Dibromofluoromethane	102			76.0-123
(S) 4-Bromofluorobenzene	92.1			80.0-120

1 Cp
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Laboratory Control Sample (LCS)

(LCS) R3253957-1 09/27/17 00:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	141	113	10.0-160	
Acrylonitrile	125	143	115	60.0-142	
Benzene	25.0	26.4	106	69.0-123	
Bromobenzene	25.0	24.2	96.8	79.0-120	
Bromodichloromethane	25.0	24.6	98.5	76.0-120	
Bromochloromethane	25.0	26.4	105	76.0-122	
Bromoform	25.0	25.0	100	67.0-132	
Bromomethane	25.0	32.0	128	18.0-160	
n-Butylbenzene	25.0	27.8	111	72.0-126	
sec-Butylbenzene	25.0	27.4	109	74.0-121	
tert-Butylbenzene	25.0	26.4	106	75.0-122	
Carbon disulfide	25.0	26.6	106	55.0-127	
Carbon tetrachloride	25.0	27.1	108	63.0-122	
Chlorobenzene	25.0	25.7	103	79.0-121	
Chlorodibromomethane	25.0	26.4	106	75.0-125	
Chloroethane	25.0	33.5	134	47.0-152	
Chloroform	25.0	26.9	108	72.0-121	
Chloromethane	25.0	28.5	114	48.0-139	
2-Chlorotoluene	25.0	25.4	101	74.0-122	
4-Chlorotoluene	25.0	25.1	100	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	25.7	103	64.0-127	
1,2-Dibromoethane	25.0	25.5	102	77.0-123	
Dibromomethane	25.0	25.9	103	78.0-120	
1,2-Dichlorobenzene	25.0	26.0	104	80.0-120	
1,3-Dichlorobenzene	25.0	25.2	101	72.0-123	
1,4-Dichlorobenzene	25.0	25.4	102	77.0-120	
Dichlorodifluoromethane	25.0	38.1	152	49.0-155	
1,1-Dichloroethane	25.0	27.0	108	70.0-126	
1,2-Dichloroethane	25.0	26.5	106	67.0-126	
1,1-Dichloroethene	25.0	27.2	109	64.0-129	
cis-1,2-Dichloroethene	25.0	26.8	107	73.0-120	
trans-1,2-Dichloroethene	25.0	27.2	109	71.0-121	
1,2-Dichloropropane	25.0	25.4	102	75.0-125	
1,1-Dichloropropene	25.0	28.8	115	71.0-129	
1,3-Dichloropropene	25.0	26.2	105	80.0-121	
cis-1,3-Dichloropropene	25.0	26.4	106	79.0-123	
trans-1,3-Dichloropropene	25.0	25.7	103	74.0-127	
trans-1,4-Dichloro-2-butene	25.0	20.2	80.9	55.0-134	
2,2-Dichloropropane	25.0	28.8	115	60.0-125	
Di-isopropyl ether	25.0	25.6	102	59.0-133	

Public Review Draft

1 Cp
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5 Sr
6 Qc
7 Gl
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ACCOUNT:

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Laboratory Control Sample (LCS)

(LCS) R3253957-1 09/27/17 00:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	26.0	104	77.0-120	
Hexachloro-1,3-butadiene	25.0	27.0	108	64.0-131	
2-Hexanone	125	135	108	58.0-147	
n-Hexane	25.0	28.7	115	56.0-124	
Iodomethane	125	139	111	57.0-140	
Isopropylbenzene	25.0	25.4	102	75.0-120	
p-Isopropyltoluene	25.0	27.4	109	74.0-126	
2-Butanone (MEK)	125	129	103	37.0-158	
Methylene Chloride	25.0	26.0	104	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	133	106	59.0-143	
Methyl tert-butyl ether	25.0	26.1	104	64.0-123	
Naphthalene	25.0	25.1	100	62.0-128	
n-Propylbenzene	25.0	25.4	101	79.0-120	
Styrene	25.0	24.9	99.7	78.0-124	
1,1,1,2-Tetrachloroethane	25.0	25.8	103	75.0-122	
1,1,2,2-Tetrachloroethane	25.0	23.4	93.6	71.0-122	
1,1,2-Trichlorotrifluoroethane	25.0	30.8	123	61.0-136	
Tetrachloroethene	25.0	25.5	102	70.0-127	
Toluene	25.0	25.4	102	77.0-120	
1,2,3-Trichlorobenzene	25.0	25.9	104	61.0-133	
1,2,4-Trichlorobenzene	25.0	25.5	102	69.0-129	
1,1,1-Trichloroethane	25.0	27.4	110	68.0-122	
1,1,2-Trichloroethane	25.0	25.1	100	78.0-120	
Trichloroethene	25.0	26.5	106	78.0-120	
Trichlorofluoromethane	25.0	32.1	129	56.0-137	
1,2,3-Trichloropropane	25.0	24.3	97.2	72.0-124	
1,2,4-Trimethylbenzene	25.0	25.0	100	75.0-120	
1,2,3-Trimethylbenzene	25.0	28.0	112	75.0-120	
1,3,5-Trimethylbenzene	25.0	25.6	102	75.0-120	
Vinyl acetate	125	143	115	46.0-160	
Vinyl chloride	25.0	31.5	126	64.0-133	
Xylenes, Total	75.0	76.8	102	77.0-120	
(S) Toluene-d8			102	80.0-120	
(S) Dibromofluoromethane			103	76.0-123	
(S) 4-Bromofluorobenzene			95.3	80.0-120	

Public Review Draft

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ACCOUNT:

PES Environmental, Inc. - WA

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1413.001.02.602

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

1 Cp
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State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

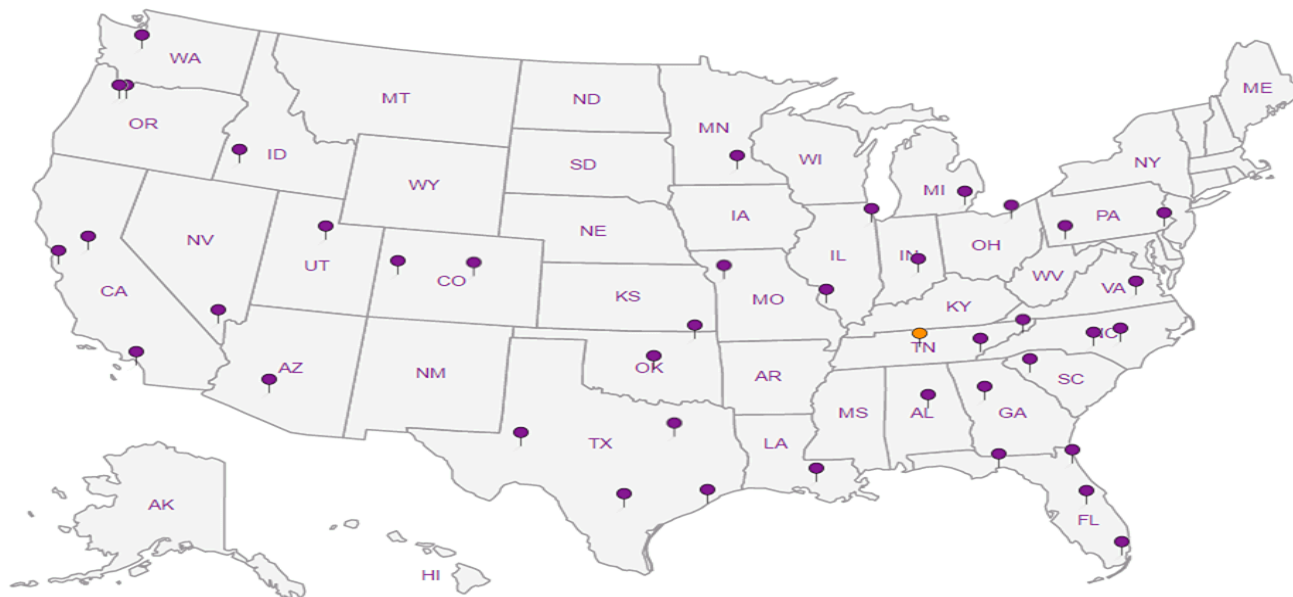
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



PES Environmental, Inc. - WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Email To: bhaldeman@pesenv.com

Report to:
Bill Haldeman

Project:
American Linen Project

Phone: 206-529-3980
 Fax: 206-529-3985

Client Project #
1413.001.02.602

City/State Collected:
SEATTLE, WA

Lab Project #
PESENVSWA-ALP

Site/Facility ID #
1413.001.02.602

Quote #

Collected by (signature):
SHANNON MCKERNAN

Immediate Packed on Ice: N Y X

Relinquished by: (Signature)
 Relinquished by: (Signature)
 Relinquished by: (Signature)

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts	Analysis / Container / Preservative
B-915-80	GRAB	SS	80	9/20/17	1430	5	NWTPHGX 2ozClr-NoPres
B-221-16		SS	16		1450	5	NWTPHGX 40ml/NaHSO4/Syr/MeOH
B-221-22		SS	22		1455	5	VOC 8260C 2ozClr-NoPres
B-221-33		SS	33		1515	5	VOC 8260C 40ml/NaHSO4/Syr/MeOH
B-221-37		SS	37		1520	5	
B-221-45		SS	45		1540	5	
B-221-50		SS	50		1545	5	
MW-138-092117		GWS	110	9/21/17	10:10	6	
B-221-60		SS	60	9/20/17	1720	5	
B-221-70		SS	70	9/21/17	08:50	5	

Remarks:

Matrix: SS - Soil, AIR - Air, F - Filter, GW - Groundwater, B - Brassay, WW - Wastewater, DW - Drinking Water, OT - Other

Samples returned via: UPS Fedex Courier

Tracking #
 Received by: (Signature)
 Received by: (Signature)
 Received for lab by: (Signature)

Temp: 09 °C
 Batches Received: 81
 Trip Blank Received: Yes/No
 HCL/MeOH
 Sample Receipt Checklist
 Coc Seal Present/Intact: NP
 Coc Signed/Accurate: N
 Bottles airtight/Intact: N
 Correct bottles used: N
 Sufficient volume sent: N
 It Abolishable: N
 YOA, Zero Headspace: N
 Preservation Correct/Checked: N

Date: 9/21/17 Time: 1430
 Date: 9/22/17 Time: 0845
 Date: 9-22-17 Time: 0845
 Hold: NCF / OK



12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

LA 938636
 G209

Account: PESENVSWA
 Template: T127855
 Prelogin: P618512
 TSR: 110 - Brian Ford
 Shipped Via: _____
 Remarks: _____
 Sample # (lab only): _____

PES Environmental, Inc. - WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Email To: bhaldeman@pesenv.com


Report to:
Bill Haldeman

Project:
American Linen Project

Phone: 206-529-3980
 Fax: 206-529-3985

Client Project #
 1413 001 02 002

Site/Facility ID #
 SHANNON MCKERNAN 1413 001 02 002

Collected by (signature):


Rush? (Lab MUST be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

P.O. #

City/State
 Collected: **SEATTLE, WA**
 Lab Project #
PESENVSWA-ALP

Date Results Needed

Immediately Packed on ice N Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Ctrcs	Analysis / Container / Preservative
B-222-17	GRAB	SS	17	9/21/17	1135	5	NWTPHGX 2ozClr-NoPres
B-222-25		SS	25		1155	5	NWTPHGX 40ml/NaHSO4/Syr/MeOH
B-222-34		SS	34		1310	5	VOC 8260C 2ozClr-NoPres 40 mL
B-222-42		SS	42		1300	5	VOC 8260C 40ml/NaHSO4/Syr/MeOH
B-222-50		SS	50		1255	5	
B-916-30		SS	30		1330	5	
TRIP BLANK-092117		MSS	NA	5/15/17	NA	1	

Remarks:

Matrix: SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Blossary
 DW - Drinking Water
 OT - Other

Samples returned via:
 UPS _____ FedEx _____ Courier _____

Tracking # _____
 Received by: (Signature) _____
 Date: _____ Time: _____

Received by: (Signature) _____
 Date: _____ Time: _____

Relinquished by: (Signature)
SHANNON MCKERNAN
 Date: 9/21/17 Time: 1430

Relinquished by: (Signature)
 Date: _____ Time: _____

Received for lab by: (Signature)
MVF
 Date: 9-22-17 Time: 0845

Relinquished by: (Signature)
 Date: _____ Time: _____

Relinquished by: (Signature)
 Date: _____ Time: _____

Relinquished by: (Signature)
 Date: _____ Time: _____

Chain of Custody Page ___ of ___



12065 Labanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-747-5859
 Fax: 615-758-5859



L# **938636**

Table # _____

Accrnum: **PESENVSWA**

Template: **T127855**

Prelogin: **P618512**

TSR: **110 - Brian Ford**

P# _____

Shipped Via: _____

Remarks: _____

Sample # (lab only) _____

Sanitize Receipt Checklist

COG Seal Present/Intact:	NP	Y	N
COG Signed/Activated:		Y	N
Bottles arrive intact:		Y	N
Correct bottles used:		Y	N
Sufficient volume sent:		Y	N
VCA zero headspace:		Y	N
Preservation Correct/Checked:		Y	N

If preservation required by Login: Date/Time

Hold: _____

Conditions: **NCF / OX**

PES Environmental, Inc.- WA

Sample Delivery Group: L938873
Samples Received: 09/23/2017
Project Number: 1413.001.02.602
Description: American Linen Project

Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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B-223-16 L938873-01 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 15:45
Received date/time 09/23/17 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1025104	1	09/27/17 15:23	09/27/17 15:46	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024797	200	09/21/17 15:45	09/26/17 20:28	DWR

2 Tc

3 Ss

B-223-22 L938873-02 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 16:00
Received date/time 09/23/17 08:45

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1025104	1	09/27/17 15:23	09/27/17 15:46	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024797	1000	09/21/17 16:00	10/02/17 19:03	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024797	200	09/21/17 16:00	09/26/17 20:54	DWR

5 Sr

6 Qc

B-223-30 L938873-03 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 16:25
Received date/time 09/23/17 08:45

7 Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1025104	1	09/27/17 15:23	09/27/17 15:46	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024797	100000	09/21/17 16:25	10/03/17 15:13	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024797	25000	09/21/17 16:25	10/02/17 19:29	BMB

8 Al

9 Sc

B-223-39 L938873-04 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 16:40
Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1025104	1	09/27/17 15:23	09/27/17 15:46	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024909	1	09/21/17 16:40	09/27/17 01:27	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024909	100	09/21/17 16:40	09/28/17 20:38	ACG

B-223-47 L938873-05 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 17:10
Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1025104	1	09/27/17 15:23	09/27/17 15:46	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024909	1	09/21/17 17:10	09/27/17 01:47	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024909	25	09/21/17 17:10	09/28/17 20:58	ACG

B-917-57 L938873-06 Solid

Collected by Shannon McKernan
Collected date/time 09/21/17 17:30
Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1025104	1	09/27/17 15:23	09/27/17 15:46	KDW
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024909	1	09/21/17 17:30	09/27/17 02:06	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1024909	25	09/21/17 17:30	09/28/17 21:18	ACG

MW-140-092217 L938873-07 GW

Collected by Shannon McKernan
Collected date/time 09/22/17 10:50
Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025164	1	09/27/17 19:51	09/27/17 19:51	BMB



MW-134-092217 L938873-08 GW

Collected by Shannon McKernan
 Collected date/time 09/22/17 08:50
 Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025164	5	09/27/17 20:13	09/27/17 20:13	BMB

¹ Cp

² Tc

³ Ss

MW-141-092217 L938873-09 GW

Collected by Shannon McKernan
 Collected date/time 09/22/17 12:30
 Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025164	1	09/27/17 20:35	09/27/17 20:35	BMB

⁴ Cn

⁵ Sr

B-917-100-W L938873-10 GW

Collected by Shannon McKernan
 Collected date/time 09/22/17 09:00
 Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025164	1	09/27/17 20:57	09/27/17 20:57	BMB

⁶ Qc

⁷ Gl

TRIP BLANK-092217 L938873-11 GW

Collected by Shannon McKernan
 Collected date/time 09/21/17 00:00
 Received date/time 09/23/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025164	1	09/27/17 12:53	09/27/17 12:53	ACG

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	84.6		1	09/27/2017 15:46	WG1025104

1 Cp

2 Tc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		2.36	11.8	200	09/26/2017 20:28	WG1024797
Acrylonitrile	U		0.423	2.36	200	09/26/2017 20:28	WG1024797
Benzene	U		0.0638	0.236	200	09/26/2017 20:28	WG1024797
Bromobenzene	U		0.0671	0.236	200	09/26/2017 20:28	WG1024797
Bromodichloromethane	U		0.0600	0.236	200	09/26/2017 20:28	WG1024797
Bromochloromethane	U		0.0922	1.18	200	09/26/2017 20:28	WG1024797
Bromoform	U		0.100	0.236	200	09/26/2017 20:28	WG1024797
Bromomethane	U	JO	0.317	1.18	200	09/26/2017 20:28	WG1024797
n-Butylbenzene	U		0.0610	0.236	200	09/26/2017 20:28	WG1024797
sec-Butylbenzene	U		0.0475	0.236	200	09/26/2017 20:28	WG1024797
tert-Butylbenzene	U		0.0487	0.236	200	09/26/2017 20:28	WG1024797
Carbon disulfide	U		0.0522	0.236	200	09/26/2017 20:28	WG1024797
Carbon tetrachloride	U		0.0775	0.236	200	09/26/2017 20:28	WG1024797
Chlorobenzene	U		0.0501	0.236	200	09/26/2017 20:28	WG1024797
Chlorodibromomethane	U		0.0881	0.236	200	09/26/2017 20:28	WG1024797
Chloroethane	U		0.223	1.18	200	09/26/2017 20:28	WG1024797
Chloroform	U		0.0541	1.18	200	09/26/2017 20:28	WG1024797
Chloromethane	U		0.0886	0.591	200	09/26/2017 20:28	WG1024797
2-Chlorotoluene	U		0.0711	0.236	200	09/26/2017 20:28	WG1024797
4-Chlorotoluene	U		0.0567	0.236	200	09/26/2017 20:28	WG1024797
1,2-Dibromo-3-Chloropropane	U		0.248	1.18	200	09/26/2017 20:28	WG1024797
1,2-Dibromoethane	U		0.0811	0.236	200	09/26/2017 20:28	WG1024797
Dibromomethane	U		0.0903	0.236	200	09/26/2017 20:28	WG1024797
1,2-Dichlorobenzene	U		0.0721	0.236	200	09/26/2017 20:28	WG1024797
1,3-Dichlorobenzene	U		0.0565	0.236	200	09/26/2017 20:28	WG1024797
1,4-Dichlorobenzene	U		0.0534	0.236	200	09/26/2017 20:28	WG1024797
Dichlorodifluoromethane	U		0.169	1.18	200	09/26/2017 20:28	WG1024797
1,1-Dichloroethane	U		0.0470	0.236	200	09/26/2017 20:28	WG1024797
1,2-Dichloroethane	U		0.0626	0.236	200	09/26/2017 20:28	WG1024797
1,1-Dichloroethene	U		0.0716	0.236	200	09/26/2017 20:28	WG1024797
cis-1,2-Dichloroethene	1.71		0.0555	0.236	200	09/26/2017 20:28	WG1024797
trans-1,2-Dichloroethene	U		0.0624	0.236	200	09/26/2017 20:28	WG1024797
1,2-Dichloropropane	0.203	J	0.0846	0.236	200	09/26/2017 20:28	WG1024797
1,1-Dichloropropene	U		0.0749	0.236	200	09/26/2017 20:28	WG1024797
1,3-Dichloropropane	U		0.0489	0.236	200	09/26/2017 20:28	WG1024797
cis-1,3-Dichloropropene	U		0.0619	0.236	200	09/26/2017 20:28	WG1024797
trans-1,3-Dichloropropene	U		0.0631	0.236	200	09/26/2017 20:28	WG1024797
trans-1,4-Dichloro-2-butene	U		0.184	0.591	200	09/26/2017 20:28	WG1024797
2,2-Dichloropropane	U		0.0659	0.236	200	09/26/2017 20:28	WG1024797
Di-isopropyl ether	U		0.0586	0.236	200	09/26/2017 20:28	WG1024797
Ethylbenzene	U		0.0702	0.236	200	09/26/2017 20:28	WG1024797
Hexachloro-1,3-butadiene	U		0.0808	0.236	200	09/26/2017 20:28	WG1024797
2-Hexanone	U		0.324	2.36	200	09/26/2017 20:28	WG1024797
n-Hexane	U		0.0685	2.36	200	09/26/2017 20:28	WG1024797
Iodomethane	U		0.598	2.36	200	09/26/2017 20:28	WG1024797
Isopropylbenzene	U		0.0574	0.236	200	09/26/2017 20:28	WG1024797
p-Isopropyltoluene	U		0.0482	0.236	200	09/26/2017 20:28	WG1024797
2-Butanone (MEK)	U		1.11	2.36	200	09/26/2017 20:28	WG1024797
Methylene Chloride	U		0.236	1.18	200	09/26/2017 20:28	WG1024797
4-Methyl-2-pentanone (MIBK)	U	JO	0.444	2.36	200	09/26/2017 20:28	WG1024797

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/21/17 15:45

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.0501	0.236	200	09/26/2017 20:28	WG1024797
Naphthalene	U		0.236	1.18	200	09/26/2017 20:28	WG1024797
n-Propylbenzene	U		0.0487	0.236	200	09/26/2017 20:28	WG1024797
Styrene	U		0.0553	0.236	200	09/26/2017 20:28	WG1024797
1,1,1,2-Tetrachloroethane	U		0.0624	0.236	200	09/26/2017 20:28	WG1024797
1,1,2,2-Tetrachloroethane	U		0.0863	0.236	200	09/26/2017 20:28	WG1024797
1,1,2-Trichlorotrifluoroethane	U		0.0863	0.236	200	09/26/2017 20:28	WG1024797
Tetrachloroethene	27.0		0.0652	0.236	200	09/26/2017 20:28	WG1024797
Toluene	U		0.103	1.18	200	09/26/2017 20:28	WG1024797
1,2,3-Trichlorobenzene	U		0.0723	0.236	200	09/26/2017 20:28	WG1024797
1,2,4-Trichlorobenzene	U		0.0917	0.236	200	09/26/2017 20:28	WG1024797
1,1,1-Trichloroethane	U		0.0676	0.236	200	09/26/2017 20:28	WG1024797
1,1,2-Trichloroethane	U		0.0655	0.236	200	09/26/2017 20:28	WG1024797
Trichloroethene	1.08		0.0659	0.236	200	09/26/2017 20:28	WG1024797
Trichlorofluoromethane	U		0.0903	1.18	200	09/26/2017 20:28	WG1024797
1,2,3-Trichloropropane	U		0.175	0.591	200	09/26/2017 20:28	WG1024797
1,2,4-Trimethylbenzene	U		0.0499	0.236	200	09/26/2017 20:28	WG1024797
1,2,3-Trimethylbenzene	U		0.0678	0.236	200	09/26/2017 20:28	WG1024797
1,3,5-Trimethylbenzene	U		0.0629	0.236	200	09/26/2017 20:28	WG1024797
Vinyl acetate	U		0.565	2.36	200	09/26/2017 20:28	WG1024797
Vinyl chloride	U		0.0688	0.236	200	09/26/2017 20:28	WG1024797
Xylenes, Total	U		0.165	0.709	200	09/26/2017 20:28	WG1024797
(S) Toluene-d8	102			80.0-120		09/26/2017 20:28	WG1024797
(S) Dibromofluoromethane	111			74.0-131		09/26/2017 20:28	WG1024797
(S) 4-Bromofluorobenzene	99.5			64.0-132		09/26/2017 20:28	WG1024797

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938873-01 WG1024797: Target compounds too high to re-analyze at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.6		1	09/27/2017 15:46	WG1025104

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		2.28	11.4	200	09/26/2017 20:54	WG1024797
Acrylonitrile	U		0.409	2.28	200	09/26/2017 20:54	WG1024797
Benzene	U		0.0617	0.228	200	09/26/2017 20:54	WG1024797
Bromobenzene	U		0.0649	0.228	200	09/26/2017 20:54	WG1024797
Bromodichloromethane	U		0.0580	0.228	200	09/26/2017 20:54	WG1024797
Bromochloromethane	U		0.0891	1.14	200	09/26/2017 20:54	WG1024797
Bromoform	U		0.0968	0.228	200	09/26/2017 20:54	WG1024797
Bromomethane	U	JO	0.306	1.14	200	09/26/2017 20:54	WG1024797
n-Butylbenzene	U		0.0589	0.228	200	09/26/2017 20:54	WG1024797
sec-Butylbenzene	U		0.0459	0.228	200	09/26/2017 20:54	WG1024797
tert-Butylbenzene	U		0.0470	0.228	200	09/26/2017 20:54	WG1024797
Carbon disulfide	U		0.0505	0.228	200	09/26/2017 20:54	WG1024797
Carbon tetrachloride	U		0.0749	0.228	200	09/26/2017 20:54	WG1024797
Chlorobenzene	U		0.0484	0.228	200	09/26/2017 20:54	WG1024797
Chlorodibromomethane	U		0.0852	0.228	200	09/26/2017 20:54	WG1024797
Chloroethane	U		0.216	1.14	200	09/26/2017 20:54	WG1024797
Chloroform	U		0.0523	1.14	200	09/26/2017 20:54	WG1024797
Chloromethane	U		0.0856	0.571	200	09/26/2017 20:54	WG1024797
2-Chlorotoluene	U		0.0687	0.228	200	09/26/2017 20:54	WG1024797
4-Chlorotoluene	U		0.0548	0.228	200	09/26/2017 20:54	WG1024797
1,2-Dibromo-3-Chloropropane	U		0.240	1.14	200	09/26/2017 20:54	WG1024797
1,2-Dibromoethane	U		0.0783	0.228	200	09/26/2017 20:54	WG1024797
Dibromomethane	U		0.0872	0.228	200	09/26/2017 20:54	WG1024797
1,2-Dichlorobenzene	U		0.0697	0.228	200	09/26/2017 20:54	WG1024797
1,3-Dichlorobenzene	U		0.0546	0.228	200	09/26/2017 20:54	WG1024797
1,4-Dichlorobenzene	U		0.0516	0.228	200	09/26/2017 20:54	WG1024797
Dichlorodifluoromethane	U		0.163	1.14	200	09/26/2017 20:54	WG1024797
1,1-Dichloroethane	U		0.0455	0.228	200	09/26/2017 20:54	WG1024797
1,2-Dichloroethane	U		0.0605	0.228	200	09/26/2017 20:54	WG1024797
1,1-Dichloroethene	U		0.0692	0.228	200	09/26/2017 20:54	WG1024797
cis-1,2-Dichloroethene	0.713		0.0537	0.228	200	09/26/2017 20:54	WG1024797
trans-1,2-Dichloroethene	U		0.0603	0.228	200	09/26/2017 20:54	WG1024797
1,2-Dichloropropane	U		0.0818	0.228	200	09/26/2017 20:54	WG1024797
1,1-Dichloropropene	U		0.0724	0.228	200	09/26/2017 20:54	WG1024797
1,3-Dichloropropane	U		0.0473	0.228	200	09/26/2017 20:54	WG1024797
cis-1,3-Dichloropropene	U		0.0598	0.228	200	09/26/2017 20:54	WG1024797
trans-1,3-Dichloropropene	U		0.0610	0.228	200	09/26/2017 20:54	WG1024797
trans-1,4-Dichloro-2-butene	U		0.178	0.571	200	09/26/2017 20:54	WG1024797
2,2-Dichloropropane	U		0.0637	0.228	200	09/26/2017 20:54	WG1024797
Di-isopropyl ether	U		0.0566	0.228	200	09/26/2017 20:54	WG1024797
Ethylbenzene	U		0.0678	0.228	200	09/26/2017 20:54	WG1024797
Hexachloro-1,3-butadiene	U		0.0781	0.228	200	09/26/2017 20:54	WG1024797
2-Hexanone	U		0.313	2.28	200	09/26/2017 20:54	WG1024797
n-Hexane	U		0.0662	2.28	200	09/26/2017 20:54	WG1024797
Iodomethane	U		0.578	2.28	200	09/26/2017 20:54	WG1024797
Isopropylbenzene	U		0.0555	0.228	200	09/26/2017 20:54	WG1024797
p-Isopropyltoluene	U		0.0466	0.228	200	09/26/2017 20:54	WG1024797
2-Butanone (MEK)	U		1.07	2.28	200	09/26/2017 20:54	WG1024797
Methylene Chloride	U		0.228	1.14	200	09/26/2017 20:54	WG1024797
4-Methyl-2-pentanone (MIBK)	U	JO	0.429	2.28	200	09/26/2017 20:54	WG1024797

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 16:00

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.0484	0.228	200	09/26/2017 20:54	WG1024797
Naphthalene	U		0.228	1.14	200	09/26/2017 20:54	WG1024797
n-Propylbenzene	U		0.0470	0.228	200	09/26/2017 20:54	WG1024797
Styrene	U		0.0534	0.228	200	09/26/2017 20:54	WG1024797
1,1,1,2-Tetrachloroethane	U		0.0603	0.228	200	09/26/2017 20:54	WG1024797
1,1,2,2-Tetrachloroethane	U		0.0834	0.228	200	09/26/2017 20:54	WG1024797
1,1,2-Trichlorotrifluoroethane	U		0.0834	0.228	200	09/26/2017 20:54	WG1024797
Tetrachloroethene	38.0		0.315	1.14	1000	10/02/2017 19:03	WG1024797
Toluene	U		0.0991	1.14	200	09/26/2017 20:54	WG1024797
1,2,3-Trichlorobenzene	U		0.0699	0.228	200	09/26/2017 20:54	WG1024797
1,2,4-Trichlorobenzene	U		0.0886	0.228	200	09/26/2017 20:54	WG1024797
1,1,1-Trichloroethane	U		0.0653	0.228	200	09/26/2017 20:54	WG1024797
1,1,2-Trichloroethane	U		0.0633	0.228	200	09/26/2017 20:54	WG1024797
Trichloroethene	0.453		0.0637	0.228	200	09/26/2017 20:54	WG1024797
Trichlorofluoromethane	U		0.0872	1.14	200	09/26/2017 20:54	WG1024797
1,2,3-Trichloropropane	U		0.169	0.571	200	09/26/2017 20:54	WG1024797
1,2,4-Trimethylbenzene	U		0.0482	0.228	200	09/26/2017 20:54	WG1024797
1,2,3-Trimethylbenzene	U		0.0655	0.228	200	09/26/2017 20:54	WG1024797
1,3,5-Trimethylbenzene	U		0.0608	0.228	200	09/26/2017 20:54	WG1024797
Vinyl acetate	U		0.546	2.28	200	09/26/2017 20:54	WG1024797
Vinyl chloride	U		0.0665	0.228	200	09/26/2017 20:54	WG1024797
Xylenes, Total	U		0.160	0.685	200	09/26/2017 20:54	WG1024797
(S) Toluene-d8	102			80.0-120		10/02/2017 19:03	WG1024797
(S) Toluene-d8	103			80.0-120		09/26/2017 20:54	WG1024797
(S) Dibromofluoromethane	110			74.0-131		10/02/2017 19:03	WG1024797
(S) Dibromofluoromethane	112			74.0-131		09/26/2017 20:54	WG1024797
(S) 4-Bromofluorobenzene	98.9			64.0-132		09/26/2017 20:54	WG1024797
(S) 4-Bromofluorobenzene	98.6			64.0-132		10/02/2017 19:03	WG1024797

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

L938873-02 WG1024797: Target compounds too high to re-analyze at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	90.8		1	09/27/2017 15:46	WG1025104

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis date / time	Batch
Acetone	U		275	1380	25000	10/02/2017 19:29	WG1024797
Acrylonitrile	U	JO	49.3	275	25000	10/02/2017 19:29	WG1024797
Benzene	U		7.43	27.5	25000	10/02/2017 19:29	WG1024797
Bromobenzene	U		7.82	27.5	25000	10/02/2017 19:29	WG1024797
Bromodichloromethane	U		6.99	27.5	25000	10/02/2017 19:29	WG1024797
Bromochloromethane	U		10.7	138	25000	10/02/2017 19:29	WG1024797
Bromoform	U		11.7	27.5	25000	10/02/2017 19:29	WG1024797
Bromomethane	U		36.9	138	25000	10/02/2017 19:29	WG1024797
n-Butylbenzene	U		7.10	27.5	25000	10/02/2017 19:29	WG1024797
sec-Butylbenzene	U		5.53	27.5	25000	10/02/2017 19:29	WG1024797
tert-Butylbenzene	U		5.67	27.5	25000	10/02/2017 19:29	WG1024797
Carbon disulfide	U		6.08	27.5	25000	10/02/2017 19:29	WG1024797
Carbon tetrachloride	U		9.03	27.5	25000	10/02/2017 19:29	WG1024797
Chlorobenzene	U		5.84	27.5	25000	10/02/2017 19:29	WG1024797
Chlorodibromomethane	U		10.3	27.5	25000	10/02/2017 19:29	WG1024797
Chloroethane	U		26.0	138	25000	10/02/2017 19:29	WG1024797
Chloroform	U		6.30	138	25000	10/02/2017 19:29	WG1024797
Chloromethane	U		10.3	68.8	25000	10/02/2017 19:29	WG1024797
2-Chlorotoluene	U		8.28	27.5	25000	10/02/2017 19:29	WG1024797
4-Chlorotoluene	U		6.61	27.5	25000	10/02/2017 19:29	WG1024797
1,2-Dibromo-3-Chloropropane	U	JO	28.8	138	25000	10/02/2017 19:29	WG1024797
1,2-Dibromoethane	U		9.45	27.5	25000	10/02/2017 19:29	WG1024797
Dibromomethane	U		10.5	27.5	25000	10/02/2017 19:29	WG1024797
1,2-Dichlorobenzene	U		8.39	27.5	25000	10/02/2017 19:29	WG1024797
1,3-Dichlorobenzene	U		6.58	27.5	25000	10/02/2017 19:29	WG1024797
1,4-Dichlorobenzene	U		6.22	27.5	25000	10/02/2017 19:29	WG1024797
Dichlorodifluoromethane	U		19.6	138	25000	10/02/2017 19:29	WG1024797
1,1-Dichloroethane	U		5.48	27.5	25000	10/02/2017 19:29	WG1024797
1,2-Dichloroethane	U		7.29	27.5	25000	10/02/2017 19:29	WG1024797
1,1-Dichloroethene	U		8.35	27.5	25000	10/02/2017 19:29	WG1024797
cis-1,2-Dichloroethene	U		6.47	27.5	25000	10/02/2017 19:29	WG1024797
trans-1,2-Dichloroethene	U		7.27	27.5	25000	10/02/2017 19:29	WG1024797
1,2-Dichloropropane	U		9.85	27.5	25000	10/02/2017 19:29	WG1024797
1,1-Dichloropropene	U		8.72	27.5	25000	10/02/2017 19:29	WG1024797
1,3-Dichloropropane	U		5.70	27.5	25000	10/02/2017 19:29	WG1024797
cis-1,3-Dichloropropene	U		7.21	27.5	25000	10/02/2017 19:29	WG1024797
trans-1,3-Dichloropropene	U		7.35	27.5	25000	10/02/2017 19:29	WG1024797
trans-1,4-Dichloro-2-butene	U		21.4	68.8	25000	10/02/2017 19:29	WG1024797
2,2-Dichloropropane	U		7.68	27.5	25000	10/02/2017 19:29	WG1024797
Di-isopropyl ether	U		6.83	27.5	25000	10/02/2017 19:29	WG1024797
Ethylbenzene	U		8.17	27.5	25000	10/02/2017 19:29	WG1024797
Hexachloro-1,3-butadiene	U		9.41	27.5	25000	10/02/2017 19:29	WG1024797
2-Hexanone	U		37.7	275	25000	10/02/2017 19:29	WG1024797
n-Hexane	U		7.98	275	25000	10/02/2017 19:29	WG1024797
Iodomethane	U		69.6	275	25000	10/02/2017 19:29	WG1024797
Isopropylbenzene	U		6.69	27.5	25000	10/02/2017 19:29	WG1024797
p-Isopropyltoluene	U		5.61	27.5	25000	10/02/2017 19:29	WG1024797
2-Butanone (MEK)	U		129	275	25000	10/02/2017 19:29	WG1024797
Methylene Chloride	U		27.5	138	25000	10/02/2017 19:29	WG1024797
4-Methyl-2-pentanone (MIBK)	U	JO	51.7	275	25000	10/02/2017 19:29	WG1024797

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/21/17 16:25

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		5.84	27.5	25000	10/02/2017 19:29	WG1024797
Naphthalene	U		27.5	138	25000	10/02/2017 19:29	WG1024797
n-Propylbenzene	U		5.67	27.5	25000	10/02/2017 19:29	WG1024797
Styrene	U		6.44	27.5	25000	10/02/2017 19:29	WG1024797
1,1,1,2-Tetrachloroethane	U		7.27	27.5	25000	10/02/2017 19:29	WG1024797
1,1,2,2-Tetrachloroethane	U		10.0	27.5	25000	10/02/2017 19:29	WG1024797
1,1,2-Trichlorotrifluoroethane	U		10.0	27.5	25000	10/02/2017 19:29	WG1024797
Tetrachloroethene	5560		30.4	110	100000	10/03/2017 15:13	WG1024797
Toluene	U		11.9	138	25000	10/02/2017 19:29	WG1024797
1,2,3-Trichlorobenzene	U		8.42	27.5	25000	10/02/2017 19:29	WG1024797
1,2,4-Trichlorobenzene	U		10.7	27.5	25000	10/02/2017 19:29	WG1024797
1,1,1-Trichloroethane	U		7.87	27.5	25000	10/02/2017 19:29	WG1024797
1,1,2-Trichloroethane	U		7.62	27.5	25000	10/02/2017 19:29	WG1024797
Trichloroethene	U		7.68	27.5	25000	10/02/2017 19:29	WG1024797
Trichlorofluoromethane	U		10.5	138	25000	10/02/2017 19:29	WG1024797
1,2,3-Trichloropropane	U		20.4	68.8	25000	10/02/2017 19:29	WG1024797
1,2,4-Trimethylbenzene	U		5.81	27.5	25000	10/02/2017 19:29	WG1024797
1,2,3-Trimethylbenzene	U		7.90	27.5	25000	10/02/2017 19:29	WG1024797
1,3,5-Trimethylbenzene	U		7.32	27.5	25000	10/02/2017 19:29	WG1024797
Vinyl acetate	U		65.8	275	25000	10/02/2017 19:29	WG1024797
Vinyl chloride	U		8.01	27.5	25000	10/02/2017 19:29	WG1024797
Xylenes, Total	U		19.2	82.6	25000	10/02/2017 19:29	WG1024797
(S) Toluene-d8	103			80.0-120		10/03/2017 15:13	WG1024797
(S) Toluene-d8	102			80.0-120		10/02/2017 19:29	WG1024797
(S) Dibromofluoromethane	91.8			74.0-131		10/03/2017 15:13	WG1024797
(S) Dibromofluoromethane	111			74.0-131		10/02/2017 19:29	WG1024797
(S) 4-Bromofluorobenzene	100			64.0-132		10/02/2017 19:29	WG1024797
(S) 4-Bromofluorobenzene	98.2			64.0-132		10/03/2017 15:13	WG1024797

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Sample Narrative:

L938873-03 WG1024797: Target compounds too high to re-analyze at a lower dilution.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.8		1	09/27/2017 15:46	WG1025104

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0114	0.0569	1	09/27/2017 01:27	WG1024909
Acrylonitrile	U		0.00204	0.0114	1	09/27/2017 01:27	WG1024909
Benzene	U		0.000308	0.00114	1	09/27/2017 01:27	WG1024909
Bromobenzene	U		0.000323	0.00114	1	09/27/2017 01:27	WG1024909
Bromodichloromethane	U		0.000289	0.00114	1	09/27/2017 01:27	WG1024909
Bromochloromethane	U		0.000444	0.00569	1	09/27/2017 01:27	WG1024909
Bromoform	U		0.000483	0.00114	1	09/27/2017 01:27	WG1024909
Bromomethane	U		0.00153	0.00569	1	09/27/2017 01:27	WG1024909
n-Butylbenzene	U		0.000294	0.00114	1	09/27/2017 01:27	WG1024909
sec-Butylbenzene	U		0.000229	0.00114	1	09/27/2017 01:27	WG1024909
tert-Butylbenzene	U		0.000235	0.00114	1	09/27/2017 01:27	WG1024909
Carbon disulfide	U		0.000252	0.00114	1	09/27/2017 01:27	WG1024909
Carbon tetrachloride	U		0.000374	0.00114	1	09/27/2017 01:27	WG1024909
Chlorobenzene	U		0.000241	0.00114	1	09/27/2017 01:27	WG1024909
Chlorodibromomethane	U		0.000425	0.00114	1	09/27/2017 01:27	WG1024909
Chloroethane	0.00151	J	0.00108	0.00569	1	09/27/2017 01:27	WG1024909
Chloroform	U		0.000261	0.00569	1	09/27/2017 01:27	WG1024909
Chloromethane	U		0.000427	0.00285	1	09/27/2017 01:27	WG1024909
2-Chlorotoluene	U		0.000343	0.00114	1	09/27/2017 01:27	WG1024909
4-Chlorotoluene	U		0.000273	0.00114	1	09/27/2017 01:27	WG1024909
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00569	1	09/27/2017 01:27	WG1024909
1,2-Dibromoethane	U		0.000391	0.00114	1	09/27/2017 01:27	WG1024909
Dibromomethane	U		0.000435	0.00114	1	09/27/2017 01:27	WG1024909
1,2-Dichlorobenzene	U		0.000347	0.00114	1	09/27/2017 01:27	WG1024909
1,3-Dichlorobenzene	U		0.000272	0.00114	1	09/27/2017 01:27	WG1024909
1,4-Dichlorobenzene	U		0.000257	0.00114	1	09/27/2017 01:27	WG1024909
Dichlorodifluoromethane	U		0.000812	0.00569	1	09/27/2017 01:27	WG1024909
1,1-Dichloroethane	U		0.000227	0.00114	1	09/27/2017 01:27	WG1024909
1,2-Dichloroethane	U		0.000302	0.00114	1	09/27/2017 01:27	WG1024909
1,1-Dichloroethene	U		0.000345	0.00114	1	09/27/2017 01:27	WG1024909
cis-1,2-Dichloroethene	0.0914		0.000268	0.00114	1	09/27/2017 01:27	WG1024909
trans-1,2-Dichloroethene	0.000883	J	0.000301	0.00114	1	09/27/2017 01:27	WG1024909
1,2-Dichloropropane	U		0.000408	0.00114	1	09/27/2017 01:27	WG1024909
1,1-Dichloropropene	U		0.000361	0.00114	1	09/27/2017 01:27	WG1024909
1,3-Dichloropropane	U		0.000236	0.00114	1	09/27/2017 01:27	WG1024909
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	09/27/2017 01:27	WG1024909
trans-1,3-Dichloropropene	U		0.000304	0.00114	1	09/27/2017 01:27	WG1024909
trans-1,4-Dichloro-2-butene	U		0.000886	0.00285	1	09/27/2017 01:27	WG1024909
2,2-Dichloropropane	U		0.000318	0.00114	1	09/27/2017 01:27	WG1024909
Di-isopropyl ether	U		0.000282	0.00114	1	09/27/2017 01:27	WG1024909
Ethylbenzene	U		0.000338	0.00114	1	09/27/2017 01:27	WG1024909
Hexachloro-1,3-butadiene	U		0.000390	0.00114	1	09/27/2017 01:27	WG1024909
2-Hexanone	U		0.00156	0.0114	1	09/27/2017 01:27	WG1024909
n-Hexane	U		0.000330	0.0114	1	09/27/2017 01:27	WG1024909
Iodomethane	U		0.00288	0.0114	1	09/27/2017 01:27	WG1024909
Isopropylbenzene	U		0.000277	0.00114	1	09/27/2017 01:27	WG1024909
p-Isopropyltoluene	U		0.000232	0.00114	1	09/27/2017 01:27	WG1024909
2-Butanone (MEK)	U		0.00533	0.0114	1	09/27/2017 01:27	WG1024909
Methylene Chloride	U		0.00114	0.00569	1	09/27/2017 01:27	WG1024909
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	09/27/2017 01:27	WG1024909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 16:40

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	09/27/2017 01:27	WG1024909
Naphthalene	U		0.00114	0.00569	1	09/27/2017 01:27	WG1024909
n-Propylbenzene	U		0.000235	0.00114	1	09/27/2017 01:27	WG1024909
Styrene	U		0.000267	0.00114	1	09/27/2017 01:27	WG1024909
1,1,1,2-Tetrachloroethane	U		0.000301	0.00114	1	09/27/2017 01:27	WG1024909
1,1,2,2-Tetrachloroethane	U		0.000416	0.00114	1	09/27/2017 01:27	WG1024909
1,1,2-Trichlorotrifluoroethane	U		0.000416	0.00114	1	09/27/2017 01:27	WG1024909
Tetrachloroethene	4.68		0.0314	0.114	100	09/28/2017 20:38	WG1024909
Toluene	U		0.000494	0.00569	1	09/27/2017 01:27	WG1024909
1,2,3-Trichlorobenzene	U		0.000349	0.00114	1	09/27/2017 01:27	WG1024909
1,2,4-Trichlorobenzene	U		0.000442	0.00114	1	09/27/2017 01:27	WG1024909
1,1,1-Trichloroethane	U		0.000326	0.00114	1	09/27/2017 01:27	WG1024909
1,1,2-Trichloroethane	U		0.000315	0.00114	1	09/27/2017 01:27	WG1024909
Trichloroethene	0.0228		0.000318	0.00114	1	09/27/2017 01:27	WG1024909
Trichlorofluoromethane	U		0.000435	0.00569	1	09/27/2017 01:27	WG1024909
1,2,3-Trichloropropane	U		0.000844	0.00285	1	09/27/2017 01:27	WG1024909
1,2,4-Trimethylbenzene	U		0.0240	0.114	100	09/28/2017 20:38	WG1024909
1,2,3-Trimethylbenzene	U		0.000327	0.00114	1	09/27/2017 01:27	WG1024909
1,3,5-Trimethylbenzene	U		0.000303	0.00114	1	09/27/2017 01:27	WG1024909
Vinyl acetate	U		0.00272	0.0114	1	09/27/2017 01:27	WG1024909
Vinyl chloride	0.00775		0.000331	0.00114	1	09/27/2017 01:27	WG1024909
Xylenes, Total	U		0.000795	0.00342	1	09/27/2017 01:27	WG1024909
(S) Toluene-d8	107			80.0-120		09/28/2017 20:38	WG1024909
(S) Toluene-d8	110			80.0-120		09/27/2017 01:27	WG1024909
(S) Dibromofluoromethane	96.5			74.0-131		09/28/2017 20:38	WG1024909
(S) Dibromofluoromethane	104			74.0-131		09/27/2017 01:27	WG1024909
(S) 4-Bromofluorobenzene	113			64.0-132		09/27/2017 01:27	WG1024909
(S) 4-Bromofluorobenzene	103			64.0-132		09/28/2017 20:38	WG1024909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938873-04 WG1024909: Target compounds too high to re-analyze at a lower dilution.



Collected date/time: 09/21/17 17:10

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	86.1		1	09/27/2017 15:46	WG1025104

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0138	J	0.0116	0.0581	1	09/27/2017 01:47	WG1024909
Acrylonitrile	U		0.00208	0.0116	1	09/27/2017 01:47	WG1024909
Benzene	U		0.000314	0.00116	1	09/27/2017 01:47	WG1024909
Bromobenzene	U		0.000330	0.00116	1	09/27/2017 01:47	WG1024909
Bromodichloromethane	U		0.000295	0.00116	1	09/27/2017 01:47	WG1024909
Bromochloromethane	U		0.000453	0.00581	1	09/27/2017 01:47	WG1024909
Bromoform	U		0.000492	0.00116	1	09/27/2017 01:47	WG1024909
Bromomethane	U		0.00156	0.00581	1	09/27/2017 01:47	WG1024909
n-Butylbenzene	U		0.000300	0.00116	1	09/27/2017 01:47	WG1024909
sec-Butylbenzene	U		0.000233	0.00116	1	09/27/2017 01:47	WG1024909
tert-Butylbenzene	U		0.000239	0.00116	1	09/27/2017 01:47	WG1024909
Carbon disulfide	0.00113	J	0.000257	0.00116	1	09/27/2017 01:47	WG1024909
Carbon tetrachloride	U		0.000381	0.00116	1	09/27/2017 01:47	WG1024909
Chlorobenzene	U		0.000246	0.00116	1	09/27/2017 01:47	WG1024909
Chlorodibromomethane	U		0.000433	0.00116	1	09/27/2017 01:47	WG1024909
Chloroethane	U		0.00110	0.00581	1	09/27/2017 01:47	WG1024909
Chloroform	U		0.000266	0.00581	1	09/27/2017 01:47	WG1024909
Chloromethane	U		0.000435	0.00290	1	09/27/2017 01:47	WG1024909
2-Chlorotoluene	U		0.000349	0.00116	1	09/27/2017 01:47	WG1024909
4-Chlorotoluene	U		0.000279	0.00116	1	09/27/2017 01:47	WG1024909
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00581	1	09/27/2017 01:47	WG1024909
1,2-Dibromoethane	U		0.000398	0.00116	1	09/27/2017 01:47	WG1024909
Dibromomethane	U		0.000444	0.00116	1	09/27/2017 01:47	WG1024909
1,2-Dichlorobenzene	U		0.000354	0.00116	1	09/27/2017 01:47	WG1024909
1,3-Dichlorobenzene	U		0.000278	0.00116	1	09/27/2017 01:47	WG1024909
1,4-Dichlorobenzene	U		0.000262	0.00116	1	09/27/2017 01:47	WG1024909
Dichlorodifluoromethane	U		0.000828	0.00581	1	09/27/2017 01:47	WG1024909
1,1-Dichloroethane	U		0.000231	0.00116	1	09/27/2017 01:47	WG1024909
1,2-Dichloroethane	U		0.000308	0.00116	1	09/27/2017 01:47	WG1024909
1,1-Dichloroethene	U		0.000352	0.00116	1	09/27/2017 01:47	WG1024909
cis-1,2-Dichloroethene	0.00208		0.000273	0.00116	1	09/27/2017 01:47	WG1024909
trans-1,2-Dichloroethene	U		0.000307	0.00116	1	09/27/2017 01:47	WG1024909
1,2-Dichloropropane	U		0.000416	0.00116	1	09/27/2017 01:47	WG1024909
1,1-Dichloropropene	U		0.000368	0.00116	1	09/27/2017 01:47	WG1024909
1,3-Dichloropropane	U		0.000240	0.00116	1	09/27/2017 01:47	WG1024909
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	09/27/2017 01:47	WG1024909
trans-1,3-Dichloropropene	U		0.000310	0.00116	1	09/27/2017 01:47	WG1024909
trans-1,4-Dichloro-2-butene	U		0.000903	0.00290	1	09/27/2017 01:47	WG1024909
2,2-Dichloropropane	U		0.000324	0.00116	1	09/27/2017 01:47	WG1024909
Di-isopropyl ether	U		0.000288	0.00116	1	09/27/2017 01:47	WG1024909
Ethylbenzene	U		0.000345	0.00116	1	09/27/2017 01:47	WG1024909
Hexachloro-1,3-butadiene	U		0.000397	0.00116	1	09/27/2017 01:47	WG1024909
2-Hexanone	U		0.00159	0.0116	1	09/27/2017 01:47	WG1024909
n-Hexane	U		0.000337	0.0116	1	09/27/2017 01:47	WG1024909
Iodomethane	U		0.00294	0.0116	1	09/27/2017 01:47	WG1024909
Isopropylbenzene	U		0.000282	0.00116	1	09/27/2017 01:47	WG1024909
p-Isopropyltoluene	U		0.000237	0.00116	1	09/27/2017 01:47	WG1024909
2-Butanone (MEK)	U		0.00543	0.0116	1	09/27/2017 01:47	WG1024909
Methylene Chloride	U		0.00116	0.00581	1	09/27/2017 01:47	WG1024909
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	09/27/2017 01:47	WG1024909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 17:10

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	09/27/2017 01:47	WG1024909
Naphthalene	U		0.00116	0.00581	1	09/27/2017 01:47	WG1024909
n-Propylbenzene	U		0.000239	0.00116	1	09/27/2017 01:47	WG1024909
Styrene	U		0.000272	0.00116	1	09/27/2017 01:47	WG1024909
1,1,1,2-Tetrachloroethane	U		0.000307	0.00116	1	09/27/2017 01:47	WG1024909
1,1,2,2-Tetrachloroethane	U		0.000424	0.00116	1	09/27/2017 01:47	WG1024909
1,1,2-Trichlorotrifluoroethane	U		0.000424	0.00116	1	09/27/2017 01:47	WG1024909
Tetrachloroethene	2.17		0.00801	0.0290	25	09/28/2017 20:58	WG1024909
Toluene	U		0.000504	0.00581	1	09/27/2017 01:47	WG1024909
1,2,3-Trichlorobenzene	U		0.000355	0.00116	1	09/27/2017 01:47	WG1024909
1,2,4-Trichlorobenzene	U		0.000451	0.00116	1	09/27/2017 01:47	WG1024909
1,1,1-Trichloroethane	U		0.000332	0.00116	1	09/27/2017 01:47	WG1024909
1,1,2-Trichloroethane	U		0.000322	0.00116	1	09/27/2017 01:47	WG1024909
Trichloroethene	0.00106	J	0.000324	0.00116	1	09/27/2017 01:47	WG1024909
Trichlorofluoromethane	U		0.000444	0.00581	1	09/27/2017 01:47	WG1024909
1,2,3-Trichloropropane	U		0.000860	0.00290	1	09/27/2017 01:47	WG1024909
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	09/27/2017 01:47	WG1024909
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	09/27/2017 01:47	WG1024909
1,3,5-Trimethylbenzene	U		0.000309	0.00116	1	09/27/2017 01:47	WG1024909
Vinyl acetate	U		0.00278	0.0116	1	09/27/2017 01:47	WG1024909
Vinyl chloride	U		0.000338	0.00116	1	09/27/2017 01:47	WG1024909
Xylenes, Total	U		0.000810	0.00348	1	09/27/2017 01:47	WG1024909
(S) Toluene-d8	110			80.0-120		09/27/2017 01:47	WG1024909
(S) Toluene-d8	108			80.0-120		09/28/2017 20:58	WG1024909
(S) Dibromofluoromethane	103			74.0-131		09/27/2017 01:47	WG1024909
(S) Dibromofluoromethane	94.2			74.0-131		09/28/2017 20:58	WG1024909
(S) 4-Bromofluorobenzene	114			64.0-132		09/27/2017 01:47	WG1024909
(S) 4-Bromofluorobenzene	99.9			64.0-132		09/28/2017 20:58	WG1024909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	93.0		1	09/27/2017 15:46	WG1025104

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	U		0.0107	0.0537	1	09/27/2017 02:06	WG1024909
Acrylonitrile	U		0.00192	0.0107	1	09/27/2017 02:06	WG1024909
Benzene	U		0.000290	0.00107	1	09/27/2017 02:06	WG1024909
Bromobenzene	U		0.000305	0.00107	1	09/27/2017 02:06	WG1024909
Bromodichloromethane	U		0.000273	0.00107	1	09/27/2017 02:06	WG1024909
Bromochloromethane	U		0.000419	0.00537	1	09/27/2017 02:06	WG1024909
Bromoform	U		0.000456	0.00107	1	09/27/2017 02:06	WG1024909
Bromomethane	U		0.00144	0.00537	1	09/27/2017 02:06	WG1024909
n-Butylbenzene	U		0.000277	0.00107	1	09/27/2017 02:06	WG1024909
sec-Butylbenzene	U		0.000216	0.00107	1	09/27/2017 02:06	WG1024909
tert-Butylbenzene	U		0.000221	0.00107	1	09/27/2017 02:06	WG1024909
Carbon disulfide	0.00100	J	0.000238	0.00107	1	09/27/2017 02:06	WG1024909
Carbon tetrachloride	U		0.000353	0.00107	1	09/27/2017 02:06	WG1024909
Chlorobenzene	U		0.000228	0.00107	1	09/27/2017 02:06	WG1024909
Chlorodibromomethane	U		0.000401	0.00107	1	09/27/2017 02:06	WG1024909
Chloroethane	U		0.00102	0.00537	1	09/27/2017 02:06	WG1024909
Chloroform	U		0.000246	0.00537	1	09/27/2017 02:06	WG1024909
Chloromethane	U		0.000403	0.00269	1	09/27/2017 02:06	WG1024909
2-Chlorotoluene	U		0.000323	0.00107	1	09/27/2017 02:06	WG1024909
4-Chlorotoluene	U		0.000258	0.00107	1	09/27/2017 02:06	WG1024909
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00537	1	09/27/2017 02:06	WG1024909
1,2-Dibromoethane	U		0.000369	0.00107	1	09/27/2017 02:06	WG1024909
Dibromomethane	U		0.000411	0.00107	1	09/27/2017 02:06	WG1024909
1,2-Dichlorobenzene	U		0.000328	0.00107	1	09/27/2017 02:06	WG1024909
1,3-Dichlorobenzene	U		0.000257	0.00107	1	09/27/2017 02:06	WG1024909
1,4-Dichlorobenzene	U		0.000243	0.00107	1	09/27/2017 02:06	WG1024909
Dichlorodifluoromethane	U		0.000766	0.00537	1	09/27/2017 02:06	WG1024909
1,1-Dichloroethane	U		0.000214	0.00107	1	09/27/2017 02:06	WG1024909
1,2-Dichloroethane	U		0.000285	0.00107	1	09/27/2017 02:06	WG1024909
1,1-Dichloroethene	U		0.000326	0.00107	1	09/27/2017 02:06	WG1024909
cis-1,2-Dichloroethene	0.000728	J	0.000253	0.00107	1	09/27/2017 02:06	WG1024909
trans-1,2-Dichloroethene	U		0.000284	0.00107	1	09/27/2017 02:06	WG1024909
1,2-Dichloropropane	U		0.000385	0.00107	1	09/27/2017 02:06	WG1024909
1,1-Dichloropropene	U		0.000341	0.00107	1	09/27/2017 02:06	WG1024909
1,3-Dichloropropane	U		0.000222	0.00107	1	09/27/2017 02:06	WG1024909
cis-1,3-Dichloropropene	U		0.000282	0.00107	1	09/27/2017 02:06	WG1024909
trans-1,3-Dichloropropene	U		0.000287	0.00107	1	09/27/2017 02:06	WG1024909
trans-1,4-Dichloro-2-butene	U		0.000836	0.00269	1	09/27/2017 02:06	WG1024909
2,2-Dichloropropane	U		0.000300	0.00107	1	09/27/2017 02:06	WG1024909
Di-isopropyl ether	U		0.000267	0.00107	1	09/27/2017 02:06	WG1024909
Ethylbenzene	U		0.000319	0.00107	1	09/27/2017 02:06	WG1024909
Hexachloro-1,3-butadiene	U		0.000368	0.00107	1	09/27/2017 02:06	WG1024909
2-Hexanone	U		0.00147	0.0107	1	09/27/2017 02:06	WG1024909
n-Hexane	U		0.000312	0.0107	1	09/27/2017 02:06	WG1024909
Iodomethane	U		0.00272	0.0107	1	09/27/2017 02:06	WG1024909
Isopropylbenzene	U		0.000261	0.00107	1	09/27/2017 02:06	WG1024909
p-Isopropyltoluene	U		0.000219	0.00107	1	09/27/2017 02:06	WG1024909
2-Butanone (MEK)	U		0.00503	0.0107	1	09/27/2017 02:06	WG1024909
Methylene Chloride	U		0.00107	0.00537	1	09/27/2017 02:06	WG1024909
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0107	1	09/27/2017 02:06	WG1024909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 17:30

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00107	1	09/27/2017 02:06	WG1024909
Naphthalene	U		0.00107	0.00537	1	09/27/2017 02:06	WG1024909
n-Propylbenzene	U		0.000221	0.00107	1	09/27/2017 02:06	WG1024909
Styrene	U		0.000251	0.00107	1	09/27/2017 02:06	WG1024909
1,1,1,2-Tetrachloroethane	U		0.000284	0.00107	1	09/27/2017 02:06	WG1024909
1,1,2,2-Tetrachloroethane	U		0.000392	0.00107	1	09/27/2017 02:06	WG1024909
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00107	1	09/27/2017 02:06	WG1024909
Tetrachloroethene	1.13		0.00742	0.0269	25	09/28/2017 21:18	WG1024909
Toluene	U		0.000466	0.00537	1	09/27/2017 02:06	WG1024909
1,2,3-Trichlorobenzene	U		0.000329	0.00107	1	09/27/2017 02:06	WG1024909
1,2,4-Trichlorobenzene	U		0.000417	0.00107	1	09/27/2017 02:06	WG1024909
1,1,1-Trichloroethane	U		0.000307	0.00107	1	09/27/2017 02:06	WG1024909
1,1,2-Trichloroethane	U		0.000298	0.00107	1	09/27/2017 02:06	WG1024909
Trichloroethene	0.000520	J	0.000300	0.00107	1	09/27/2017 02:06	WG1024909
Trichlorofluoromethane	U		0.000411	0.00537	1	09/27/2017 02:06	WG1024909
1,2,3-Trichloropropane	U		0.000796	0.00269	1	09/27/2017 02:06	WG1024909
1,2,4-Trimethylbenzene	U		0.000227	0.00107	1	09/27/2017 02:06	WG1024909
1,2,3-Trimethylbenzene	U		0.000308	0.00107	1	09/27/2017 02:06	WG1024909
1,3,5-Trimethylbenzene	U		0.000286	0.00107	1	09/27/2017 02:06	WG1024909
Vinyl acetate	U		0.00257	0.0107	1	09/27/2017 02:06	WG1024909
Vinyl chloride	U		0.000313	0.00107	1	09/27/2017 02:06	WG1024909
Xylenes, Total	U		0.000750	0.00322	1	09/27/2017 02:06	WG1024909
(S) Toluene-d8	108			80.0-120		09/27/2017 02:06	WG1024909
(S) Toluene-d8	108			80.0-120		09/28/2017 21:18	WG1024909
(S) Dibromofluoromethane	107			74.0-131		09/27/2017 02:06	WG1024909
(S) Dibromofluoromethane	93.5			74.0-131		09/28/2017 21:18	WG1024909
(S) 4-Bromofluorobenzene	101			64.0-132		09/28/2017 21:18	WG1024909
(S) 4-Bromofluorobenzene	113			64.0-132		09/27/2017 02:06	WG1024909

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.11	<u>BJJ4</u>	1.05	25.0	1	09/27/2017 19:51	WG1025164
Acrylonitrile	U		0.873	5.00	1	09/27/2017 19:51	WG1025164
Benzene	U		0.0896	0.500	1	09/27/2017 19:51	WG1025164
Bromobenzene	U		0.133	0.500	1	09/27/2017 19:51	WG1025164
Bromodichloromethane	U		0.0800	0.500	1	09/27/2017 19:51	WG1025164
Bromochloromethane	U		0.145	0.500	1	09/27/2017 19:51	WG1025164
Bromoform	U		0.186	0.500	1	09/27/2017 19:51	WG1025164
Bromomethane	U		0.157	2.50	1	09/27/2017 19:51	WG1025164
n-Butylbenzene	U		0.143	0.500	1	09/27/2017 19:51	WG1025164
sec-Butylbenzene	U		0.134	0.500	1	09/27/2017 19:51	WG1025164
tert-Butylbenzene	U		0.183	0.500	1	09/27/2017 19:51	WG1025164
Carbon disulfide	U		0.101	0.500	1	09/27/2017 19:51	WG1025164
Carbon tetrachloride	U		0.159	0.500	1	09/27/2017 19:51	WG1025164
Chlorobenzene	U		0.140	0.500	1	09/27/2017 19:51	WG1025164
Chlorodibromomethane	U		0.128	0.500	1	09/27/2017 19:51	WG1025164
Chloroethane	U		0.141	2.50	1	09/27/2017 19:51	WG1025164
Chloroform	U		0.0860	0.500	1	09/27/2017 19:51	WG1025164
Chloromethane	0.754	<u>J</u>	0.153	1.25	1	09/27/2017 19:51	WG1025164
2-Chlorotoluene	U		0.111	0.500	1	09/27/2017 19:51	WG1025164
4-Chlorotoluene	U		0.0972	0.500	1	09/27/2017 19:51	WG1025164
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/27/2017 19:51	WG1025164
1,2-Dibromoethane	U		0.193	0.500	1	09/27/2017 19:51	WG1025164
Dibromomethane	U		0.117	0.500	1	09/27/2017 19:51	WG1025164
1,2-Dichlorobenzene	U		0.101	0.500	1	09/27/2017 19:51	WG1025164
1,3-Dichlorobenzene	U		0.130	0.500	1	09/27/2017 19:51	WG1025164
1,4-Dichlorobenzene	U		0.121	0.500	1	09/27/2017 19:51	WG1025164
Dichlorodifluoromethane	U		0.127	2.50	1	09/27/2017 19:51	WG1025164
1,1-Dichloroethane	U		0.114	0.500	1	09/27/2017 19:51	WG1025164
1,2-Dichloroethane	U		0.108	0.500	1	09/27/2017 19:51	WG1025164
1,1-Dichloroethene	0.226	<u>J</u>	0.188	0.500	1	09/27/2017 19:51	WG1025164
cis-1,2-Dichloroethene	0.477	<u>J</u>	0.0933	0.500	1	09/27/2017 19:51	WG1025164
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/27/2017 19:51	WG1025164
1,2-Dichloropropane	U		0.190	0.500	1	09/27/2017 19:51	WG1025164
1,1-Dichloropropene	U		0.128	0.500	1	09/27/2017 19:51	WG1025164
1,3-Dichloropropane	U		0.147	1.00	1	09/27/2017 19:51	WG1025164
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/27/2017 19:51	WG1025164
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/27/2017 19:51	WG1025164
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	09/27/2017 19:51	WG1025164
2,2-Dichloropropane	U		0.0929	0.500	1	09/27/2017 19:51	WG1025164
Di-isopropyl ether	U		0.0924	0.500	1	09/27/2017 19:51	WG1025164
Ethylbenzene	U		0.158	0.500	1	09/27/2017 19:51	WG1025164
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/27/2017 19:51	WG1025164
2-Hexanone	U		0.757	5.00	1	09/27/2017 19:51	WG1025164
n-Hexane	U		0.305	5.00	1	09/27/2017 19:51	WG1025164
Iodomethane	U		0.377	10.0	1	09/27/2017 19:51	WG1025164
Isopropylbenzene	U		0.126	0.500	1	09/27/2017 19:51	WG1025164
p-Isopropyltoluene	U		0.138	0.500	1	09/27/2017 19:51	WG1025164
2-Butanone (MEK)	U		1.28	5.00	1	09/27/2017 19:51	WG1025164
Methylene Chloride	U		1.07	2.50	1	09/27/2017 19:51	WG1025164
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/27/2017 19:51	WG1025164
Methyl tert-butyl ether	U		0.102	0.500	1	09/27/2017 19:51	WG1025164
Naphthalene	U		0.174	2.50	1	09/27/2017 19:51	WG1025164
n-Propylbenzene	U		0.162	0.500	1	09/27/2017 19:51	WG1025164
Styrene	U		0.117	0.500	1	09/27/2017 19:51	WG1025164
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/27/2017 19:51	WG1025164
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/27/2017 19:51	WG1025164

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/22/17 10:50

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/27/2017 19:51	WG1025164
Tetrachloroethene	U		0.199	0.500	1	09/27/2017 19:51	WG1025164
Toluene	U		0.412	0.500	1	09/27/2017 19:51	WG1025164
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/27/2017 19:51	WG1025164
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/27/2017 19:51	WG1025164
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/27/2017 19:51	WG1025164
1,1,2-Trichloroethane	U		0.186	0.500	1	09/27/2017 19:51	WG1025164
Trichloroethene	0.450	U	0.153	0.500	1	09/27/2017 19:51	WG1025164
Trichlorofluoromethane	U		0.130	2.50	1	09/27/2017 19:51	WG1025164
1,2,3-Trichloropropane	U		0.247	2.50	1	09/27/2017 19:51	WG1025164
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/27/2017 19:51	WG1025164
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/27/2017 19:51	WG1025164
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/27/2017 19:51	WG1025164
Vinyl acetate	U		0.645	5.00	1	09/27/2017 19:51	WG1025164
Vinyl chloride	U		0.118	0.500	1	09/27/2017 19:51	WG1025164
Xylenes, Total	U		0.316	1.50	1	09/27/2017 19:51	WG1025164
(S) Toluene-d8	104			80.0-120		09/27/2017 19:51	WG1025164
(S) Dibromofluoromethane	101			76.0-123		09/27/2017 19:51	WG1025164
(S) 4-Bromofluorobenzene	89.4			80.0-120		09/27/2017 19:51	WG1025164

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.64	<u>BJJ4</u>	5.25	125	5	09/27/2017 20:13	WG1025164
Acrylonitrile	U		4.36	25.0	5	09/27/2017 20:13	WG1025164
Benzene	U		0.448	2.50	5	09/27/2017 20:13	WG1025164
Bromobenzene	U		0.665	2.50	5	09/27/2017 20:13	WG1025164
Bromodichloromethane	U		0.400	2.50	5	09/27/2017 20:13	WG1025164
Bromochloromethane	U		0.725	2.50	5	09/27/2017 20:13	WG1025164
Bromoform	U		0.930	2.50	5	09/27/2017 20:13	WG1025164
Bromomethane	U		0.785	12.5	5	09/27/2017 20:13	WG1025164
n-Butylbenzene	U		0.715	2.50	5	09/27/2017 20:13	WG1025164
sec-Butylbenzene	U		0.670	2.50	5	09/27/2017 20:13	WG1025164
tert-Butylbenzene	U		0.915	2.50	5	09/27/2017 20:13	WG1025164
Carbon disulfide	U		0.505	2.50	5	09/27/2017 20:13	WG1025164
Carbon tetrachloride	U		0.795	2.50	5	09/27/2017 20:13	WG1025164
Chlorobenzene	U		0.700	2.50	5	09/27/2017 20:13	WG1025164
Chlorodibromomethane	U		0.640	2.50	5	09/27/2017 20:13	WG1025164
Chloroethane	U		0.705	12.5	5	09/27/2017 20:13	WG1025164
Chloroform	U		0.430	2.50	5	09/27/2017 20:13	WG1025164
Chloromethane	U		0.765	6.25	5	09/27/2017 20:13	WG1025164
2-Chlorotoluene	U		0.555	2.50	5	09/27/2017 20:13	WG1025164
4-Chlorotoluene	U		0.486	2.50	5	09/27/2017 20:13	WG1025164
1,2-Dibromo-3-Chloropropane	U		1.62	12.5	5	09/27/2017 20:13	WG1025164
1,2-Dibromoethane	U		0.965	2.50	5	09/27/2017 20:13	WG1025164
Dibromomethane	U		0.585	2.50	5	09/27/2017 20:13	WG1025164
1,2-Dichlorobenzene	U		0.505	2.50	5	09/27/2017 20:13	WG1025164
1,3-Dichlorobenzene	U		0.650	2.50	5	09/27/2017 20:13	WG1025164
1,4-Dichlorobenzene	U		0.605	2.50	5	09/27/2017 20:13	WG1025164
Dichlorodifluoromethane	U		0.635	12.5	5	09/27/2017 20:13	WG1025164
1,1-Dichloroethane	U		0.570	2.50	5	09/27/2017 20:13	WG1025164
1,2-Dichloroethane	U		0.540	2.50	5	09/27/2017 20:13	WG1025164
1,1-Dichloroethene	U		0.940	2.50	5	09/27/2017 20:13	WG1025164
cis-1,2-Dichloroethene	86.2		0.466	2.50	5	09/27/2017 20:13	WG1025164
trans-1,2-Dichloroethene	U		0.760	2.50	5	09/27/2017 20:13	WG1025164
1,2-Dichloropropane	U		0.950	2.50	5	09/27/2017 20:13	WG1025164
1,1-Dichloropropene	U		0.640	2.50	5	09/27/2017 20:13	WG1025164
1,3-Dichloropropane	U		0.735	5.00	5	09/27/2017 20:13	WG1025164
cis-1,3-Dichloropropene	U		0.488	2.50	5	09/27/2017 20:13	WG1025164
trans-1,3-Dichloropropene	U		1.11	2.50	5	09/27/2017 20:13	WG1025164
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	1.28	25.0	5	09/27/2017 20:13	WG1025164
2,2-Dichloropropane	U		0.464	2.50	5	09/27/2017 20:13	WG1025164
Di-isopropyl ether	U		0.462	2.50	5	09/27/2017 20:13	WG1025164
Ethylbenzene	U		0.790	2.50	5	09/27/2017 20:13	WG1025164
Hexachloro-1,3-butadiene	U		0.785	5.00	5	09/27/2017 20:13	WG1025164
2-Hexanone	U		3.78	25.0	5	09/27/2017 20:13	WG1025164
n-Hexane	U		1.52	25.0	5	09/27/2017 20:13	WG1025164
Iodomethane	U		1.88	50.0	5	09/27/2017 20:13	WG1025164
Isopropylbenzene	U		0.630	2.50	5	09/27/2017 20:13	WG1025164
p-Isopropyltoluene	U		0.690	2.50	5	09/27/2017 20:13	WG1025164
2-Butanone (MEK)	U		6.40	25.0	5	09/27/2017 20:13	WG1025164
Methylene Chloride	U		5.35	12.5	5	09/27/2017 20:13	WG1025164
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	09/27/2017 20:13	WG1025164
Methyl tert-butyl ether	U		0.510	2.50	5	09/27/2017 20:13	WG1025164
Naphthalene	U		0.870	12.5	5	09/27/2017 20:13	WG1025164
n-Propylbenzene	U		0.810	2.50	5	09/27/2017 20:13	WG1025164
Styrene	U		0.585	2.50	5	09/27/2017 20:13	WG1025164
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	09/27/2017 20:13	WG1025164
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	09/27/2017 20:13	WG1025164

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/22/17 08:50

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	09/27/2017 20:13	WG1025164
Tetrachloroethene	U		0.995	2.50	5	09/27/2017 20:13	WG1025164
Toluene	U		2.06	2.50	5	09/27/2017 20:13	WG1025164
1,2,3-Trichlorobenzene	U		0.820	2.50	5	09/27/2017 20:13	WG1025164
1,2,4-Trichlorobenzene	U		1.78	2.50	5	09/27/2017 20:13	WG1025164
1,1,1-Trichloroethane	U		0.470	2.50	5	09/27/2017 20:13	WG1025164
1,1,2-Trichloroethane	U		0.930	2.50	5	09/27/2017 20:13	WG1025164
Trichloroethene	U		0.765	2.50	5	09/27/2017 20:13	WG1025164
Trichlorofluoromethane	U		0.650	12.5	5	09/27/2017 20:13	WG1025164
1,2,3-Trichloropropane	U		1.24	12.5	5	09/27/2017 20:13	WG1025164
1,2,4-Trimethylbenzene	U		0.615	2.50	5	09/27/2017 20:13	WG1025164
1,2,3-Trimethylbenzene	U		0.370	2.50	5	09/27/2017 20:13	WG1025164
1,3,5-Trimethylbenzene	U		0.620	2.50	5	09/27/2017 20:13	WG1025164
Vinyl acetate	U		3.22	25.0	5	09/27/2017 20:13	WG1025164
Vinyl chloride	229		0.590	2.50	5	09/27/2017 20:13	WG1025164
Xylenes, Total	U		1.58	7.50	5	09/27/2017 20:13	WG1025164
<i>(S) Toluene-d8</i>	105			80.0-120		09/27/2017 20:13	WG1025164
<i>(S) Dibromofluoromethane</i>	102			76.0-123		09/27/2017 20:13	WG1025164
<i>(S) 4-Bromofluorobenzene</i>	90.5			80.0-120		09/27/2017 20:13	WG1025164

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L938873-08 WG1025164: Target compounds too high to re-analyze at a lower dilution.



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.56	<u>BJJ4</u>	1.05	25.0	1	09/27/2017 20:35	WG1025164
Acrylonitrile	U		0.873	5.00	1	09/27/2017 20:35	WG1025164
Benzene	U		0.0896	0.500	1	09/27/2017 20:35	WG1025164
Bromobenzene	U		0.133	0.500	1	09/27/2017 20:35	WG1025164
Bromodichloromethane	U		0.0800	0.500	1	09/27/2017 20:35	WG1025164
Bromochloromethane	U		0.145	0.500	1	09/27/2017 20:35	WG1025164
Bromoform	U		0.186	0.500	1	09/27/2017 20:35	WG1025164
Bromomethane	U		0.157	2.50	1	09/27/2017 20:35	WG1025164
n-Butylbenzene	U		0.143	0.500	1	09/27/2017 20:35	WG1025164
sec-Butylbenzene	U		0.134	0.500	1	09/27/2017 20:35	WG1025164
tert-Butylbenzene	U		0.183	0.500	1	09/27/2017 20:35	WG1025164
Carbon disulfide	U		0.101	0.500	1	09/27/2017 20:35	WG1025164
Carbon tetrachloride	U		0.159	0.500	1	09/27/2017 20:35	WG1025164
Chlorobenzene	U		0.140	0.500	1	09/27/2017 20:35	WG1025164
Chlorodibromomethane	U		0.128	0.500	1	09/27/2017 20:35	WG1025164
Chloroethane	U		0.141	2.50	1	09/27/2017 20:35	WG1025164
Chloroform	U		0.0860	0.500	1	09/27/2017 20:35	WG1025164
Chloromethane	2.07		0.153	1.25	1	09/27/2017 20:35	WG1025164
2-Chlorotoluene	U		0.111	0.500	1	09/27/2017 20:35	WG1025164
4-Chlorotoluene	U		0.0972	0.500	1	09/27/2017 20:35	WG1025164
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/27/2017 20:35	WG1025164
1,2-Dibromoethane	U		0.193	0.500	1	09/27/2017 20:35	WG1025164
Dibromomethane	U		0.117	0.500	1	09/27/2017 20:35	WG1025164
1,2-Dichlorobenzene	U		0.101	0.500	1	09/27/2017 20:35	WG1025164
1,3-Dichlorobenzene	U		0.130	0.500	1	09/27/2017 20:35	WG1025164
1,4-Dichlorobenzene	U		0.121	0.500	1	09/27/2017 20:35	WG1025164
Dichlorodifluoromethane	U		0.127	2.50	1	09/27/2017 20:35	WG1025164
1,1-Dichloroethane	U		0.114	0.500	1	09/27/2017 20:35	WG1025164
1,2-Dichloroethane	U		0.108	0.500	1	09/27/2017 20:35	WG1025164
1,1-Dichloroethene	U		0.188	0.500	1	09/27/2017 20:35	WG1025164
cis-1,2-Dichloroethene	0.345	<u>J</u>	0.0933	0.500	1	09/27/2017 20:35	WG1025164
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/27/2017 20:35	WG1025164
1,2-Dichloropropane	U		0.190	0.500	1	09/27/2017 20:35	WG1025164
1,1-Dichloropropene	U		0.128	0.500	1	09/27/2017 20:35	WG1025164
1,3-Dichloropropane	U		0.147	1.00	1	09/27/2017 20:35	WG1025164
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/27/2017 20:35	WG1025164
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/27/2017 20:35	WG1025164
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	09/27/2017 20:35	WG1025164
2,2-Dichloropropane	U		0.0929	0.500	1	09/27/2017 20:35	WG1025164
Di-isopropyl ether	U		0.0924	0.500	1	09/27/2017 20:35	WG1025164
Ethylbenzene	U		0.158	0.500	1	09/27/2017 20:35	WG1025164
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/27/2017 20:35	WG1025164
2-Hexanone	U		0.757	5.00	1	09/27/2017 20:35	WG1025164
n-Hexane	U		0.305	5.00	1	09/27/2017 20:35	WG1025164
Iodomethane	U		0.377	10.0	1	09/27/2017 20:35	WG1025164
Isopropylbenzene	U		0.126	0.500	1	09/27/2017 20:35	WG1025164
p-Isopropyltoluene	U		0.138	0.500	1	09/27/2017 20:35	WG1025164
2-Butanone (MEK)	U		1.28	5.00	1	09/27/2017 20:35	WG1025164
Methylene Chloride	U		1.07	2.50	1	09/27/2017 20:35	WG1025164
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/27/2017 20:35	WG1025164
Methyl tert-butyl ether	U		0.102	0.500	1	09/27/2017 20:35	WG1025164
Naphthalene	U		0.174	2.50	1	09/27/2017 20:35	WG1025164
n-Propylbenzene	U		0.162	0.500	1	09/27/2017 20:35	WG1025164
Styrene	U		0.117	0.500	1	09/27/2017 20:35	WG1025164
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/27/2017 20:35	WG1025164
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/27/2017 20:35	WG1025164

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/22/17 12:30

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/27/2017 20:35	WG1025164
Tetrachloroethene	U		0.199	0.500	1	09/27/2017 20:35	WG1025164
Toluene	0.941		0.412	0.500	1	09/27/2017 20:35	WG1025164
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/27/2017 20:35	WG1025164
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/27/2017 20:35	WG1025164
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/27/2017 20:35	WG1025164
1,1,2-Trichloroethane	U		0.186	0.500	1	09/27/2017 20:35	WG1025164
Trichloroethene	U		0.153	0.500	1	09/27/2017 20:35	WG1025164
Trichlorofluoromethane	U		0.130	2.50	1	09/27/2017 20:35	WG1025164
1,2,3-Trichloropropane	U		0.247	2.50	1	09/27/2017 20:35	WG1025164
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/27/2017 20:35	WG1025164
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/27/2017 20:35	WG1025164
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/27/2017 20:35	WG1025164
Vinyl acetate	U		0.645	5.00	1	09/27/2017 20:35	WG1025164
Vinyl chloride	0.457	U	0.118	0.500	1	09/27/2017 20:35	WG1025164
Xylenes, Total	U		0.316	1.50	1	09/27/2017 20:35	WG1025164
(S) Toluene-d8	104			80.0-120		09/27/2017 20:35	WG1025164
(S) Dibromofluoromethane	102			76.0-123		09/27/2017 20:35	WG1025164
(S) 4-Bromofluorobenzene	88.9			80.0-120		09/27/2017 20:35	WG1025164

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.74	<u>BJJ4</u>	1.05	25.0	1	09/27/2017 20:57	WG1025164
Acrylonitrile	U		0.873	5.00	1	09/27/2017 20:57	WG1025164
Benzene	U		0.0896	0.500	1	09/27/2017 20:57	WG1025164
Bromobenzene	U		0.133	0.500	1	09/27/2017 20:57	WG1025164
Bromodichloromethane	U		0.0800	0.500	1	09/27/2017 20:57	WG1025164
Bromochloromethane	U		0.145	0.500	1	09/27/2017 20:57	WG1025164
Bromoform	U		0.186	0.500	1	09/27/2017 20:57	WG1025164
Bromomethane	U		0.157	2.50	1	09/27/2017 20:57	WG1025164
n-Butylbenzene	U		0.143	0.500	1	09/27/2017 20:57	WG1025164
sec-Butylbenzene	U		0.134	0.500	1	09/27/2017 20:57	WG1025164
tert-Butylbenzene	U		0.183	0.500	1	09/27/2017 20:57	WG1025164
Carbon disulfide	U		0.101	0.500	1	09/27/2017 20:57	WG1025164
Carbon tetrachloride	U		0.159	0.500	1	09/27/2017 20:57	WG1025164
Chlorobenzene	U		0.140	0.500	1	09/27/2017 20:57	WG1025164
Chlorodibromomethane	U		0.128	0.500	1	09/27/2017 20:57	WG1025164
Chloroethane	U		0.141	2.50	1	09/27/2017 20:57	WG1025164
Chloroform	U		0.0860	0.500	1	09/27/2017 20:57	WG1025164
Chloromethane	2.13		0.153	1.25	1	09/27/2017 20:57	WG1025164
2-Chlorotoluene	U		0.111	0.500	1	09/27/2017 20:57	WG1025164
4-Chlorotoluene	U		0.0972	0.500	1	09/27/2017 20:57	WG1025164
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/27/2017 20:57	WG1025164
1,2-Dibromoethane	U		0.193	0.500	1	09/27/2017 20:57	WG1025164
Dibromomethane	U		0.117	0.500	1	09/27/2017 20:57	WG1025164
1,2-Dichlorobenzene	U		0.101	0.500	1	09/27/2017 20:57	WG1025164
1,3-Dichlorobenzene	U		0.130	0.500	1	09/27/2017 20:57	WG1025164
1,4-Dichlorobenzene	U		0.121	0.500	1	09/27/2017 20:57	WG1025164
Dichlorodifluoromethane	U		0.127	2.50	1	09/27/2017 20:57	WG1025164
1,1-Dichloroethane	U		0.114	0.500	1	09/27/2017 20:57	WG1025164
1,2-Dichloroethane	U		0.108	0.500	1	09/27/2017 20:57	WG1025164
1,1-Dichloroethene	0.211	<u>J</u>	0.188	0.500	1	09/27/2017 20:57	WG1025164
cis-1,2-Dichloroethene	0.523		0.0933	0.500	1	09/27/2017 20:57	WG1025164
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/27/2017 20:57	WG1025164
1,2-Dichloropropane	U		0.190	0.500	1	09/27/2017 20:57	WG1025164
1,1-Dichloropropene	U		0.128	0.500	1	09/27/2017 20:57	WG1025164
1,3-Dichloropropane	U		0.147	1.00	1	09/27/2017 20:57	WG1025164
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/27/2017 20:57	WG1025164
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/27/2017 20:57	WG1025164
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	09/27/2017 20:57	WG1025164
2,2-Dichloropropane	U		0.0929	0.500	1	09/27/2017 20:57	WG1025164
Di-isopropyl ether	U		0.0924	0.500	1	09/27/2017 20:57	WG1025164
Ethylbenzene	U		0.158	0.500	1	09/27/2017 20:57	WG1025164
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/27/2017 20:57	WG1025164
2-Hexanone	U		0.757	5.00	1	09/27/2017 20:57	WG1025164
n-Hexane	U		0.305	5.00	1	09/27/2017 20:57	WG1025164
Iodomethane	U		0.377	10.0	1	09/27/2017 20:57	WG1025164
Isopropylbenzene	U		0.126	0.500	1	09/27/2017 20:57	WG1025164
p-Isopropyltoluene	U		0.138	0.500	1	09/27/2017 20:57	WG1025164
2-Butanone (MEK)	U		1.28	5.00	1	09/27/2017 20:57	WG1025164
Methylene Chloride	U		1.07	2.50	1	09/27/2017 20:57	WG1025164
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/27/2017 20:57	WG1025164
Methyl tert-butyl ether	U		0.102	0.500	1	09/27/2017 20:57	WG1025164
Naphthalene	U		0.174	2.50	1	09/27/2017 20:57	WG1025164
n-Propylbenzene	U		0.162	0.500	1	09/27/2017 20:57	WG1025164
Styrene	U		0.117	0.500	1	09/27/2017 20:57	WG1025164
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/27/2017 20:57	WG1025164
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/27/2017 20:57	WG1025164

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/22/17 09:00

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/27/2017 20:57	WG1025164
Tetrachloroethene	U		0.199	0.500	1	09/27/2017 20:57	WG1025164
Toluene	U		0.412	0.500	1	09/27/2017 20:57	WG1025164
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/27/2017 20:57	WG1025164
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/27/2017 20:57	WG1025164
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/27/2017 20:57	WG1025164
1,1,2-Trichloroethane	U		0.186	0.500	1	09/27/2017 20:57	WG1025164
Trichloroethene	0.456	U	0.153	0.500	1	09/27/2017 20:57	WG1025164
Trichlorofluoromethane	U		0.130	2.50	1	09/27/2017 20:57	WG1025164
1,2,3-Trichloropropane	U		0.247	2.50	1	09/27/2017 20:57	WG1025164
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/27/2017 20:57	WG1025164
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/27/2017 20:57	WG1025164
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/27/2017 20:57	WG1025164
Vinyl acetate	U		0.645	5.00	1	09/27/2017 20:57	WG1025164
Vinyl chloride	U		0.118	0.500	1	09/27/2017 20:57	WG1025164
Xylenes, Total	U		0.316	1.50	1	09/27/2017 20:57	WG1025164
(S) Toluene-d8	104			80.0-120		09/27/2017 20:57	WG1025164
(S) Dibromofluoromethane	102			76.0-123		09/27/2017 20:57	WG1025164
(S) 4-Bromofluorobenzene	89.3			80.0-120		09/27/2017 20:57	WG1025164

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/21/17 00:00

L938873

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	1.05	25.0	1	09/27/2017 12:53	WG1025164
Acrylonitrile	U		0.873	5.00	1	09/27/2017 12:53	WG1025164
Benzene	U		0.0896	0.500	1	09/27/2017 12:53	WG1025164
Bromobenzene	U		0.133	0.500	1	09/27/2017 12:53	WG1025164
Bromodichloromethane	U		0.0800	0.500	1	09/27/2017 12:53	WG1025164
Bromochloromethane	U		0.145	0.500	1	09/27/2017 12:53	WG1025164
Bromoform	U		0.186	0.500	1	09/27/2017 12:53	WG1025164
Bromomethane	U		0.157	2.50	1	09/27/2017 12:53	WG1025164
n-Butylbenzene	U		0.143	0.500	1	09/27/2017 12:53	WG1025164
sec-Butylbenzene	U		0.134	0.500	1	09/27/2017 12:53	WG1025164
tert-Butylbenzene	U		0.183	0.500	1	09/27/2017 12:53	WG1025164
Carbon disulfide	U		0.101	0.500	1	09/27/2017 12:53	WG1025164
Carbon tetrachloride	U		0.159	0.500	1	09/27/2017 12:53	WG1025164
Chlorobenzene	U		0.140	0.500	1	09/27/2017 12:53	WG1025164
Chlorodibromomethane	U		0.128	0.500	1	09/27/2017 12:53	WG1025164
Chloroethane	U		0.141	2.50	1	09/27/2017 12:53	WG1025164
Chloroform	U		0.0860	0.500	1	09/27/2017 12:53	WG1025164
Chloromethane	U		0.153	1.25	1	09/27/2017 12:53	WG1025164
2-Chlorotoluene	U		0.111	0.500	1	09/27/2017 12:53	WG1025164
4-Chlorotoluene	U		0.0972	0.500	1	09/27/2017 12:53	WG1025164
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/27/2017 12:53	WG1025164
1,2-Dibromoethane	U		0.193	0.500	1	09/27/2017 12:53	WG1025164
Dibromomethane	U		0.117	0.500	1	09/27/2017 12:53	WG1025164
1,2-Dichlorobenzene	U		0.101	0.500	1	09/27/2017 12:53	WG1025164
1,3-Dichlorobenzene	U		0.130	0.500	1	09/27/2017 12:53	WG1025164
1,4-Dichlorobenzene	U		0.121	0.500	1	09/27/2017 12:53	WG1025164
Dichlorodifluoromethane	U		0.127	2.50	1	09/27/2017 12:53	WG1025164
1,1-Dichloroethane	U		0.114	0.500	1	09/27/2017 12:53	WG1025164
1,2-Dichloroethane	U		0.108	0.500	1	09/27/2017 12:53	WG1025164
1,1-Dichloroethene	U		0.188	0.500	1	09/27/2017 12:53	WG1025164
cis-1,2-Dichloroethene	U		0.0933	0.500	1	09/27/2017 12:53	WG1025164
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/27/2017 12:53	WG1025164
1,2-Dichloropropane	U		0.190	0.500	1	09/27/2017 12:53	WG1025164
1,1-Dichloropropene	U		0.128	0.500	1	09/27/2017 12:53	WG1025164
1,3-Dichloropropane	U		0.147	1.00	1	09/27/2017 12:53	WG1025164
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/27/2017 12:53	WG1025164
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/27/2017 12:53	WG1025164
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	09/27/2017 12:53	WG1025164
2,2-Dichloropropane	U		0.0929	0.500	1	09/27/2017 12:53	WG1025164
Di-isopropyl ether	U		0.0924	0.500	1	09/27/2017 12:53	WG1025164
Ethylbenzene	U		0.158	0.500	1	09/27/2017 12:53	WG1025164
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/27/2017 12:53	WG1025164
2-Hexanone	U		0.757	5.00	1	09/27/2017 12:53	WG1025164
n-Hexane	U		0.305	5.00	1	09/27/2017 12:53	WG1025164
Iodomethane	U		0.377	10.0	1	09/27/2017 12:53	WG1025164
Isopropylbenzene	U		0.126	0.500	1	09/27/2017 12:53	WG1025164
p-Isopropyltoluene	U		0.138	0.500	1	09/27/2017 12:53	WG1025164
2-Butanone (MEK)	U		1.28	5.00	1	09/27/2017 12:53	WG1025164
Methylene Chloride	U		1.07	2.50	1	09/27/2017 12:53	WG1025164
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/27/2017 12:53	WG1025164
Methyl tert-butyl ether	U		0.102	0.500	1	09/27/2017 12:53	WG1025164
Naphthalene	U		0.174	2.50	1	09/27/2017 12:53	WG1025164
n-Propylbenzene	U		0.162	0.500	1	09/27/2017 12:53	WG1025164
Styrene	U		0.117	0.500	1	09/27/2017 12:53	WG1025164
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/27/2017 12:53	WG1025164
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/27/2017 12:53	WG1025164

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/21/17 00:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/27/2017 12:53	WG1025164
Tetrachloroethene	U		0.199	0.500	1	09/27/2017 12:53	WG1025164
Toluene	U		0.412	0.500	1	09/27/2017 12:53	WG1025164
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/27/2017 12:53	WG1025164
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/27/2017 12:53	WG1025164
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/27/2017 12:53	WG1025164
1,1,2-Trichloroethane	U		0.186	0.500	1	09/27/2017 12:53	WG1025164
Trichloroethene	U		0.153	0.500	1	09/27/2017 12:53	WG1025164
Trichlorofluoromethane	U		0.130	2.50	1	09/27/2017 12:53	WG1025164
1,2,3-Trichloropropane	U		0.247	2.50	1	09/27/2017 12:53	WG1025164
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/27/2017 12:53	WG1025164
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/27/2017 12:53	WG1025164
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/27/2017 12:53	WG1025164
Vinyl acetate	U		0.645	5.00	1	09/27/2017 12:53	WG1025164
Vinyl chloride	U		0.118	0.500	1	09/27/2017 12:53	WG1025164
Xylenes, Total	U		0.316	1.50	1	09/27/2017 12:53	WG1025164
(S) Toluene-d8	105			80.0-120		09/27/2017 12:53	WG1025164
(S) Dibromofluoromethane	101			76.0-123		09/27/2017 12:53	WG1025164
(S) 4-Bromofluorobenzene	90.9			80.0-120		09/27/2017 12:53	WG1025164

- 1 Cp
- 2 Tc
- 3 Ss
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- 8 Al
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Total Solids by Method 2540 G-2011

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Method Blank (MB)

(MB) R3252964-1	09/27/17 15:46						
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL				
Analyte	%	%	%				
Total Solids	0.00100						

L938855-01 Original Sample (OS) • Duplicate (DUP)

(OS) L938855-01	09/27/17 15:46	• (DUP) R3252964-3	09/27/17 15:46				
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits		
Analyte	%	%	%		%		
Total Solids	82.9	82.7	1	0.000	5		

Laboratory Control Sample (LCS)

(LCS) R3252964-2	09/27/17 15:46						
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>			
Analyte	%	%	%				
Total Solids	50.0	50.0	100	85.0-115			

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Method Blank (MB)

(MB) R3254115-3 09/26/17 11:36

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Method Blank (MB)

(MB) R3254115-3 09/26/17 11:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
n-Hexane	U		0.000290	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
2-Hexanone	U		0.00137	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	103		80.0-120	
(S) Dibromofluoromethane	110		74.0-131	
(S) 4-Bromofluorobenzene	101		64.0-132	

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3254115-1 09/26/17 10:17 • (LCSD) R3254115-2 09/26/17 10:43

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.142	0.132	113	106	11.0-160			7.05	23
Acrylonitrile	0.125	0.103	0.102	82.1	81.5	61.0-143			0.810	20
Benzene	0.0250	0.0254	0.0253	102	101	71.0-124			0.380	20
Bromobenzene	0.0250	0.0244	0.0242	97.6	96.9	78.0-120			0.650	20
Bromodichloromethane	0.0250	0.0241	0.0240	96.6	96.1	75.0-120			0.530	20
Bromoform	0.0250	0.0238	0.0238	95.4	95.4	65.0-133			0.0100	20
Bromomethane	0.0250	0.0308	0.0307	123	123	26.0-160			0.170	20
Bromochloromethane	0.0250	0.0258	0.0262	103	105	80.0-121			1.40	20
n-Butylbenzene	0.0250	0.0290	0.0285	116	114	73.0-126			1.64	20
sec-Butylbenzene	0.0250	0.0276	0.0274	111	110	75.0-121			0.750	20
Carbon disulfide	0.0250	0.0279	0.0280	111	112	53.0-130			0.560	20
Carbon tetrachloride	0.0250	0.0263	0.0264	105	105	74.0-122			0.0500	20
tert-Butylbenzene	0.0250	0.0261	0.0255	105	102	66.0-123			2.40	20
Carbon tetrachloride	0.0250	0.0266	0.0262	106	105	79.0-121			1.67	20
Chlorobenzene	0.0250	0.0256	0.0253	102	101	74.0-128			1.14	20
Chlorodibromomethane	0.0250	0.0281	0.0282	112	113	51.0-147			0.100	20
Chloroethane	0.0250	0.0267	0.0264	107	105	73.0-123			1.07	20
Chloroform	0.0250	0.0238	0.0235	95.1	94.2	51.0-138			0.970	20
Chloromethane	0.0250	0.0259	0.0259	104	104	72.0-124			0.0700	20
2-Chlorotoluene	0.0250	0.0215	0.0214	86.0	85.5	65.0-126			0.570	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0251	0.0250	101	100	78.0-120			0.410	20
4-Chlorotoluene	0.0250	0.0236	0.0233	94.4	93.3	78.0-122			1.20	20
1,2-Dibromoethane	0.0250	0.0250	0.0247	100	99.0	80.0-120			1.23	20
1,2-Dichlorobenzene	0.0250	0.0245	0.0240	97.8	96.2	79.0-120			1.71	20
Dibromomethane	0.0250	0.0251	0.0248	100	99.1	72.0-123			1.34	20
1,3-Dichlorobenzene	0.0250	0.0259	0.0258	103	103	77.0-120			0.130	20
Dichlorodifluoromethane	0.0250	0.0280	0.0277	112	111	49.0-155			1.02	20
1,1-Dichloroethane	0.0250	0.0261	0.0261	105	104	70.0-128			0.140	20
trans-1,4-Dichloro-2-butene	0.0250	0.0217	0.0213	86.8	85.4	68.0-126			1.63	20
1,2-Dichloroethane	0.0250	0.0266	0.0261	106	104	69.0-128			2.02	20
1,1-Dichloroethene	0.0250	0.0275	0.0273	110	109	63.0-131			1.03	20
cis-1,2-Dichloroethene	0.0250	0.0258	0.0256	103	103	74.0-123			0.440	20
trans-1,2-Dichloroethene	0.0250	0.0266	0.0264	106	106	72.0-122			0.620	20
1,2-Dichloropropane	0.0250	0.0243	0.0240	97.1	95.9	75.0-126			1.26	20
1,1-Dichloropropene	0.0250	0.0264	0.0258	105	103	72.0-130			2.24	20
1,3-Dichloropropene	0.0250	0.0238	0.0235	95.2	94.1	80.0-121			1.17	20
cis-1,3-Dichloropropene	0.0250	0.0260	0.0262	104	105	80.0-125			0.440	20
trans-1,3-Dichloropropene	0.0250	0.0253	0.0250	101	99.9	75.0-129			1.25	20
2,2-Dichloropropane	0.0250	0.0260	0.0261	104	105	60.0-129			0.620	20
Di-isopropyl ether	0.0250	0.0234	0.0244	93.5	97.5	62.0-133			4.18	20

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier		LCSD Qualifier		RPD	RPD Limits
							mg/kg	mg/kg	mg/kg	%		
Ethylbenzene	0.0250	0.0262	0.0257	105	103	77.0-120					1.97	20
2-Hexanone	0.125	0.115	0.110	92.2	87.8	61.0-143					4.85	20
Hexachloro-1,3-butadiene	0.0250	0.0300	0.0301	120	120	68.0-128					0.170	20
Isopropylbenzene	0.0250	0.0254	0.0251	102	100	75.0-120					1.14	20
n-Hexane	0.0250	0.0270	0.0266	108	107	57.0-125					1.20	20
2-Butanone (MEK)	0.125	0.116	0.109	92.4	86.9	37.0-159					6.15	20
Iodomethane	0.125	0.149	0.148	119	118	67.0-132					0.440	20
p-Isopropyltoluene	0.0250	0.0289	0.0283	116	113	74.0-125					2.22	20
Methylene Chloride	0.0250	0.0279	0.0281	112	112	67.0-123					0.640	20
4-Methyl-2-pentanone (MIBK)	0.125	0.102	0.0995	81.9	79.6	60.0-144					2.88	20
Methyl tert-butyl ether	0.0250	0.0255	0.0252	102	101	66.0-125					1.00	20
Naphthalene	0.0250	0.0214	0.0214	85.5	85.7	64.0-125					0.230	20
n-Propylbenzene	0.0250	0.0279	0.0273	111	109	78.0-120					2.17	20
Styrene	0.0250	0.0256	0.0250	102	99.9	78.0-124					2.39	20
1,1,1,2-Tetrachloroethane	0.0250	0.0263	0.0258	105	103	74.0-124					1.82	20
1,1,2,2-Tetrachloroethane	0.0250	0.0233	0.0228	93.4	91.1	73.0-120					2.47	20
Tetrachloroethene	0.0250	0.0254	0.0251	102	100	70.0-127					1.33	20
Toluene	0.0250	0.0243	0.0241	97.4	96.4	77.0-120					1.00	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0282	0.0281	113	112	64.0-135					0.670	20
1,2,3-Trichlorobenzene	0.0250	0.0234	0.0237	93.7	94.8	68.0-126					1.16	20
1,1,1-Trichloroethane	0.0250	0.0264	0.0261	105	104	69.0-125					1.13	20
1,2,4-Trichlorobenzene	0.0250	0.0244	0.0238	97.8	95.2	70.0-127					2.63	20
1,1,2-Trichloroethane	0.0250	0.0237	0.0236	94.7	94.5	78.0-120					0.270	20
Trichloroethene	0.0250	0.0251	0.0250	100	100	79.0-120					0.420	20
Trichlorofluoromethane	0.0250	0.0286	0.0284	114	114	59.0-136					0.730	20
1,2,3-Trichloropropane	0.0250	0.0239	0.0233	95.5	93.1	73.0-124					2.59	20
1,2,3-Trimethylbenzene	0.0250	0.0240	0.0240	95.9	95.9	76.0-120					0.0700	20
1,2,4-Trimethylbenzene	0.0250	0.0261	0.0258	104	103	75.0-120					1.28	20
1,3,5-Trimethylbenzene	0.0250	0.0265	0.0261	106	104	75.0-120					1.83	20
Vinyl chloride	0.0250	0.0272	0.0269	109	108	63.0-134					1.12	20
Xylenes, Total	0.0750	0.0786	0.0775	105	103	77.0-120					1.41	20
Vinyl acetate	0.125	0.134	0.133	107	107	58.0-156					0.750	20
<i>(S) Toluene-d8</i>												
<i>(S) Dibromofluoromethane</i>												
<i>(S) 4-Bromofluorobenzene</i>												
	98.7			98.1		64.0-132						

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L938873-04.05.06](#)

Method Blank (MB)

(MB) R3253106-3 09/26/17 19:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

Public Review Draft

1 Cp
2 Tc
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6 Qc
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L938873-04.05.06](#)

Method Blank (MB)

(MB) R3253106-3 09/26/17 19:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
n-Hexane	U		0.000290	0.0100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
Iodomethane	U		0.00253	0.0100
2-Hexanone	U		0.00137	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
Vinyl acetate	U		0.00239	0.0100
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	117		80.0-120	
(S) Dibromofluoromethane	101		74.0-131	
(S) 4-Bromofluorobenzene	111		64.0-132	

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2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3253106-1 09/26/17 18:54 • (LCSD) R3253106-2 09/26/17 19:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0989	0.0850	79.1	68.0	11.0-160			15.1	23
Acrylonitrile	0.125	0.0957	0.0917	76.5	73.4	61.0-143			4.23	20
Benzene	0.0250	0.0224	0.0216	89.5	86.3	71.0-124			3.64	20
Bromobenzene	0.0250	0.0233	0.0237	93.0	94.9	78.0-120			1.95	20
Bromodichloromethane	0.0250	0.0243	0.0230	97.2	92.0	75.0-120			5.47	20
Bromoform	0.0250	0.0253	0.0252	101	101	65.0-133			0.460	20
Bromochloromethane	0.0250	0.0249	0.0241	99.6	96.5	80.0-121			3.20	20
Bromomethane	0.0250	0.0195	0.0187	78.1	75.0	26.0-160			4.13	20
n-Butylbenzene	0.0250	0.0223	0.0227	89.3	90.9	73.0-126			1.80	20
sec-Butylbenzene	0.0250	0.0235	0.0235	93.9	94.0	75.0-121			0.130	20
tert-Butylbenzene	0.0250	0.0230	0.0226	92.2	90.6	74.0-122			1.74	20
Carbon tetrachloride	0.0250	0.0204	0.0198	81.6	79.4	66.0-123			2.74	20
Carbon disulfide	0.0250	0.0215	0.0205	85.8	81.9	53.0-130			4.70	20
Chlorobenzene	0.0250	0.0249	0.0249	99.5	99.8	79.0-121			0.300	20
Chlorodibromomethane	0.0250	0.0243	0.0244	97.4	97.5	74.0-128			0.140	20
Chloroethane	0.0250	0.0213	0.0203	85.4	81.4	51.0-147			4.79	20
Chloroform	0.0250	0.0226	0.0221	90.6	88.2	73.0-123			2.63	20
Chloromethane	0.0250	0.0186	0.0180	74.5	72.2	51.0-138			3.20	20
2-Chlorotoluene	0.0250	0.0236	0.0236	94.5	94.2	72.0-124			0.240	20
4-Chlorotoluene	0.0250	0.0233	0.0237	93.2	94.9	78.0-120			1.81	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0199	0.0206	79.6	82.5	65.0-126			3.62	20
1,2-Dibromoethane	0.0250	0.0264	0.0262	106	105	78.0-122			0.590	20
Dibromomethane	0.0250	0.0220	0.0218	87.9	87.1	79.0-120			0.900	20
1,2-Dichlorobenzene	0.0250	0.0226	0.0232	90.6	92.7	80.0-120			2.26	20
1,3-Dichlorobenzene	0.0250	0.0234	0.0233	93.4	93.3	72.0-123			0.130	20
1,4-Dichlorobenzene	0.0250	0.0233	0.0234	93.4	93.5	77.0-120			0.140	20
Dichlorodifluoromethane	0.0250	0.0199	0.0188	79.5	75.2	49.0-155			5.56	20
trans-1,4-Dichloro-2-butene	0.0250	0.0208	0.0219	83.2	87.6	68.0-126			5.18	20
1,1-Dichloroethane	0.0250	0.0234	0.0223	93.7	89.0	70.0-128			5.08	20
1,2-Dichloroethane	0.0250	0.0229	0.0221	91.6	88.2	69.0-128			3.69	20
1,1-Dichloroethene	0.0250	0.0219	0.0208	87.8	83.2	63.0-131			5.43	20
cis-1,2-Dichloroethene	0.0250	0.0235	0.0221	94.2	88.4	74.0-123			6.32	20
trans-1,2-Dichloroethene	0.0250	0.0233	0.0226	93.4	90.6	72.0-122			3.03	20
1,2-Dichloropropane	0.0250	0.0239	0.0234	95.6	93.5	75.0-126			2.19	20
1,1-Dichloropropene	0.0250	0.0224	0.0217	89.7	86.8	72.0-130			3.29	20
1,3-Dichloropropene	0.0250	0.0250	0.0255	100	102	80.0-121			1.67	20
cis-1,3-Dichloropropene	0.0250	0.0278	0.0279	111	112	80.0-125			0.260	20
trans-1,3-Dichloropropene	0.0250	0.0270	0.0267	108	107	75.0-129			1.06	20
2,2-Dichloropropane	0.0250	0.0169	0.0167	67.6	66.6	60.0-129			1.49	20
Di-isopropyl ether	0.0250	0.0203	0.0198	81.2	79.1	62.0-133			2.68	20

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1 Cp
2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3253106-1 09/26/17 18:54 • (LCSD) R3253106-2 09/26/17 19:14

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0241	0.0238	96.4	95.1	77.0-120			1.30	20
Hexachloro-1,3-butadiene	0.0250	0.0239	0.0245	95.6	97.9	68.0-128			2.33	20
2-Hexanone	0.125	0.105	0.0995	84.4	79.6	61.0-143			5.87	20
Isopropylbenzene	0.0250	0.0232	0.0231	92.6	92.3	75.0-120			0.300	20
n-Hexane	0.0250	0.0205	0.0195	82.1	78.1	57.0-125			4.98	20
Iodomethane	0.125	0.114	0.108	91.4	86.4	67.0-132			5.65	20
p-Isopropyltoluene	0.0250	0.0244	0.0243	97.5	97.2	74.0-125			0.360	20
2-Butanone (MEK)	0.125	0.0960	0.0863	76.8	69.1	37.0-159			10.6	20
Methylene Chloride	0.0250	0.0215	0.0208	86.0	83.2	67.0-123			3.26	20
4-Methyl-2-pentanone (MIBK)	0.125	0.0907	0.0894	72.5	71.5	60.0-144			1.47	20
Methyl tert-butyl ether	0.0250	0.0190	0.0182	75.9	72.9	66.0-125			3.92	20
Naphthalene	0.0250	0.0219	0.0224	87.4	89.6	64.0-125			2.45	20
n-Propylbenzene	0.0250	0.0239	0.0238	95.7	95.2	78.0-120			0.490	20
Styrene	0.0250	0.0251	0.0251	100	100	78.0-124			0.0200	20
1,1,1,2-Tetrachloroethane	0.0250	0.0222	0.0227	88.7	90.8	74.0-124			2.31	20
1,1,2,2-Tetrachloroethane	0.0250	0.0216	0.0218	86.2	87.0	73.0-120			0.930	20
Tetrachloroethene	0.0250	0.0264	0.0258	105	103	70.0-127			2.05	20
Toluene	0.0250	0.0240	0.0235	95.9	94.1	77.0-120			1.97	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0197	0.0186	79.0	74.6	64.0-135			5.77	20
1,2,3-Trichlorobenzene	0.0250	0.0241	0.0248	96.3	99.0	68.0-126			2.82	20
1,2,4-Trichlorobenzene	0.0250	0.0229	0.0234	91.4	93.7	70.0-127			2.49	20
1,1,1-Trichloroethane	0.0250	0.0211	0.0200	84.2	80.1	69.0-125			5.01	20
1,1,2-Trichloroethane	0.0250	0.0243	0.0246	97.1	98.4	78.0-120			1.29	20
Trichloroethene	0.0250	0.0230	0.0222	91.8	89.0	79.0-120			3.13	20
Trichlorofluoromethane	0.0250	0.0213	0.0199	85.1	79.4	59.0-136			6.90	20
1,2,3-Trichloropropane	0.0250	0.0215	0.0216	85.8	86.3	73.0-124			0.530	20
1,2,3-Trimethylbenzene	0.0250	0.0207	0.0209	83.0	83.6	76.0-120			0.780	20
1,2,4-Trimethylbenzene	0.0250	0.0224	0.0226	89.8	90.2	75.0-120			0.540	20
1,3,5-Trimethylbenzene	0.0250	0.0235	0.0234	94.1	93.4	75.0-120			0.650	20
Vinyl chloride	0.0250	0.0213	0.0200	85.1	80.0	63.0-134			6.11	20
Xylenes, Total	0.0750	0.0725	0.0718	96.7	95.7	77.0-120			0.970	20
Vinyl acetate	0.125	0.121	0.117	96.9	93.7	58.0-156			3.43	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										

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1 Cp
2 Tc
3 Ss
4 Cn
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7 Gl
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9 Sc



Method Blank (MB)

(MB) R3253064-3 09/27/17 12:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	110	J	1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
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Method Blank (MB)

(MB) R3253064-3 09/27/17 12:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.178	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	104			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) 4-Bromofluorobenzene	89.9			80.0-120

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Laboratory Control Sample (LCS)

(LCS) R3253064-1 09/27/17 10:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	202	162	10.0-160	J4
Acrylonitrile	125	139	111	60.0-142	
Benzene	25.0	26.0	104	69.0-123	
Bromobenzene	25.0	23.9	95.5	79.0-120	
Bromodichloromethane	25.0	24.6	98.3	76.0-120	
Bromochloromethane	25.0	25.8	103	76.0-122	
Bromoform	25.0	25.4	102	67.0-132	
Bromomethane	25.0	30.3	121	18.0-160	
n-Butylbenzene	25.0	27.2	109	72.0-126	
sec-Butylbenzene	25.0	26.5	106	74.0-121	
tert-Butylbenzene	25.0	25.3	101	75.0-122	
Carbon disulfide	25.0	25.5	102	55.0-127	
Carbon tetrachloride	25.0	25.3	101	63.0-122	
Chlorobenzene	25.0	26.0	104	79.0-121	
Chlorodibromomethane	25.0	26.7	107	75.0-125	
Chloroethane	25.0	32.5	130	47.0-152	
Chloroform	25.0	25.7	103	72.0-121	
Chloromethane	25.0	28.7	115	48.0-139	
2-Chlorotoluene	25.0	24.4	97.5	74.0-122	
4-Chlorotoluene	25.0	24.2	96.9	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	25.1	101	64.0-127	
1,2-Dibromoethane	25.0	25.5	102	77.0-123	
Dibromomethane	25.0	25.4	102	78.0-120	
1,2-Dichlorobenzene	25.0	25.9	104	80.0-120	
1,3-Dichlorobenzene	25.0	25.3	101	72.0-123	
1,4-Dichlorobenzene	25.0	25.2	101	77.0-120	
Dichlorodifluoromethane	25.0	33.9	136	49.0-155	
1,1-Dichloroethane	25.0	26.3	105	70.0-126	
1,2-Dichloroethane	25.0	26.8	107	67.0-126	
cis-1,2-Dichloroethene	25.0	25.5	102	64.0-129	
trans-1,2-Dichloroethene	25.0	25.4	102	73.0-120	
1,1-Dichloropropane	25.0	25.9	104	71.0-121	
1,2-Dichloropropane	25.0	26.2	105	75.0-125	
1,3-Dichloropropane	25.0	26.6	107	71.0-129	
cis-1,3-Dichloropropene	25.0	26.1	105	80.0-121	
trans-1,3-Dichloropropene	25.0	26.1	105	79.0-123	
trans-1,4-Dichloro-2-butene	25.0	25.9	104	74.0-127	
2,2-Dichloropropane	25.0	18.5	73.8	55.0-134	
Di-isopropyl ether	25.0	25.8	103	60.0-125	
	25.0	25.7	103	59.0-133	

Public Review Draft

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.02.602

SDG:

L938873

DATE/TIME:

10/03/17 17:17

PAGE:

39 of 44

Volatile Organic Compounds (GC/MS) by Method 8260C

[L938873-07.08.09.10.11](#)

Laboratory Control Sample (LCS)

(LCS) R3253064-1 09/27/17 10:50

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.5	102	77.0-120	
Hexachloro-1,3-butadiene	25.0	25.6	102	64.0-131	
2-Hexanone	125	146	116	58.0-147	
n-Hexane	25.0	27.5	110	56.0-124	
Iodomethane	125	127	102	57.0-140	
Isopropylbenzene	25.0	24.6	98.3	75.0-120	
p-Isopropyltoluene	25.0	26.7	107	74.0-126	
2-Butanone (MEK)	125	143	114	37.0-158	
Methylene Chloride	25.0	25.6	102	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	129	103	59.0-143	
Methyl tert-butyl ether	25.0	25.8	103	64.0-123	
Naphthalene	25.0	25.3	101	62.0-128	
n-Propylbenzene	25.0	24.8	99.2	79.0-120	
Styrene	25.0	23.9	95.8	78.0-124	
1,1,1,2-Tetrachloroethane	25.0	25.8	103	75.0-122	
1,1,2,2-Tetrachloroethane	25.0	24.3	97.2	71.0-122	
1,1,2-Trichlorotrifluoroethane	25.0	26.8	107	61.0-136	
Tetrachloroethene	25.0	25.7	103	70.0-127	
Toluene	25.0	25.4	102	77.0-120	
1,2,3-Trichlorobenzene	25.0	25.2	101	61.0-133	
1,2,4-Trichlorobenzene	25.0	25.2	101	69.0-129	
1,1,1-Trichloroethane	25.0	26.2	105	68.0-122	
1,1,2-Trichloroethane	25.0	25.8	103	78.0-120	
Trichloroethene	25.0	25.6	103	78.0-120	
Trichlorofluoromethane	25.0	28.5	114	56.0-137	
1,2,3-Trichloropropane	25.0	24.3	97.3	72.0-124	
1,2,4-Trimethylbenzene	25.0	24.5	98.0	75.0-120	
1,2,3-Trimethylbenzene	25.0	26.2	105	75.0-120	
1,3,5-Trimethylbenzene	25.0	24.6	98.2	75.0-120	
Vinyl acetate	125	137	110	46.0-160	
Vinyl chloride	25.0	32.9	131	64.0-133	
Xylenes, Total	75.0	76.7	102	77.0-120	
(S) Toluene-d8			103	80.0-120	
(S) Dibromofluoromethane			102	76.0-123	
(S) 4-Bromofluorobenzene			92.9	80.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J4	The associated batch QC was outside the established quality control range for accuracy.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

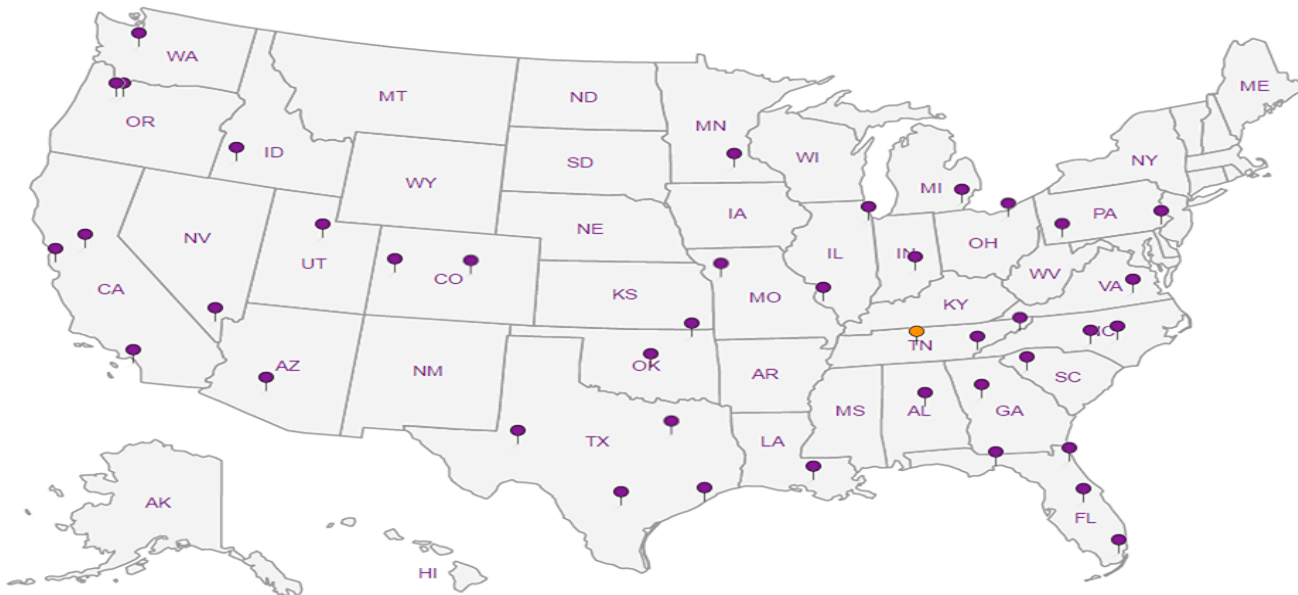
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: bhalldeman@pesenv.com

Report to:
Bill Halldeman

Project:
American Linen Project

City/State Collected:
SEATTLE WA

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413-001-02-002

Lab Project #
PESENVSWA-ALP

Collected by (print):
SHANNON MCKERMAN

Site/Facility ID #
1413.001.02.002

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Immediately Packed on Ice N Y X

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

B-223-14
B-223-22
B-223-30
B-223-39
B-223-47
B-917-57
MN-140-092217
MN-134-092217
MN-141-092217
B-917-100-W

CRAB
SS
SS
SS
SS
SS
SS
SS
SS
SS

16
22
30
39
47
57
134
85
100
100

9/21/17
9/21/17
9/21/17
9/21/17
9/21/17
9/21/17
9/21/17
9/21/17
9/21/17
9/21/17

1545
1600
1125
1640
1730
1410
1050
0850
1230
0930

5
5
5
5
5
5
6
6
6
6

Analysis / Container / Preservative
NWTPHGX 2ozClr-NoPres
NWTPHGX 40ml/NaHSO4/Syr/MeOH
VOC 8260C 2ozClr-NoPres 40 ml/HCl
VOC 8260C 40ml/NaHSO4/Syr/MeOH

PH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles airtight/Intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
vial zero headspace: Y N
Preservation Correct/Checked: Y N

Remarks:
Samples returned via:
 UPS FedEx Counter

Tracking # 7474 0421 0344

Trip Blank Received: Y / No
HCL / MeOH

Relinquished by: (Signature)
[Signature]

Date: 9/22/17

Time: 1500

Received by: (Signature)
[Signature]

Temp: 2.00 °C

Bottles Received: 54

Hold: _____

Relinquished by: (Signature)
[Signature]

Date: _____

Time: _____

Received by: (Signature)
[Signature]

Date: 9/23/17

Time: 0845

Condition: NCE / *[Signature]*

Relinquished by: (Signature)
[Signature]

Date: _____

Time: _____

Received by: (Signature)
[Signature]

Date: 9/23/17

Time: 0845

Condition: NCE / *[Signature]*



12005 Leannon Rd.
Mount Juliet, TN 37122
Phone: 615-358-5658
Phone: 800-787-5859
Fax: 615-728-5859



L# 038873

Table # B067

Account: PESENVSWA

Template: T127855

Prelogin: P618512

TSR: 110 - Brian Ford

PB:

Shipped Via:

Remarks: _____ Sample # (lab only)

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report To: Bill Haldeeman
Email To: bhaldeeman@pesenv.com

Project: American Linen Project

Phone: 206-529-3980
Fax: 206-529-3985

Client Project # 1413-001-02-002
Lab Project # PESENVSWA-ALP

Collected by (print): SHANNON MCKERNAN

Site/Facility ID # 1413.001.02.002

P.O. #

Quote #

Collected by (signature): *SMC*

Rush? (Lab MUST be Notified)
 Same Day
 Next Day
 Two Day
 Three Day
 Five Day
 10 Day (Red Only)

Date Results Needed

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
TRIP BLANK 092217	NA	SS	NH	5/15/17	NA	1
		SS				
		SS				
		SS				
		SS				
		SS				
		SS				

Analysis / Container / Preservative	Pres Chk
NWTPHGX 2ozClr-NoPres	
NWTPHGX 40ml/NaHSO4/Syr/MeOH	
VOC 8260C 2ozClr-NoPres 40mL/HCl	
VOC 8260C 40ml/NaHSO4/Syr/MeOH	

* Matrix: SS - Soil, AIR - Air, F - Filter, GW - Groundwater, B - Biosassy, WW - Wastewater, DW - Drinking Water, OT - Other

Relinquished by: (Signature) *SMC* Date: 9/22/17 Time: 1500

Relinquished by: (Signature) Date: Time:

Relinquished by: (Signature) Date: Time:

Remarks: Samples returned via: UPS, FedEx, Courier

Tracking # 7474 0921 0377

Received by: (Signature) *SMC* Date: 9/23/17 Time: 0845

Received for job by (Signature) *SMC* Date: 9/23/17 Time: 0845

Temp: 20.0 °C
Bottles Received: 54
pH: _____ Temp: _____
Flow: _____ Other: _____

Temp: 20.0 °C
Bottles Received: 54
pH: _____ Temp: _____
Flow: _____ Other: _____

Sample Receipt Checklist:
 COC Seal Present/Intact
 COC Signed/Accurate
 Bottled arrive intact
 Correct bottles used
 Sufficient volume sent
 It Applicable
 VOA zero Headspace
 Preservation Correct/Checked

Hold: _____ Condition: NCF

Chain of Custody Page 2 of 2

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

October 05, 2017

PES Environmental, Inc.- WA

Sample Delivery Group: L939416
Samples Received: 09/27/2017
Project Number: 1413.001.02.602
Description: MVSC
Site: AMERICAM LINEN
Report To: Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	2 Tc
Ss: Sample Summary	3	3 Ss
Cn: Case Narrative	4	4 Cn
Sr: Sample Results	5	5 Sr
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MW-133-092517 L939416-04	11	
MW-136-092517 L939416-05	13	
MW-137-092517 L939416-06	15	
EQ-092517 L939416-07	17	
Qc: Quality Control Summary	19	19 Qc
Volatile Organic Compounds (GC) by Method NWTPHGX	19	
Volatile Organic Compounds (GC/MS) by Method 8260C	20	
Gl: Glossary of Terms	24	24 Gl
Al: Accreditations & Locations	25	25 Al
Sc: Sample Chain of Custody	26	26 Sc



MW-139-092517 L939416-01 GW

Collected by Karsten Springstead
 Collected date/time 09/25/17 12:00
 Received date/time 09/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1026503	1	10/01/17 17:01	10/01/17 17:01	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	1	09/28/17 20:28	09/28/17 20:28	BMB

1 Cp

2 Tc

3 Ss

MW-132-092517 L939416-02 GW

Collected by Karsten Springstead
 Collected date/time 09/25/17 13:00
 Received date/time 09/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1026503	1	10/05/17 00:36	10/05/17 00:36	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	5	10/03/17 16:10	10/03/17 16:10	ACG

4 Cn

5 Sr

6 Qc

MW-135-092517 L939416-03 GW

Collected by Karsten Springstead
 Collected date/time 09/25/17 14:00
 Received date/time 09/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1026503	100	10/01/17 17:49	10/01/17 17:49	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	100	09/28/17 21:12	09/28/17 21:12	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	1000	10/03/17 16:32	10/03/17 16:32	ACG

7 Gl

8 Al

9 Sc

MW-133-092517 L939416-04 GW

Collected by Karsten Springstead
 Collected date/time 09/25/17 15:00
 Received date/time 09/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1026503	1	10/05/17 00:58	10/05/17 00:58	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	1	10/03/17 16:55	10/03/17 16:55	ACG

MW-136-092517 L939416-05 GW

Collected by Karsten Springstead
 Collected date/time 09/25/17 16:50
 Received date/time 09/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1026503	1	10/05/17 01:21	10/05/17 01:21	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	1	10/03/17 17:16	10/03/17 17:16	ACG

MW-137-092517 L939416-06 GW

Collected by Karsten Springstead
 Collected date/time 09/25/17 17:45
 Received date/time 09/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1026503	1	10/05/17 01:43	10/05/17 01:43	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	1	10/03/17 17:38	10/03/17 17:38	ACG

EQ-092517 L939416-07 GW

Collected by Karsten Springstead
 Collected date/time 09/25/17 18:15
 Received date/time 09/27/17 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1026503	1	10/05/17 02:05	10/05/17 02:05	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1025567	1	10/03/17 17:59	10/03/17 17:59	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times. All MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Collected date/time: 09/25/17 12:00

L939416

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	62.2	<u>B J</u>	31.6	100	1	10/01/2017 17:01	WG1026503
(S) a,a,a-Trifluorotoluene(FID)	96.7			77.0-122		10/01/2017 17:01	WG1026503

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.87	<u>J J4</u>	1.05	25.0	1	09/28/2017 20:28	WG1025567
Acrylonitrile	U		0.873	5.00	1	09/28/2017 20:28	WG1025567
Benzene	U		0.0896	0.500	1	09/28/2017 20:28	WG1025567
Bromobenzene	U		0.133	0.500	1	09/28/2017 20:28	WG1025567
Bromodichloromethane	U		0.0800	0.500	1	09/28/2017 20:28	WG1025567
Bromochloromethane	U		0.145	0.500	1	09/28/2017 20:28	WG1025567
Bromoform	U		0.186	0.500	1	09/28/2017 20:28	WG1025567
Bromomethane	U		0.157	2.50	1	09/28/2017 20:28	WG1025567
n-Butylbenzene	U		0.143	0.500	1	09/28/2017 20:28	WG1025567
sec-Butylbenzene	U		0.134	0.500	1	09/28/2017 20:28	WG1025567
tert-Butylbenzene	U		0.183	0.500	1	09/28/2017 20:28	WG1025567
Carbon disulfide	1.18		0.101	0.500	1	09/28/2017 20:28	WG1025567
Carbon tetrachloride	U		0.159	0.500	1	09/28/2017 20:28	WG1025567
Chlorobenzene	U		0.140	0.500	1	09/28/2017 20:28	WG1025567
Chlorodibromomethane	U		0.128	0.500	1	09/28/2017 20:28	WG1025567
Chloroethane	U		0.141	2.50	1	09/28/2017 20:28	WG1025567
Chloroform	1.33		0.0860	0.500	1	09/28/2017 20:28	WG1025567
Chloromethane	U		0.153	1.25	1	09/28/2017 20:28	WG1025567
2-Chlorotoluene	U		0.111	0.500	1	09/28/2017 20:28	WG1025567
4-Chlorotoluene	U		0.0972	0.500	1	09/28/2017 20:28	WG1025567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	09/28/2017 20:28	WG1025567
1,2-Dibromoethane	U		0.193	0.500	1	09/28/2017 20:28	WG1025567
Dibromomethane	U		0.117	0.500	1	09/28/2017 20:28	WG1025567
1,2-Dichlorobenzene	U		0.101	0.500	1	09/28/2017 20:28	WG1025567
1,3-Dichlorobenzene	U		0.130	0.500	1	09/28/2017 20:28	WG1025567
1,4-Dichlorobenzene	U		0.121	0.500	1	09/28/2017 20:28	WG1025567
Dichlorodifluoromethane	U		0.127	2.50	1	09/28/2017 20:28	WG1025567
1,1-Dichloroethane	U		0.114	0.500	1	09/28/2017 20:28	WG1025567
1,2-Dichloroethane	U		0.108	0.500	1	09/28/2017 20:28	WG1025567
1,1-Dichloroethene	U		0.188	0.500	1	09/28/2017 20:28	WG1025567
cis-1,2-Dichloroethene	1.42		0.0933	0.500	1	09/28/2017 20:28	WG1025567
trans-1,2-Dichloroethene	U		0.152	0.500	1	09/28/2017 20:28	WG1025567
1,2-Dichloropropane	U		0.190	0.500	1	09/28/2017 20:28	WG1025567
1,1-Dichloropropene	U		0.128	0.500	1	09/28/2017 20:28	WG1025567
1,3-Dichloropropane	U		0.147	1.00	1	09/28/2017 20:28	WG1025567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	09/28/2017 20:28	WG1025567
trans-1,3-Dichloropropene	U		0.222	0.500	1	09/28/2017 20:28	WG1025567
trans-1,4-Dichloro-2-butene	U	<u>JO J4</u>	0.257	5.00	1	09/28/2017 20:28	WG1025567
2,2-Dichloropropane	U		0.0929	0.500	1	09/28/2017 20:28	WG1025567
Di-isopropyl ether	U		0.0924	0.500	1	09/28/2017 20:28	WG1025567
Ethylbenzene	U		0.158	0.500	1	09/28/2017 20:28	WG1025567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	09/28/2017 20:28	WG1025567
2-Hexanone	U		0.757	5.00	1	09/28/2017 20:28	WG1025567
n-Hexane	U		0.305	5.00	1	09/28/2017 20:28	WG1025567
Iodomethane	U		0.377	10.0	1	09/28/2017 20:28	WG1025567
Isopropylbenzene	U		0.126	0.500	1	09/28/2017 20:28	WG1025567
p-Isopropyltoluene	U		0.138	0.500	1	09/28/2017 20:28	WG1025567
2-Butanone (MEK)	U		1.28	5.00	1	09/28/2017 20:28	WG1025567



Collected date/time: 09/25/17 12:00

L939416

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	1.10	J	1.07	2.50	1	09/28/2017 20:28	WG1025567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	09/28/2017 20:28	WG1025567
Methyl tert-butyl ether	U		0.102	0.500	1	09/28/2017 20:28	WG1025567
Naphthalene	U		0.174	2.50	1	09/28/2017 20:28	WG1025567
n-Propylbenzene	U		0.162	0.500	1	09/28/2017 20:28	WG1025567
Styrene	U		0.117	0.500	1	09/28/2017 20:28	WG1025567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	09/28/2017 20:28	WG1025567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	09/28/2017 20:28	WG1025567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	09/28/2017 20:28	WG1025567
Tetrachloroethene	U		0.199	0.500	1	09/28/2017 20:28	WG1025567
Toluene	0.516		0.412	0.500	1	09/28/2017 20:28	WG1025567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	09/28/2017 20:28	WG1025567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	09/28/2017 20:28	WG1025567
1,1,1-Trichloroethane	U		0.0940	0.500	1	09/28/2017 20:28	WG1025567
1,1,2-Trichloroethane	U		0.186	0.500	1	09/28/2017 20:28	WG1025567
Trichloroethene	U		0.153	0.500	1	09/28/2017 20:28	WG1025567
Trichlorofluoromethane	U		0.130	2.50	1	09/28/2017 20:28	WG1025567
1,2,3-Trichloropropane	U		0.247	2.50	1	09/28/2017 20:28	WG1025567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	09/28/2017 20:28	WG1025567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	09/28/2017 20:28	WG1025567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	09/28/2017 20:28	WG1025567
Vinyl acetate	U		0.645	5.00	1	09/28/2017 20:28	WG1025567
Vinyl chloride	0.246	J J4	0.118	0.500	1	09/28/2017 20:28	WG1025567
Xylenes, Total	U		0.316	1.50	1	09/28/2017 20:28	WG1025567
(S) Toluene-d8	105			80.0-120		09/28/2017 20:28	WG1025567
(S) Dibromofluoromethane	102			76.0-123		09/28/2017 20:28	WG1025567
(S) 4-Bromofluorobenzene	88.5			80.0-120		09/28/2017 20:28	WG1025567

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/25/17 13:00

L939416

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	95.9	<u>B</u> <u>J</u>	31.6	100	1	10/05/2017 00:36	WG1026503
(S) a,a,a-Trifluorotoluene(FID)	92.6			77.0-122		10/05/2017 00:36	WG1026503

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	5.91	<u>J</u> <u>JO</u> <u>J4</u>	5.25	125	5	10/03/2017 16:10	WG1025567
Acrylonitrile	U		4.36	25.0	5	10/03/2017 16:10	WG1025567
Benzene	U		0.448	2.50	5	10/03/2017 16:10	WG1025567
Bromobenzene	U		0.665	2.50	5	10/03/2017 16:10	WG1025567
Bromodichloromethane	U		0.400	2.50	5	10/03/2017 16:10	WG1025567
Bromochloromethane	U		0.725	2.50	5	10/03/2017 16:10	WG1025567
Bromoform	U		0.930	2.50	5	10/03/2017 16:10	WG1025567
Bromomethane	U		0.785	12.5	5	10/03/2017 16:10	WG1025567
n-Butylbenzene	U		0.715	2.50	5	10/03/2017 16:10	WG1025567
sec-Butylbenzene	U		0.670	2.50	5	10/03/2017 16:10	WG1025567
tert-Butylbenzene	U		0.915	2.50	5	10/03/2017 16:10	WG1025567
Carbon disulfide	U		0.505	2.50	5	10/03/2017 16:10	WG1025567
Carbon tetrachloride	U		0.795	2.50	5	10/03/2017 16:10	WG1025567
Chlorobenzene	U		0.700	2.50	5	10/03/2017 16:10	WG1025567
Chlorodibromomethane	U		0.640	2.50	5	10/03/2017 16:10	WG1025567
Chloroethane	U		0.705	12.5	5	10/03/2017 16:10	WG1025567
Chloroform	U		0.430	2.50	5	10/03/2017 16:10	WG1025567
Chloromethane	U		0.765	6.25	5	10/03/2017 16:10	WG1025567
2-Chlorotoluene	U		0.555	2.50	5	10/03/2017 16:10	WG1025567
4-Chlorotoluene	U		0.486	2.50	5	10/03/2017 16:10	WG1025567
1,2-Dibromo-3-Chloropropane	U		1.62	12.5	5	10/03/2017 16:10	WG1025567
1,2-Dibromoethane	U		0.965	2.50	5	10/03/2017 16:10	WG1025567
Dibromomethane	U		0.585	2.50	5	10/03/2017 16:10	WG1025567
1,2-Dichlorobenzene	U		0.505	2.50	5	10/03/2017 16:10	WG1025567
1,3-Dichlorobenzene	U		0.650	2.50	5	10/03/2017 16:10	WG1025567
1,4-Dichlorobenzene	U		0.605	2.50	5	10/03/2017 16:10	WG1025567
Dichlorodifluoromethane	U		0.635	12.5	5	10/03/2017 16:10	WG1025567
1,1-Dichloroethane	U		0.570	2.50	5	10/03/2017 16:10	WG1025567
1,2-Dichloroethane	U		0.540	2.50	5	10/03/2017 16:10	WG1025567
1,1-Dichloroethene	U		0.940	2.50	5	10/03/2017 16:10	WG1025567
cis-1,2-Dichloroethene	196		0.466	2.50	5	10/03/2017 16:10	WG1025567
trans-1,2-Dichloroethene	U		0.760	2.50	5	10/03/2017 16:10	WG1025567
1,2-Dichloropropane	U		0.950	2.50	5	10/03/2017 16:10	WG1025567
1,1-Dichloropropene	U		0.640	2.50	5	10/03/2017 16:10	WG1025567
1,3-Dichloropropane	U		0.735	5.00	5	10/03/2017 16:10	WG1025567
cis-1,3-Dichloropropene	U		0.488	2.50	5	10/03/2017 16:10	WG1025567
trans-1,3-Dichloropropene	U		1.11	2.50	5	10/03/2017 16:10	WG1025567
trans-1,4-Dichloro-2-butene	U	<u>JO</u> <u>J4</u>	1.28	25.0	5	10/03/2017 16:10	WG1025567
2,2-Dichloropropane	U		0.464	2.50	5	10/03/2017 16:10	WG1025567
Di-isopropyl ether	U		0.462	2.50	5	10/03/2017 16:10	WG1025567
Ethylbenzene	U		0.790	2.50	5	10/03/2017 16:10	WG1025567
Hexachloro-1,3-butadiene	U		0.785	5.00	5	10/03/2017 16:10	WG1025567
2-Hexanone	U		3.78	25.0	5	10/03/2017 16:10	WG1025567
n-Hexane	U		1.52	25.0	5	10/03/2017 16:10	WG1025567
Iodomethane	U		1.88	50.0	5	10/03/2017 16:10	WG1025567
Isopropylbenzene	U		0.630	2.50	5	10/03/2017 16:10	WG1025567
p-Isopropyltoluene	U		0.690	2.50	5	10/03/2017 16:10	WG1025567
2-Butanone (MEK)	U		6.40	25.0	5	10/03/2017 16:10	WG1025567

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/25/17 13:00

L939416

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		5.35	12.5	5	10/03/2017 16:10	WG1025567
4-Methyl-2-pentanone (MIBK)	U		4.12	25.0	5	10/03/2017 16:10	WG1025567
Methyl tert-butyl ether	U		0.510	2.50	5	10/03/2017 16:10	WG1025567
Naphthalene	U		0.870	12.5	5	10/03/2017 16:10	WG1025567
n-Propylbenzene	U		0.810	2.50	5	10/03/2017 16:10	WG1025567
Styrene	U		0.585	2.50	5	10/03/2017 16:10	WG1025567
1,1,1,2-Tetrachloroethane	U		0.600	2.50	5	10/03/2017 16:10	WG1025567
1,1,2,2-Tetrachloroethane	U		0.650	2.50	5	10/03/2017 16:10	WG1025567
1,1,2-Trichlorotrifluoroethane	U		0.820	2.50	5	10/03/2017 16:10	WG1025567
Tetrachloroethene	U		0.995	2.50	5	10/03/2017 16:10	WG1025567
Toluene	U		2.06	2.50	5	10/03/2017 16:10	WG1025567
1,2,3-Trichlorobenzene	U		0.820	2.50	5	10/03/2017 16:10	WG1025567
1,2,4-Trichlorobenzene	U		1.78	2.50	5	10/03/2017 16:10	WG1025567
1,1,1-Trichloroethane	U		0.470	2.50	5	10/03/2017 16:10	WG1025567
1,1,2-Trichloroethane	U		0.930	2.50	5	10/03/2017 16:10	WG1025567
Trichloroethene	1.95	J	0.765	2.50	5	10/03/2017 16:10	WG1025567
Trichlorofluoromethane	U		0.650	12.5	5	10/03/2017 16:10	WG1025567
1,2,3-Trichloropropane	U		1.24	12.5	5	10/03/2017 16:10	WG1025567
1,2,4-Trimethylbenzene	U		0.615	2.50	5	10/03/2017 16:10	WG1025567
1,2,3-Trimethylbenzene	U		0.370	2.50	5	10/03/2017 16:10	WG1025567
1,3,5-Trimethylbenzene	U		0.620	2.50	5	10/03/2017 16:10	WG1025567
Vinyl acetate	U		3.22	25.0	5	10/03/2017 16:10	WG1025567
Vinyl chloride	1.76	J J4	0.590	2.50	5	10/03/2017 16:10	WG1025567
Xylenes, Total	U		1.58	7.50	5	10/03/2017 16:10	WG1025567
(S) Toluene-d8	104			80.0-120		10/03/2017 16:10	WG1025567
(S) Dibromofluoromethane	103			76.0-123		10/03/2017 16:10	WG1025567
(S) 4-Bromofluorobenzene	91.8			80.0-120		10/03/2017 16:10	WG1025567

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L939416-02 WG1025567: Non-target compounds too high to run at a lower dilution.



Collected date/time: 09/25/17 14:00

L939416

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	10900	<u>B</u>	3160	10000	100	10/01/2017 17:49	WG1026503
(S) a,a,a-Trifluorotoluene(FID)	97.5			77.0-122		10/01/2017 17:49	WG1026503

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	<u>J4</u>	105	2500	100	09/28/2017 21:12	WG1025567
Acrylonitrile	U		87.3	500	100	09/28/2017 21:12	WG1025567
Benzene	U		8.96	50.0	100	09/28/2017 21:12	WG1025567
Bromobenzene	U		13.3	50.0	100	09/28/2017 21:12	WG1025567
Bromodichloromethane	U		8.00	50.0	100	09/28/2017 21:12	WG1025567
Bromochloromethane	U		14.5	50.0	100	09/28/2017 21:12	WG1025567
Bromoform	U		18.6	50.0	100	09/28/2017 21:12	WG1025567
Bromomethane	U		15.7	250	100	09/28/2017 21:12	WG1025567
n-Butylbenzene	U		14.3	50.0	100	09/28/2017 21:12	WG1025567
sec-Butylbenzene	U		13.4	50.0	100	09/28/2017 21:12	WG1025567
tert-Butylbenzene	U		18.3	50.0	100	09/28/2017 21:12	WG1025567
Carbon disulfide	U		10.1	50.0	100	09/28/2017 21:12	WG1025567
Carbon tetrachloride	U		15.9	50.0	100	09/28/2017 21:12	WG1025567
Chlorobenzene	U		14.0	50.0	100	09/28/2017 21:12	WG1025567
Chlorodibromomethane	U		12.8	50.0	100	09/28/2017 21:12	WG1025567
Chloroethane	U		14.1	250	100	09/28/2017 21:12	WG1025567
Chloroform	U		8.60	50.0	100	09/28/2017 21:12	WG1025567
Chloromethane	U		15.3	125	100	09/28/2017 21:12	WG1025567
2-Chlorotoluene	U		11.1	50.0	100	09/28/2017 21:12	WG1025567
4-Chlorotoluene	U		9.72	50.0	100	09/28/2017 21:12	WG1025567
1,2-Dibromo-3-Chloropropane	U		32.5	250	100	09/28/2017 21:12	WG1025567
1,2-Dibromoethane	U		19.3	50.0	100	09/28/2017 21:12	WG1025567
Dibromomethane	U		11.7	50.0	100	09/28/2017 21:12	WG1025567
1,2-Dichlorobenzene	U		10.1	50.0	100	09/28/2017 21:12	WG1025567
1,3-Dichlorobenzene	U		13.0	50.0	100	09/28/2017 21:12	WG1025567
1,4-Dichlorobenzene	U		12.1	50.0	100	09/28/2017 21:12	WG1025567
Dichlorodifluoromethane	U		12.7	250	100	09/28/2017 21:12	WG1025567
1,1-Dichloroethane	U		11.4	50.0	100	09/28/2017 21:12	WG1025567
1,2-Dichloroethane	U		10.8	50.0	100	09/28/2017 21:12	WG1025567
1,1-Dichloroethene	87.2		18.8	50.0	100	09/28/2017 21:12	WG1025567
cis-1,2-Dichloroethene	16100		93.3	500	1000	10/03/2017 16:32	WG1025567
trans-1,2-Dichloroethene	U		15.2	50.0	100	09/28/2017 21:12	WG1025567
1,2-Dichloropropane	U		19.0	50.0	100	09/28/2017 21:12	WG1025567
1,1-Dichloropropene	U		12.8	50.0	100	09/28/2017 21:12	WG1025567
1,3-Dichloropropane	U		14.7	100	100	09/28/2017 21:12	WG1025567
cis-1,3-Dichloropropene	U		9.76	50.0	100	09/28/2017 21:12	WG1025567
trans-1,3-Dichloropropene	U		22.2	50.0	100	09/28/2017 21:12	WG1025567
trans-1,4-Dichloro-2-butene	U	<u>JO J4</u>	25.7	500	100	09/28/2017 21:12	WG1025567
2,2-Dichloropropane	U		9.29	50.0	100	09/28/2017 21:12	WG1025567
Di-isopropyl ether	U		9.24	50.0	100	09/28/2017 21:12	WG1025567
Ethylbenzene	U		15.8	50.0	100	09/28/2017 21:12	WG1025567
Hexachloro-1,3-butadiene	U		15.7	100	100	09/28/2017 21:12	WG1025567
2-Hexanone	U		75.7	500	100	09/28/2017 21:12	WG1025567
n-Hexane	U		30.5	500	100	09/28/2017 21:12	WG1025567
Iodomethane	U		37.7	1000	100	09/28/2017 21:12	WG1025567
Isopropylbenzene	U		12.6	50.0	100	09/28/2017 21:12	WG1025567
p-Isopropyltoluene	U		13.8	50.0	100	09/28/2017 21:12	WG1025567
2-Butanone (MEK)	U		128	500	100	09/28/2017 21:12	WG1025567

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/25/17 14:00

L939416

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		107	250	100	09/28/2017 21:12	WG1025567
4-Methyl-2-pentanone (MIBK)	U		82.3	500	100	09/28/2017 21:12	WG1025567
Methyl tert-butyl ether	U		10.2	50.0	100	09/28/2017 21:12	WG1025567
Naphthalene	U		17.4	250	100	09/28/2017 21:12	WG1025567
n-Propylbenzene	U		16.2	50.0	100	09/28/2017 21:12	WG1025567
Styrene	U		11.7	50.0	100	09/28/2017 21:12	WG1025567
1,1,1,2-Tetrachloroethane	U		12.0	50.0	100	09/28/2017 21:12	WG1025567
1,1,2,2-Tetrachloroethane	U		13.0	50.0	100	09/28/2017 21:12	WG1025567
1,1,2-Trichlorotrifluoroethane	U		16.4	50.0	100	09/28/2017 21:12	WG1025567
Tetrachloroethene	10400		19.9	50.0	100	09/28/2017 21:12	WG1025567
Toluene	U		41.2	50.0	100	09/28/2017 21:12	WG1025567
1,2,3-Trichlorobenzene	U		16.4	50.0	100	09/28/2017 21:12	WG1025567
1,2,4-Trichlorobenzene	U		35.5	50.0	100	09/28/2017 21:12	WG1025567
1,1,1-Trichloroethane	U		9.40	50.0	100	09/28/2017 21:12	WG1025567
1,1,2-Trichloroethane	U		18.6	50.0	100	09/28/2017 21:12	WG1025567
Trichloroethene	2480		15.3	50.0	100	09/28/2017 21:12	WG1025567
Trichlorofluoromethane	U		13.0	250	100	09/28/2017 21:12	WG1025567
1,2,3-Trichloropropane	U		24.7	250	100	09/28/2017 21:12	WG1025567
1,2,4-Trimethylbenzene	U		12.3	50.0	100	09/28/2017 21:12	WG1025567
1,2,3-Trimethylbenzene	U		7.39	50.0	100	09/28/2017 21:12	WG1025567
1,3,5-Trimethylbenzene	U		12.4	50.0	100	09/28/2017 21:12	WG1025567
Vinyl acetate	U		64.5	500	100	09/28/2017 21:12	WG1025567
Vinyl chloride	82.0	J4	11.8	50.0	100	09/28/2017 21:12	WG1025567
Xylenes, Total	U		31.6	150	100	09/28/2017 21:12	WG1025567
(S) Toluene-d8	103			80.0-120		10/03/2017 16:32	WG1025567
(S) Toluene-d8	104			80.0-120		09/28/2017 21:12	WG1025567
(S) Dibromofluoromethane	101			76.0-123		09/28/2017 21:12	WG1025567
(S) Dibromofluoromethane	105			76.0-123		10/03/2017 16:32	WG1025567
(S) 4-Bromofluorobenzene	90.4			80.0-120		10/03/2017 16:32	WG1025567
(S) 4-Bromofluorobenzene	89.0			80.0-120		09/28/2017 21:12	WG1025567

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/25/17 15:00

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	41.2	<u>B</u> <u>J</u>	31.6	100	1	10/05/2017 00:58	WG1026503
(S) a,a,a-Trifluorotoluene(FID)	91.9			77.0-122		10/05/2017 00:58	WG1026503

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.02	<u>J</u> <u>JO</u> <u>J4</u>	1.05	25.0	1	10/03/2017 16:55	WG1025567
Acrylonitrile	U		0.873	5.00	1	10/03/2017 16:55	WG1025567
Benzene	U		0.0896	0.500	1	10/03/2017 16:55	WG1025567
Bromobenzene	U		0.133	0.500	1	10/03/2017 16:55	WG1025567
Bromodichloromethane	U		0.0800	0.500	1	10/03/2017 16:55	WG1025567
Bromochloromethane	U		0.145	0.500	1	10/03/2017 16:55	WG1025567
Bromoform	U		0.186	0.500	1	10/03/2017 16:55	WG1025567
Bromomethane	U		0.157	2.50	1	10/03/2017 16:55	WG1025567
n-Butylbenzene	U		0.143	0.500	1	10/03/2017 16:55	WG1025567
sec-Butylbenzene	U		0.134	0.500	1	10/03/2017 16:55	WG1025567
tert-Butylbenzene	U		0.183	0.500	1	10/03/2017 16:55	WG1025567
Carbon disulfide	0.439	<u>J</u>	0.101	0.500	1	10/03/2017 16:55	WG1025567
Carbon tetrachloride	U		0.159	0.500	1	10/03/2017 16:55	WG1025567
Chlorobenzene	U		0.140	0.500	1	10/03/2017 16:55	WG1025567
Chlorodibromomethane	U		0.128	0.500	1	10/03/2017 16:55	WG1025567
Chloroethane	U		0.141	2.50	1	10/03/2017 16:55	WG1025567
Chloroform	U		0.0860	0.500	1	10/03/2017 16:55	WG1025567
Chloromethane	U		0.153	1.25	1	10/03/2017 16:55	WG1025567
2-Chlorotoluene	U		0.111	0.500	1	10/03/2017 16:55	WG1025567
4-Chlorotoluene	U		0.0972	0.500	1	10/03/2017 16:55	WG1025567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/03/2017 16:55	WG1025567
1,2-Dibromoethane	U		0.193	0.500	1	10/03/2017 16:55	WG1025567
Dibromomethane	U		0.117	0.500	1	10/03/2017 16:55	WG1025567
1,2-Dichlorobenzene	U		0.101	0.500	1	10/03/2017 16:55	WG1025567
1,3-Dichlorobenzene	U		0.130	0.500	1	10/03/2017 16:55	WG1025567
1,4-Dichlorobenzene	U		0.121	0.500	1	10/03/2017 16:55	WG1025567
Dichlorodifluoromethane	U		0.127	2.50	1	10/03/2017 16:55	WG1025567
1,1-Dichloroethane	U		0.114	0.500	1	10/03/2017 16:55	WG1025567
1,2-Dichloroethane	U		0.108	0.500	1	10/03/2017 16:55	WG1025567
1,1-Dichloroethene	1.87		0.188	0.500	1	10/03/2017 16:55	WG1025567
cis-1,2-Dichloroethene	13.3		0.0933	0.500	1	10/03/2017 16:55	WG1025567
trans-1,2-Dichloroethene	1.13		0.152	0.500	1	10/03/2017 16:55	WG1025567
1,2-Dichloropropane	U		0.190	0.500	1	10/03/2017 16:55	WG1025567
1,1-Dichloropropene	U		0.128	0.500	1	10/03/2017 16:55	WG1025567
1,3-Dichloropropane	U		0.147	1.00	1	10/03/2017 16:55	WG1025567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/03/2017 16:55	WG1025567
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/03/2017 16:55	WG1025567
trans-1,4-Dichloro-2-butene	U	<u>JO</u> <u>J4</u>	0.257	5.00	1	10/03/2017 16:55	WG1025567
2,2-Dichloropropane	U		0.0929	0.500	1	10/03/2017 16:55	WG1025567
Di-isopropyl ether	U		0.0924	0.500	1	10/03/2017 16:55	WG1025567
Ethylbenzene	U		0.158	0.500	1	10/03/2017 16:55	WG1025567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/03/2017 16:55	WG1025567
2-Hexanone	U		0.757	5.00	1	10/03/2017 16:55	WG1025567
n-Hexane	U		0.305	5.00	1	10/03/2017 16:55	WG1025567
Iodomethane	U		0.377	10.0	1	10/03/2017 16:55	WG1025567
Isopropylbenzene	U		0.126	0.500	1	10/03/2017 16:55	WG1025567
p-Isopropyltoluene	U		0.138	0.500	1	10/03/2017 16:55	WG1025567
2-Butanone (MEK)	U		1.28	5.00	1	10/03/2017 16:55	WG1025567



Collected date/time: 09/25/17 15:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/03/2017 16:55	WG1025567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/03/2017 16:55	WG1025567
Methyl tert-butyl ether	U		0.102	0.500	1	10/03/2017 16:55	WG1025567
Naphthalene	1.07	J	0.174	2.50	1	10/03/2017 16:55	WG1025567
n-Propylbenzene	U		0.162	0.500	1	10/03/2017 16:55	WG1025567
Styrene	U		0.117	0.500	1	10/03/2017 16:55	WG1025567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/03/2017 16:55	WG1025567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/03/2017 16:55	WG1025567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/03/2017 16:55	WG1025567
Tetrachloroethene	12.7		0.199	0.500	1	10/03/2017 16:55	WG1025567
Toluene	0.748		0.412	0.500	1	10/03/2017 16:55	WG1025567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/03/2017 16:55	WG1025567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/03/2017 16:55	WG1025567
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/03/2017 16:55	WG1025567
1,1,2-Trichloroethane	U		0.186	0.500	1	10/03/2017 16:55	WG1025567
Trichloroethene	16.2		0.153	0.500	1	10/03/2017 16:55	WG1025567
Trichlorofluoromethane	U		0.130	2.50	1	10/03/2017 16:55	WG1025567
1,2,3-Trichloropropane	U		0.247	2.50	1	10/03/2017 16:55	WG1025567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/03/2017 16:55	WG1025567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/03/2017 16:55	WG1025567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/03/2017 16:55	WG1025567
Vinyl acetate	U		0.645	5.00	1	10/03/2017 16:55	WG1025567
Vinyl chloride	0.239	J J4	0.118	0.500	1	10/03/2017 16:55	WG1025567
Xylenes, Total	U		0.316	1.50	1	10/03/2017 16:55	WG1025567
(S) Toluene-d8	103			80.0-120		10/03/2017 16:55	WG1025567
(S) Dibromofluoromethane	104			76.0-123		10/03/2017 16:55	WG1025567
(S) 4-Bromofluorobenzene	89.9			80.0-120		10/03/2017 16:55	WG1025567

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/25/17 16:50

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	55.2	<u>B</u> <u>J</u>	31.6	100	1	10/05/2017 01:21	WG1026503
(S) a,a,a-Trifluorotoluene(FID)	92.0			77.0-122		10/05/2017 01:21	WG1026503

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	7.30	<u>J</u> <u>JO</u> <u>J4</u>	1.05	25.0	1	10/03/2017 17:16	WG1025567
Acrylonitrile	U		0.873	5.00	1	10/03/2017 17:16	WG1025567
Benzene	0.332	<u>J</u>	0.0896	0.500	1	10/03/2017 17:16	WG1025567
Bromobenzene	U		0.133	0.500	1	10/03/2017 17:16	WG1025567
Bromodichloromethane	U		0.0800	0.500	1	10/03/2017 17:16	WG1025567
Bromochloromethane	U		0.145	0.500	1	10/03/2017 17:16	WG1025567
Bromoform	U		0.186	0.500	1	10/03/2017 17:16	WG1025567
Bromomethane	U		0.157	2.50	1	10/03/2017 17:16	WG1025567
n-Butylbenzene	U		0.143	0.500	1	10/03/2017 17:16	WG1025567
sec-Butylbenzene	U		0.134	0.500	1	10/03/2017 17:16	WG1025567
tert-Butylbenzene	U		0.183	0.500	1	10/03/2017 17:16	WG1025567
Carbon disulfide	0.685		0.101	0.500	1	10/03/2017 17:16	WG1025567
Carbon tetrachloride	U		0.159	0.500	1	10/03/2017 17:16	WG1025567
Chlorobenzene	U		0.140	0.500	1	10/03/2017 17:16	WG1025567
Chlorodibromomethane	U		0.128	0.500	1	10/03/2017 17:16	WG1025567
Chloroethane	U		0.141	2.50	1	10/03/2017 17:16	WG1025567
Chloroform	0.198	<u>J</u>	0.0860	0.500	1	10/03/2017 17:16	WG1025567
Chloromethane	U		0.153	1.25	1	10/03/2017 17:16	WG1025567
2-Chlorotoluene	U		0.111	0.500	1	10/03/2017 17:16	WG1025567
4-Chlorotoluene	U		0.0972	0.500	1	10/03/2017 17:16	WG1025567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/03/2017 17:16	WG1025567
1,2-Dibromoethane	U		0.193	0.500	1	10/03/2017 17:16	WG1025567
Dibromomethane	U		0.117	0.500	1	10/03/2017 17:16	WG1025567
1,2-Dichlorobenzene	U		0.101	0.500	1	10/03/2017 17:16	WG1025567
1,3-Dichlorobenzene	U		0.130	0.500	1	10/03/2017 17:16	WG1025567
1,4-Dichlorobenzene	U		0.121	0.500	1	10/03/2017 17:16	WG1025567
Dichlorodifluoromethane	U		0.127	2.50	1	10/03/2017 17:16	WG1025567
1,1-Dichloroethane	U		0.114	0.500	1	10/03/2017 17:16	WG1025567
1,2-Dichloroethane	U		0.108	0.500	1	10/03/2017 17:16	WG1025567
1,1-Dichloroethene	U		0.188	0.500	1	10/03/2017 17:16	WG1025567
cis-1,2-Dichloroethene	18.7		0.0933	0.500	1	10/03/2017 17:16	WG1025567
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/03/2017 17:16	WG1025567
1,2-Dichloropropane	U		0.190	0.500	1	10/03/2017 17:16	WG1025567
1,1-Dichloropropene	U		0.128	0.500	1	10/03/2017 17:16	WG1025567
1,3-Dichloropropane	U		0.147	1.00	1	10/03/2017 17:16	WG1025567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/03/2017 17:16	WG1025567
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/03/2017 17:16	WG1025567
trans-1,4-Dichloro-2-butene	U	<u>JO</u> <u>J4</u>	0.257	5.00	1	10/03/2017 17:16	WG1025567
2,2-Dichloropropane	U		0.0929	0.500	1	10/03/2017 17:16	WG1025567
Di-isopropyl ether	U		0.0924	0.500	1	10/03/2017 17:16	WG1025567
Ethylbenzene	U		0.158	0.500	1	10/03/2017 17:16	WG1025567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/03/2017 17:16	WG1025567
2-Hexanone	U		0.757	5.00	1	10/03/2017 17:16	WG1025567
n-Hexane	U		0.305	5.00	1	10/03/2017 17:16	WG1025567
Iodomethane	U		0.377	10.0	1	10/03/2017 17:16	WG1025567
Isopropylbenzene	U		0.126	0.500	1	10/03/2017 17:16	WG1025567
p-Isopropyltoluene	U		0.138	0.500	1	10/03/2017 17:16	WG1025567
2-Butanone (MEK)	1.43	<u>J</u>	1.28	5.00	1	10/03/2017 17:16	WG1025567

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/25/17 16:50

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/03/2017 17:16	WG1025567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/03/2017 17:16	WG1025567
Methyl tert-butyl ether	U		0.102	0.500	1	10/03/2017 17:16	WG1025567
Naphthalene	U		0.174	2.50	1	10/03/2017 17:16	WG1025567
n-Propylbenzene	U		0.162	0.500	1	10/03/2017 17:16	WG1025567
Styrene	U		0.117	0.500	1	10/03/2017 17:16	WG1025567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/03/2017 17:16	WG1025567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/03/2017 17:16	WG1025567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/03/2017 17:16	WG1025567
Tetrachloroethene	15.4		0.199	0.500	1	10/03/2017 17:16	WG1025567
Toluene	U		0.412	0.500	1	10/03/2017 17:16	WG1025567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/03/2017 17:16	WG1025567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/03/2017 17:16	WG1025567
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/03/2017 17:16	WG1025567
1,1,2-Trichloroethane	U		0.186	0.500	1	10/03/2017 17:16	WG1025567
Trichloroethene	10.7		0.153	0.500	1	10/03/2017 17:16	WG1025567
Trichlorofluoromethane	U		0.130	2.50	1	10/03/2017 17:16	WG1025567
1,2,3-Trichloropropane	U		0.247	2.50	1	10/03/2017 17:16	WG1025567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/03/2017 17:16	WG1025567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/03/2017 17:16	WG1025567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/03/2017 17:16	WG1025567
Vinyl acetate	U		0.645	5.00	1	10/03/2017 17:16	WG1025567
Vinyl chloride	U	J4	0.118	0.500	1	10/03/2017 17:16	WG1025567
Xylenes, Total	U		0.316	1.50	1	10/03/2017 17:16	WG1025567
(S) Toluene-d8	104			80.0-120		10/03/2017 17:16	WG1025567
(S) Dibromofluoromethane	104			76.0-123		10/03/2017 17:16	WG1025567
(S) 4-Bromofluorobenzene	90.6			80.0-120		10/03/2017 17:16	WG1025567

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/25/17 17:45

L939416

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	58.5	<u>B J</u>	31.6	100	1	10/05/2017 01:43	WG1026503
(S) a,a,a-Trifluorotoluene(FID)	92.0			77.0-122		10/05/2017 01:43	WG1026503

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.84	<u>J JO J4</u>	1.05	25.0	1	10/03/2017 17:38	WG1025567
Acrylonitrile	U		0.873	5.00	1	10/03/2017 17:38	WG1025567
Benzene	U		0.0896	0.500	1	10/03/2017 17:38	WG1025567
Bromobenzene	U		0.133	0.500	1	10/03/2017 17:38	WG1025567
Bromodichloromethane	U		0.0800	0.500	1	10/03/2017 17:38	WG1025567
Bromochloromethane	U		0.145	0.500	1	10/03/2017 17:38	WG1025567
Bromoform	U		0.186	0.500	1	10/03/2017 17:38	WG1025567
Bromomethane	U		0.157	2.50	1	10/03/2017 17:38	WG1025567
n-Butylbenzene	U		0.143	0.500	1	10/03/2017 17:38	WG1025567
sec-Butylbenzene	U		0.134	0.500	1	10/03/2017 17:38	WG1025567
tert-Butylbenzene	U		0.183	0.500	1	10/03/2017 17:38	WG1025567
Carbon disulfide	2.27		0.101	0.500	1	10/03/2017 17:38	WG1025567
Carbon tetrachloride	U		0.159	0.500	1	10/03/2017 17:38	WG1025567
Chlorobenzene	U		0.140	0.500	1	10/03/2017 17:38	WG1025567
Chlorodibromomethane	U		0.128	0.500	1	10/03/2017 17:38	WG1025567
Chloroethane	U		0.141	2.50	1	10/03/2017 17:38	WG1025567
Chloroform	U		0.0860	0.500	1	10/03/2017 17:38	WG1025567
Chloromethane	U		0.153	1.25	1	10/03/2017 17:38	WG1025567
2-Chlorotoluene	U		0.111	0.500	1	10/03/2017 17:38	WG1025567
4-Chlorotoluene	U		0.0972	0.500	1	10/03/2017 17:38	WG1025567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/03/2017 17:38	WG1025567
1,2-Dibromoethane	U		0.193	0.500	1	10/03/2017 17:38	WG1025567
Dibromomethane	U		0.117	0.500	1	10/03/2017 17:38	WG1025567
1,2-Dichlorobenzene	U		0.101	0.500	1	10/03/2017 17:38	WG1025567
1,3-Dichlorobenzene	U		0.130	0.500	1	10/03/2017 17:38	WG1025567
1,4-Dichlorobenzene	U		0.121	0.500	1	10/03/2017 17:38	WG1025567
Dichlorodifluoromethane	U		0.127	2.50	1	10/03/2017 17:38	WG1025567
1,1-Dichloroethane	U		0.114	0.500	1	10/03/2017 17:38	WG1025567
1,2-Dichloroethane	U		0.108	0.500	1	10/03/2017 17:38	WG1025567
1,1-Dichloroethene	U		0.188	0.500	1	10/03/2017 17:38	WG1025567
cis-1,2-Dichloroethene	62.0		0.0933	0.500	1	10/03/2017 17:38	WG1025567
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/03/2017 17:38	WG1025567
1,2-Dichloropropane	U		0.190	0.500	1	10/03/2017 17:38	WG1025567
1,1-Dichloropropene	U		0.128	0.500	1	10/03/2017 17:38	WG1025567
1,3-Dichloropropane	U		0.147	1.00	1	10/03/2017 17:38	WG1025567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/03/2017 17:38	WG1025567
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/03/2017 17:38	WG1025567
trans-1,4-Dichloro-2-butene	U	<u>JO J4</u>	0.257	5.00	1	10/03/2017 17:38	WG1025567
2,2-Dichloropropane	U		0.0929	0.500	1	10/03/2017 17:38	WG1025567
Di-isopropyl ether	U		0.0924	0.500	1	10/03/2017 17:38	WG1025567
Ethylbenzene	U		0.158	0.500	1	10/03/2017 17:38	WG1025567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/03/2017 17:38	WG1025567
2-Hexanone	U		0.757	5.00	1	10/03/2017 17:38	WG1025567
n-Hexane	U		0.305	5.00	1	10/03/2017 17:38	WG1025567
Iodomethane	U		0.377	10.0	1	10/03/2017 17:38	WG1025567
Isopropylbenzene	U		0.126	0.500	1	10/03/2017 17:38	WG1025567
p-Isopropyltoluene	U		0.138	0.500	1	10/03/2017 17:38	WG1025567
2-Butanone (MEK)	U		1.28	5.00	1	10/03/2017 17:38	WG1025567

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/03/2017 17:38	WG1025567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/03/2017 17:38	WG1025567
Methyl tert-butyl ether	U		0.102	0.500	1	10/03/2017 17:38	WG1025567
Naphthalene	U		0.174	2.50	1	10/03/2017 17:38	WG1025567
n-Propylbenzene	U		0.162	0.500	1	10/03/2017 17:38	WG1025567
Styrene	U		0.117	0.500	1	10/03/2017 17:38	WG1025567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/03/2017 17:38	WG1025567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/03/2017 17:38	WG1025567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/03/2017 17:38	WG1025567
Tetrachloroethene	15.0		0.199	0.500	1	10/03/2017 17:38	WG1025567
Toluene	3.90		0.412	0.500	1	10/03/2017 17:38	WG1025567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/03/2017 17:38	WG1025567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/03/2017 17:38	WG1025567
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/03/2017 17:38	WG1025567
1,1,2-Trichloroethane	U		0.186	0.500	1	10/03/2017 17:38	WG1025567
Trichloroethene	19.1		0.153	0.500	1	10/03/2017 17:38	WG1025567
Trichlorofluoromethane	U		0.130	2.50	1	10/03/2017 17:38	WG1025567
1,2,3-Trichloropropane	U		0.247	2.50	1	10/03/2017 17:38	WG1025567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/03/2017 17:38	WG1025567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/03/2017 17:38	WG1025567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/03/2017 17:38	WG1025567
Vinyl acetate	U		0.645	5.00	1	10/03/2017 17:38	WG1025567
Vinyl chloride	U	J4	0.118	0.500	1	10/03/2017 17:38	WG1025567
Xylenes, Total	U		0.316	1.50	1	10/03/2017 17:38	WG1025567
(S) Toluene-d8	105			80.0-120		10/03/2017 17:38	WG1025567
(S) Dibromofluoromethane	105			76.0-123		10/03/2017 17:38	WG1025567
(S) 4-Bromofluorobenzene	91.2			80.0-120		10/03/2017 17:38	WG1025567

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 09/25/17 18:15

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/05/2017 02:05	WG1026503
(S) a,a,a-Trifluorotoluene(FID)	91.5			77.0-122		10/05/2017 02:05	WG1026503

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	11.6	<u>J JO J4</u>	1.05	25.0	1	10/03/2017 17:59	WG1025567
Acrylonitrile	U		0.873	5.00	1	10/03/2017 17:59	WG1025567
Benzene	U		0.0896	0.500	1	10/03/2017 17:59	WG1025567
Bromobenzene	U		0.133	0.500	1	10/03/2017 17:59	WG1025567
Bromodichloromethane	U		0.0800	0.500	1	10/03/2017 17:59	WG1025567
Bromochloromethane	U		0.145	0.500	1	10/03/2017 17:59	WG1025567
Bromoform	U		0.186	0.500	1	10/03/2017 17:59	WG1025567
Bromomethane	U		0.157	2.50	1	10/03/2017 17:59	WG1025567
n-Butylbenzene	U		0.143	0.500	1	10/03/2017 17:59	WG1025567
sec-Butylbenzene	U		0.134	0.500	1	10/03/2017 17:59	WG1025567
tert-Butylbenzene	U		0.183	0.500	1	10/03/2017 17:59	WG1025567
Carbon disulfide	U		0.101	0.500	1	10/03/2017 17:59	WG1025567
Carbon tetrachloride	U		0.159	0.500	1	10/03/2017 17:59	WG1025567
Chlorobenzene	U		0.140	0.500	1	10/03/2017 17:59	WG1025567
Chlorodibromomethane	U		0.128	0.500	1	10/03/2017 17:59	WG1025567
Chloroethane	U		0.141	2.50	1	10/03/2017 17:59	WG1025567
Chloroform	U		0.0860	0.500	1	10/03/2017 17:59	WG1025567
Chloromethane	U		0.153	1.25	1	10/03/2017 17:59	WG1025567
2-Chlorotoluene	U		0.111	0.500	1	10/03/2017 17:59	WG1025567
4-Chlorotoluene	U		0.0972	0.500	1	10/03/2017 17:59	WG1025567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/03/2017 17:59	WG1025567
1,2-Dibromoethane	U		0.193	0.500	1	10/03/2017 17:59	WG1025567
Dibromomethane	U		0.117	0.500	1	10/03/2017 17:59	WG1025567
1,2-Dichlorobenzene	U		0.101	0.500	1	10/03/2017 17:59	WG1025567
1,3-Dichlorobenzene	U		0.130	0.500	1	10/03/2017 17:59	WG1025567
1,4-Dichlorobenzene	U		0.121	0.500	1	10/03/2017 17:59	WG1025567
Dichlorodifluoromethane	U		0.127	2.50	1	10/03/2017 17:59	WG1025567
1,1-Dichloroethane	U		0.114	0.500	1	10/03/2017 17:59	WG1025567
1,2-Dichloroethane	U		0.108	0.500	1	10/03/2017 17:59	WG1025567
1,1-Dichloroethene	U		0.188	0.500	1	10/03/2017 17:59	WG1025567
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/03/2017 17:59	WG1025567
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/03/2017 17:59	WG1025567
1,2-Dichloropropane	U		0.190	0.500	1	10/03/2017 17:59	WG1025567
1,1-Dichloropropene	U		0.128	0.500	1	10/03/2017 17:59	WG1025567
1,3-Dichloropropane	U		0.147	1.00	1	10/03/2017 17:59	WG1025567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/03/2017 17:59	WG1025567
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/03/2017 17:59	WG1025567
trans-1,4-Dichloro-2-butene	U	<u>JO J4</u>	0.257	5.00	1	10/03/2017 17:59	WG1025567
2,2-Dichloropropane	U		0.0929	0.500	1	10/03/2017 17:59	WG1025567
Di-isopropyl ether	U		0.0924	0.500	1	10/03/2017 17:59	WG1025567
Ethylbenzene	U		0.158	0.500	1	10/03/2017 17:59	WG1025567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/03/2017 17:59	WG1025567
2-Hexanone	U		0.757	5.00	1	10/03/2017 17:59	WG1025567
n-Hexane	U		0.305	5.00	1	10/03/2017 17:59	WG1025567
Iodomethane	U		0.377	10.0	1	10/03/2017 17:59	WG1025567
Isopropylbenzene	U		0.126	0.500	1	10/03/2017 17:59	WG1025567
p-Isopropyltoluene	U		0.138	0.500	1	10/03/2017 17:59	WG1025567
2-Butanone (MEK)	1.69	<u>J</u>	1.28	5.00	1	10/03/2017 17:59	WG1025567

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 09/25/17 18:15

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/03/2017 17:59	WG1025567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/03/2017 17:59	WG1025567
Methyl tert-butyl ether	U		0.102	0.500	1	10/03/2017 17:59	WG1025567
Naphthalene	U		0.174	2.50	1	10/03/2017 17:59	WG1025567
n-Propylbenzene	U		0.162	0.500	1	10/03/2017 17:59	WG1025567
Styrene	U		0.117	0.500	1	10/03/2017 17:59	WG1025567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/03/2017 17:59	WG1025567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/03/2017 17:59	WG1025567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/03/2017 17:59	WG1025567
Tetrachloroethene	U		0.199	0.500	1	10/03/2017 17:59	WG1025567
Toluene	U		0.412	0.500	1	10/03/2017 17:59	WG1025567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/03/2017 17:59	WG1025567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/03/2017 17:59	WG1025567
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/03/2017 17:59	WG1025567
1,1,2-Trichloroethane	U		0.186	0.500	1	10/03/2017 17:59	WG1025567
Trichloroethene	U		0.153	0.500	1	10/03/2017 17:59	WG1025567
Trichlorofluoromethane	U		0.130	2.50	1	10/03/2017 17:59	WG1025567
1,2,3-Trichloropropane	U		0.247	2.50	1	10/03/2017 17:59	WG1025567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/03/2017 17:59	WG1025567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/03/2017 17:59	WG1025567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/03/2017 17:59	WG1025567
Vinyl acetate	U		0.645	5.00	1	10/03/2017 17:59	WG1025567
Vinyl chloride	U	J4	0.118	0.500	1	10/03/2017 17:59	WG1025567
Xylenes, Total	U		0.316	1.50	1	10/03/2017 17:59	WG1025567
(S) Toluene-d8	103			80.0-120		10/03/2017 17:59	WG1025567
(S) Dibromofluoromethane	102			76.0-123		10/03/2017 17:59	WG1025567
(S) 4-Bromofluorobenzene	89.0			80.0-120		10/03/2017 17:59	WG1025567

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L939416-01.02.03.04.05.06.07](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	39.2	J	316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	97.3			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	5310	5300	96.6	96.4	72.0-134			0.270	20
^(S) <i>a,a</i> -Trifluorotoluene(FID)				108	108	77.0-122				

L939987-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	127	5920	5620	105	99.9	1	23.0-159			5.22	20
^(S) <i>a,a</i> -Trifluorotoluene(FID)					108	108		77.0-122				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Public Review Draft

ACCOUNT:

PROJECT:

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DATE/TIME:

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PES Environmental, Inc. - WA

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10/05/17 11:41

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Method Blank (MB)

(MB) R3254139-3 09/28/17 12:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.02.602

SDG:

L939416

DATE/TIME:

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Method Blank (MB)

(MB) R3254139-3 09/28/17 12:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) 4-Bromofluorobenzene	89.5			80.0-120

1 Cp
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5 Sr
6 Qc
7 Gl
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9 Sc

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PROJECT:

1413.001.02.602

SDG:

L939416

DATE/TIME:

10/05/17 11:41

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3254139-1 09/28/17 11:04 • (LCSD) R3254139-2 09/28/17 11:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	211	199	169	160	10.0-160	J4		5.51	23
Acrylonitrile	125	145	147	116	117	60.0-142			1.10	20
Benzene	25.0	27.5	27.2	110	109	69.0-123			1.22	20
Bromobenzene	25.0	24.0	23.7	96.1	94.9	79.0-120			1.24	20
Bromodichloromethane	25.0	25.4	24.8	102	99.4	76.0-120			2.36	20
Bromochloromethane	25.0	26.5	26.7	106	107	76.0-122			0.670	20
Bromoform	25.0	25.3	24.7	101	98.9	67.0-132			2.23	20
Bromomethane	25.0	32.5	31.2	130	125	18.0-160			4.30	20
n-Butylbenzene	25.0	27.4	27.2	109	109	72.0-126			0.780	20
sec-Butylbenzene	25.0	26.6	26.3	106	105	74.0-121			0.930	20
tert-Butylbenzene	25.0	25.4	25.3	102	101	75.0-122			0.420	20
Carbon disulfide	25.0	28.0	27.7	112	111	55.0-127			1.14	20
Carbon tetrachloride	25.0	26.8	25.5	107	102	63.0-122			4.90	20
Chlorobenzene	25.0	26.3	25.8	105	103	79.0-121			1.72	20
Chlorodibromomethane	25.0	26.6	26.5	107	106	75.0-125			0.480	20
Chloroethane	25.0	32.9	33.1	132	133	47.0-152			0.760	20
Chloroform	25.0	27.1	26.6	108	106	72.0-121			1.92	20
Chloromethane	25.0	29.5	29.4	118	117	48.0-139			0.290	20
2-Chlorotoluene	25.0	24.3	24.2	97.3	96.7	74.0-122			0.680	20
4-Chlorotoluene	25.0	24.1	24.0	96.6	96.1	79.0-120			0.440	20
1,2-Dibromo-3-Chloropropane	25.0	24.4	24.8	97.7	99.3	64.0-127			1.64	20
1,2-Dibromoethane	25.0	25.8	25.6	103	103	77.0-123			0.700	20
Dibromomethane	25.0	26.3	25.8	105	103	78.0-120			1.72	20
1,2-Dichlorobenzene	25.0	25.8	25.7	103	103	80.0-120			0.490	20
1,3-Dichlorobenzene	25.0	25.4	25.1	102	100	72.0-123			1.18	20
1,4-Dichlorobenzene	25.0	25.6	25.1	103	100	77.0-120			2.22	20
Dichlorodifluoromethane	25.0	34.2	34.0	137	136	49.0-155			0.400	20
1,1-Dichloroethane	25.0	27.9	27.0	112	108	70.0-126			3.16	20
1,2-Dichloroethane	25.0	28.2	27.8	113	111	67.0-126			1.64	20
1,1-Dichloroethene	25.0	27.0	26.5	108	106	64.0-129			1.77	20
cis-1,2-Dichloroethene	25.0	26.7	26.0	107	104	73.0-120			2.54	20
trans-1,2-Dichloroethene	25.0	27.0	26.7	108	107	71.0-121			0.890	20
1,2-Dichloropropane	25.0	26.7	26.5	107	106	75.0-125			0.990	20
1,1-Dichloropropene	25.0	28.1	27.8	112	111	71.0-129			0.830	20
1,3-Dichloropropene	25.0	26.5	26.5	106	106	80.0-121			0.110	20
cis-1,3-Dichloropropene	25.0	26.2	26.1	105	104	79.0-123			0.370	20
trans-1,3-Dichloropropene	25.0	26.1	26.1	104	104	74.0-127			0.0900	20
trans-1,4-Dichloro-2-butene	25.0	13.4	13.6	53.6	54.2	55.0-134	J4	J4	1.22	20
2,2-Dichloropropane	25.0	28.1	28.0	112	112	60.0-125			0.240	20
Di-isopropyl ether	25.0	26.9	26.9	107	108	59.0-133			0.0900	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier		LCSD Qualifier		RPD %	RPD Limits %
Ethylbenzene	25.0	25.5	25.1	102	101	77.0-120					1.58	20
Hexachloro-1,3-butadiene	25.0	23.7	24.7	94.6	98.8	64.0-131					4.35	20
2-Hexanone	125	145	144	116	116	58.0-147					0.370	20
n-Hexane	25.0	29.0	28.4	116	114	56.0-124					1.95	20
Iodomethane	125	136	134	108	107	57.0-140					1.11	20
Isopropylbenzene	25.0	24.8	24.4	99.1	97.7	75.0-120					1.35	20
p-Isopropyltoluene	25.0	26.6	26.4	106	106	74.0-126					0.550	20
2-Butanone (MEK)	125	151	148	120	119	37.0-158					1.58	20
Methylene Chloride	25.0	26.4	26.3	106	105	66.0-121					0.500	20
4-Methyl-2-pentanone (MIBK)	125	130	129	104	103	59.0-143					0.860	20
Methyl tert-butyl ether	25.0	26.9	27.0	107	108	64.0-123					0.390	20
Naphthalene	25.0	23.6	24.6	94.2	98.4	62.0-128					4.33	20
n-Propylbenzene	25.0	24.9	24.6	99.4	98.3	79.0-120					1.14	20
Styrene	25.0	23.8	23.9	95.1	95.6	78.0-124					0.440	20
1,1,1,2-Tetrachloroethane	25.0	25.7	25.7	103	103	75.0-122					0.150	20
1,1,2,2-Tetrachloroethane	25.0	24.4	24.3	97.8	97.2	71.0-122					0.570	20
1,1,2-Trichlorotrifluoroethane	25.0	27.9	27.7	112	111	61.0-136					0.770	20
Tetrachloroethene	25.0	25.6	25.1	103	100	70.0-127					2.18	20
Toluene	25.0	25.6	25.2	102	101	77.0-120					1.44	20
1,2,3-Trichlorobenzene	25.0	23.9	24.8	95.6	99.4	61.0-133					3.85	20
1,2,4-Trichlorobenzene	25.0	24.2	24.3	96.8	97.3	69.0-129					0.540	20
1,1,1-Trichloroethane	25.0	27.8	27.4	111	110	68.0-122					1.63	20
1,1,2-Trichloroethane	25.0	25.5	25.5	102	102	78.0-120					0.130	20
Trichloroethene	25.0	26.0	26.0	104	104	78.0-120					0.110	20
Trichlorofluoromethane	25.0	28.4	28.5	114	114	56.0-137					0.380	20
1,2,3-Trichloropropane	25.0	24.3	24.0	97.2	96.1	72.0-124					1.14	20
1,2,4-Trimethylbenzene	25.0	24.6	24.4	98.4	97.5	75.0-120					0.990	20
1,2,3-Trimethylbenzene	25.0	26.5	26.4	106	106	75.0-120					0.330	20
1,3,5-Trimethylbenzene	25.0	24.4	24.5	97.6	98.2	75.0-120					0.580	20
Vinyl acetate	125	145	143	116	114	46.0-160					1.14	20
Vinyl chloride	25.0	33.9	33.0	136	132	64.0-133					2.77	20
Xylenes, Total	75.0	76.9	76.4	103	102	77.0-120					0.650	20
(S) Toluene-d8				101	102	80.0-120						
(S) Dibromofluoromethane				103	104	76.0-123						
(S) 4-Bromofluorobenzene				92.1	93.2	80.0-120						

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J4	The associated batch QC was outside the established quality control range for accuracy.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our "one location" design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be **YOUR LAB OF CHOICE**.
 * Not all certifications held by the laboratory are applicable to the results reported in the attached report.

State Accreditations

Alabama	40660	Nevada	TN-03-2002-34
Alaska	UST-080	New Hampshire	2975
Arizona	AZ0612	New Jersey–NELAP	TN002
Arkansas	88-0469	New Mexico	TN00003
California	01157CA	New York	11742
Colorado	TN00003	North Carolina	Env375
Connecticut	PH-0197	North Carolina ¹	DW21704
Florida	E87487	North Carolina ²	41
Georgia	NELAP	North Dakota	R-140
Georgia ¹	923	Ohio–VAP	CL0069
Idaho	TN00003	Oklahoma	9915
Illinois	200008	Oregon	TN200002
Indiana	C-TN-01	Pennsylvania	68-02979
Iowa	364	Rhode Island	221
Kansas	E-10277	South Carolina	84004
Kentucky ¹	90010	South Dakota	n/a
Kentucky ²	16	Tennessee ¹⁴	2006
Louisiana	AI30792	Texas	T 104704245-07-TX
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	6157585858
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	109
Minnesota	047-999-395	Washington	C1915
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA
Nebraska	NE-OS-15-05		

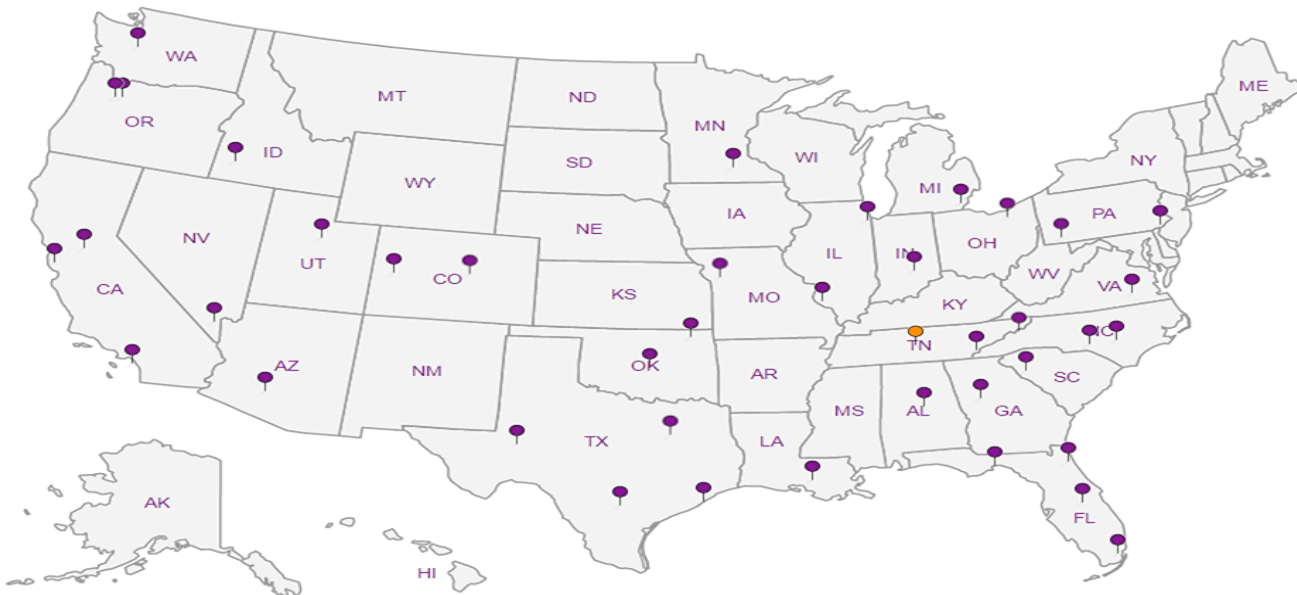
Third Party & Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	S-67674
EPA–Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ^{n/a} Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. **ESC Lab Sciences performs all testing at our central laboratory.**



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page of



12855 Johnson Hill
Mount Juliet, TN 37122
Phone: 615-756-5858
Phone: 800-767-5859
Fax: 615-718-5897



L# 439416

G057

Table #

Account: PESENVSWA

Template: T121444

Prelogin: P609637

TSR: 110 - Brian Ford

PB:

Shipped Via:

Remarks: Sample # (lab only)

Report to: **Bill Halderman**

Email To: mdahl@pesenv.com;
kspriestead@pesenv.com

Project: **AMERICAN CUVEN**

Description: **AMERICAN CUVEN**

City/State Collected: **Seattle, WA**

Phone: 206-529-3980

Fax: 206-529-3985

Client Project #

~~1358-001-001~~

Site/Facility ID #

~~1358-001-001-001~~

Lab Project #

PESENVSWA-1358001001

P.O. #

1413001002

Quote #

~~1358-001-001-001~~

Date Results Needed

Same Day Five Day
Next Day 5 Day (Frid Only)
Two Day 10 Day (Frid Only)
Three Day

Collected by (print): **Kaylen Spryhsel**

Collected by (signature): *[Signature]*

Immediately Packed on Ice: N Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-139-092517	Grab	GW	75	9-25-17	1200	6
MW-132-092517		GW	75		1300	6
MW-135-092517		GW	75		1400	6
MW-133-092517		GW	133		1500	6
MW-136-092517		GW	90		1650	6
MW-137-092517		GW	110		1745	6
BA-092517		GW			1815	6

8260C 40ml Amb-HCl
NWTPA-GX

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MW-139-092517	Grab	GW	75	9-25-17	1200	6	X X X X X X
MW-132-092517		GW	75		1300	6	X X X X X X
MW-135-092517		GW	75		1400	6	X X X X X X
MW-133-092517		GW	133		1500	6	X X X X X X
MW-136-092517		GW	90		1650	6	X X X X X X
MW-137-092517		GW	110		1745	6	X X X X X X
BA-092517		GW			1815	6	X X X X X X

Matrix: SS - Soil F - Filter
GW - Groundwater B - Biosassy
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks:

Samples returned via:
UPS _____ FedEx _____ Courier _____

Tracking # 7466 1463 9147

Trip Blank Received: Yes/No
HCL/Meth TBR

Sample Receipt Checklist
COC Seal Present/Intact: NP N
COC Signed/Accurate: NP N
Bottles arrive intact: NP N
Correct bottles used: NP N
Sufficient volume sent: NP N
I.L. Applicable: NP N
VQA zero Headspace: NP N
Preservation Correct/checked: NP N

Relinquished by: (Signature) *[Signature]*

Date: 9-26-17

Time: 1230

Received by: (Signature) *[Signature]*

Date: 12

Temp: °C Bottles Received:

If preservation required by Login: Date/Time

Relinquished by: (Signature) *[Signature]*

Date: 9-27-17

Time: 845

Received for lab by: (Signature) *[Signature]*

Date: 4-27-17

Temp: °C Bottles Received:

Hold: NCF / OK

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Temp: °C Bottles Received:

Hold: NCF / OK

April 06, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L981889
Samples Received: 03/30/2018
Project Number: 1413.001.05.601
Description: American Linen Project

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	¹Cp
Tc: Table of Contents	2	
Ss: Sample Summary	4	²Tc
Cn: Case Narrative	11	
Sr: Sample Results	12	³Ss
B-244-5 L981889-01	12	
B-244-10 L981889-02	14	⁴Cn
B-244-15 L981889-03	16	⁵Sr
B-244-20 L981889-04	18	
B-244-25 L981889-05	20	⁶Qc
B-244-30 L981889-06	22	
B-244-35 L981889-07	24	⁷Gl
B-244-40 L981889-08	26	
B-244-42 L981889-09	28	⁸Al
B-244-45 L981889-10	30	
B-244-50 L981889-11	32	⁹Sc
B-244-55 L981889-12	34	
B-244-60 L981889-13	36	
B-244-65 L981889-14	38	
B-244-70 L981889-15	40	
B-244-75 L981889-16	42	
B-244-80 L981889-17	44	
IW-907-70 L981889-18	46	
TRIPBLANK L981889-19	48	
B-245-5 L981889-20	50	
B-245-10 L981889-21	52	
B-245-15 L981889-22	54	
B-245-20 L981889-23	56	
B-245-25 L981889-24	58	
B-245-30 L981889-25	60	
B-245-35 L981889-26	62	
B-245-40 L981889-27	64	
B-245-45 L981889-28	66	
B-245-50 L981889-29	68	
B-245-55 L981889-30	70	
B-245-60 L981889-31	72	
B-245-65 L981889-32	74	
B-245-70 L981889-33	76	
B-245-75 L981889-34	78	
B-245-80 L981889-35	80	



MW-153-10	L981889-36	82	¹ Cp
MW-153-20	L981889-37	84	
MW-153-30	L981889-38	86	² Tc
MW-153-40	L981889-39	88	
MW-153-50	L981889-40	90	³ Ss
MW-153-61	L981889-41	92	
MW-153-70	L981889-42	94	⁴ Cn
MW-153-80	L981889-43	96	⁵ Sr
MW-153-90	L981889-44	98	
MW-153-110	L981889-45	100	⁶ Qc
MW-153-130	L981889-46	102	
TRIPBLANK	L981889-47	104	⁷ Gl
Qc: Quality Control Summary		106	
Total Solids by Method 2540 G-2011		106	
Volatile Organic Compounds (GC/MS) by Method 8260C		111	
Gl: Glossary of Terms		133	
Al: Accreditations & Locations		134	⁸ Al
Sc: Sample Chain of Custody		135	⁹ Sc



B-244-5 L981889-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 09:19	03/31/18 20:25	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/28/18 09:19	03/30/18 08:45

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

B-244-10 L981889-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 09:46	03/31/18 20:46	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/28/18 09:46	03/30/18 08:45

B-244-15 L981889-03 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 09:54	03/31/18 21:07	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/28/18 09:54	03/30/18 08:45

B-244-20 L981889-04 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 10:03	03/31/18 21:29	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/28/18 10:03	03/30/18 08:45

B-244-25 L981889-05 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 10:11	03/31/18 21:50	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/28/18 10:11	03/30/18 08:45

B-244-30 L981889-06 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 10:32	03/31/18 22:11	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/28/18 10:32	03/30/18 08:45

B-244-35 L981889-07 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 10:41	03/31/18 22:32	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/28/18 10:41	03/30/18 08:45



B-244-40 L981889-08 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093163	1	04/04/18 14:33	04/04/18 14:42	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 10:49	03/31/18 22:53	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	25	03/28/18 10:49	04/06/18 00:44	LRL

Collected by DJ/RM
Collected date/time 03/28/18 10:49
Received date/time 03/30/18 08:45

1 Cp

2 Tc

3 Ss

4 Cn

B-244-42 L981889-09 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	25	03/28/18 10:55	04/01/18 01:19	DWR

Collected by DJ/RM
Collected date/time 03/28/18 10:55
Received date/time 03/30/18 08:45

5 Sr

6 Qc

B-244-45 L981889-10 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 11:02	03/31/18 23:13	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	200	03/28/18 11:02	04/06/18 14:19	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	50	03/28/18 11:02	04/06/18 01:05	LRL

Collected by DJ/RM
Collected date/time 03/28/18 11:02
Received date/time 03/30/18 08:45

7 Gl

8 Al

9 Sc

B-244-50 L981889-11 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 11:14	03/31/18 23:34	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	50	03/28/18 11:14	04/06/18 01:26	LRL

Collected by DJ/RM
Collected date/time 03/28/18 11:14
Received date/time 03/30/18 08:45

B-244-55 L981889-12 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 11:21	03/31/18 23:55	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1000	03/28/18 11:21	04/06/18 14:58	LRL

Collected by DJ/RM
Collected date/time 03/28/18 11:21
Received date/time 03/30/18 08:45

B-244-60 L981889-13 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 11:32	04/01/18 00:16	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	200	03/28/18 11:32	04/06/18 14:00	LRL

Collected by DJ/RM
Collected date/time 03/28/18 11:32
Received date/time 03/30/18 08:45



B-244-65 L981889-14 Solid

Collected by DJ/RM
Collected date/time 03/28/18 11:51
Received date/time 03/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 11:51	04/01/18 00:37	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	56.5	03/28/18 11:51	04/06/18 02:30	LRL

1 Cp

2 Tc

3 Ss

B-244-70 L981889-15 Solid

Collected by DJ/RM
Collected date/time 03/28/18 12:50
Received date/time 03/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1	03/28/18 12:50	04/01/18 00:58	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092116	1000	03/28/18 12:50	04/06/18 14:39	LRL

4 Cn

5 Sr

6 Qc

B-244-75 L981889-16 Solid

Collected by DJ/RM
Collected date/time 03/28/18 13:05
Received date/time 03/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 13:05	04/02/18 01:40	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	50	03/28/18 13:05	04/06/18 04:15	LRL

7 Gl

8 Al

9 Sc

B-244-80 L981889-17 Solid

Collected by DJ/RM
Collected date/time 03/28/18 13:13
Received date/time 03/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 13:13	04/02/18 02:01	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 13:13	04/06/18 04:37	LRL

IW-907-70 L981889-18 Solid

Collected by DJ/RM
Collected date/time 03/28/18 11:45
Received date/time 03/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093165	1	04/04/18 14:17	04/04/18 14:27	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 11:45	04/02/18 02:22	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	200	03/28/18 11:45	04/06/18 04:58	LRL

TRIPBLANK L981889-19 GW

Collected by DJ/RM
Collected date/time 03/28/18 00:00
Received date/time 03/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092115	1	03/31/18 18:26	03/31/18 18:26	LRL

B-245-5 L981889-20 Solid

Collected by DJ/RM
Collected date/time 03/28/18 15:26
Received date/time 03/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 15:26	04/02/18 02:43	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 15:26	04/06/18 05:19	LRL



B-245-10 L981889-21 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 15:45	04/02/18 03:04	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 15:45	04/06/18 05:40	LRL

Collected by DJ/RM
Collected date/time 03/28/18 15:45
Received date/time 03/30/18 08:45

1 Cp

2 Tc

3 Ss

B-245-15 L981889-22 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 15:55	04/06/18 06:01	LRL

Collected by DJ/RM
Collected date/time 03/28/18 15:55
Received date/time 03/30/18 08:45

4 Cn

5 Sr

6 Qc

B-245-20 L981889-23 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 16:03	04/02/18 03:46	BMB

Collected by DJ/RM
Collected date/time 03/28/18 16:03
Received date/time 03/30/18 08:45

7 Gl

8 Al

9 Sc

B-245-25 L981889-24 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/28/18 16:13	04/02/18 04:07	BMB

Collected by DJ/RM
Collected date/time 03/28/18 16:13
Received date/time 03/30/18 08:45

B-245-30 L981889-25 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1.55	03/29/18 08:13	04/02/18 04:28	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	250	03/29/18 08:13	04/06/18 06:22	LRL

Collected by DJ/RM
Collected date/time 03/29/18 08:13
Received date/time 03/30/18 08:45

B-245-35 L981889-26 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/29/18 08:37	04/02/18 05:22	BMB

Collected by DJ/RM
Collected date/time 03/29/18 08:37
Received date/time 03/30/18 08:45

B-245-40 L981889-27 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/29/18 08:43	04/02/18 05:43	BMB

Collected by DJ/RM
Collected date/time 03/29/18 08:43
Received date/time 03/30/18 08:45



B-245-45 L981889-28 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/29/18 09:05	04/02/18 06:05	BMB

Collected by	Collected date/time	Received date/time
DJ/RM	03/29/18 09:05	03/30/18 08:45

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

B-245-50 L981889-29 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093167	1	04/04/18 14:06	04/04/18 14:15	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/29/18 09:14	04/06/18 06:44	LRL

Collected by	Collected date/time	Received date/time
DJ/RM	03/29/18 09:14	03/30/18 08:45

B-245-55 L981889-30 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/29/18 09:23	04/02/18 06:47	BMB

Collected by	Collected date/time	Received date/time
DJ/RM	03/29/18 09:23	03/30/18 08:45

B-245-60 L981889-31 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/29/18 09:34	04/02/18 07:08	BMB

Collected by	Collected date/time	Received date/time
DJ/RM	03/29/18 09:34	03/30/18 08:45

B-245-65 L981889-32 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092315	1	03/29/18 09:42	04/02/18 07:29	BMB

Collected by	Collected date/time	Received date/time
DJ/RM	03/29/18 09:42	03/30/18 08:45

B-245-70 L981889-33 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/29/18 10:08	04/01/18 23:39	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/29/18 10:08	03/30/18 08:45

B-245-75 L981889-34 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/29/18 10:15	04/01/18 23:59	DWR

Collected by	Collected date/time	Received date/time
DJ/RM	03/29/18 10:15	03/30/18 08:45



B-245-80 L981889-35 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/29/18 10:27	04/02/18 00:18	DWR

Collected by DJ/RM
 Collected date/time 03/29/18 10:27
 Received date/time 03/30/18 08:45

1 Cp

2 Tc

3 Ss

MW-153-10 L981889-36 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/27/18 10:45	04/02/18 00:38	DWR

Collected by DJ/RM
 Collected date/time 03/27/18 10:45
 Received date/time 03/30/18 08:45

4 Cn

5 Sr

6 Qc

MW-153-20 L981889-37 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/27/18 11:20	04/02/18 00:58	DWR

Collected by DJ/RM
 Collected date/time 03/27/18 11:20
 Received date/time 03/30/18 08:45

7 Gl

8 Al

9 Sc

MW-153-30 L981889-38 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/27/18 11:45	04/02/18 01:17	DWR

Collected by DJ/RM
 Collected date/time 03/27/18 11:45
 Received date/time 03/30/18 08:45

MW-153-40 L981889-39 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093168	1	04/04/18 13:36	04/04/18 13:45	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/27/18 12:05	04/02/18 01:37	DWR

Collected by DJ/RM
 Collected date/time 03/27/18 12:05
 Received date/time 03/30/18 08:45

MW-153-50 L981889-40 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093170	1	04/04/18 13:20	04/04/18 13:30	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/27/18 12:35	04/02/18 01:57	DWR

Collected by DJ/RM
 Collected date/time 03/27/18 12:35
 Received date/time 03/30/18 08:45

MW-153-61 L981889-41 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093170	1	04/04/18 13:20	04/04/18 13:30	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/27/18 13:15	04/02/18 02:16	DWR

Collected by DJ/RM
 Collected date/time 03/27/18 13:15
 Received date/time 03/30/18 08:45



MW-153-70 L981889-42 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093170	1	04/04/18 13:20	04/04/18 13:30	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/27/18 13:40	04/02/18 02:36	DWR

Collected by DJ/RM
 Collected date/time 03/27/18 13:40
 Received date/time 03/30/18 08:45

1 Cp

2 Tc

3 Ss

MW-153-80 L981889-43 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093170	1	04/04/18 13:20	04/04/18 13:30	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/28/18 11:10	04/02/18 02:55	DWR

Collected by DJ/RM
 Collected date/time 03/28/18 11:10
 Received date/time 03/30/18 08:45

4 Cn

5 Sr

6 Qc

MW-153-90 L981889-44 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093170	1	04/04/18 13:20	04/04/18 13:30	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/28/18 11:35	04/02/18 03:15	DWR

Collected by DJ/RM
 Collected date/time 03/28/18 11:35
 Received date/time 03/30/18 08:45

7 Gl

8 Al

9 Sc

MW-153-110 L981889-45 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093170	1	04/04/18 13:20	04/04/18 13:30	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/28/18 12:57	04/02/18 03:34	DWR

Collected by DJ/RM
 Collected date/time 03/28/18 12:57
 Received date/time 03/30/18 08:45

MW-153-130 L981889-46 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1093170	1	04/04/18 13:20	04/04/18 13:30	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092317	1	03/29/18 10:19	04/02/18 03:54	DWR

Collected by DJ/RM
 Collected date/time 03/29/18 10:19
 Received date/time 03/30/18 08:45

TRIPBLANK L981889-47 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1092115	1	03/31/18 18:45	03/31/18 18:45	LRL

Collected by DJ/RM
 Collected date/time 03/29/18 00:00
 Received date/time 03/30/18 08:45



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.2		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.125	J3	0.0126	0.0631	1	03/31/2018 20:25	WG1092116
Acrylonitrile	U		0.00226	0.0126	1	03/31/2018 20:25	WG1092116
Benzene	0.00411		0.000341	0.00126	1	03/31/2018 20:25	WG1092116
Bromobenzene	U		0.000358	0.00126	1	03/31/2018 20:25	WG1092116
Bromodichloromethane	U		0.000321	0.00126	1	03/31/2018 20:25	WG1092116
Bromochloromethane	U		0.000492	0.00631	1	03/31/2018 20:25	WG1092116
Bromoform	U		0.000535	0.00126	1	03/31/2018 20:25	WG1092116
Bromomethane	U	J3	0.00169	0.00631	1	03/31/2018 20:25	WG1092116
n-Butylbenzene	U	J3	0.000326	0.00126	1	03/31/2018 20:25	WG1092116
sec-Butylbenzene	U	J3	0.000254	0.00126	1	03/31/2018 20:25	WG1092116
tert-Butylbenzene	U	J3	0.000260	0.00126	1	03/31/2018 20:25	WG1092116
Carbon disulfide	0.00929	J3	0.000279	0.00126	1	03/31/2018 20:25	WG1092116
Carbon tetrachloride	U	J3	0.000414	0.00126	1	03/31/2018 20:25	WG1092116
Chlorobenzene	U		0.000268	0.00126	1	03/31/2018 20:25	WG1092116
Chlorodibromomethane	U		0.000471	0.00126	1	03/31/2018 20:25	WG1092116
Chloroethane	U	J3	0.00119	0.00631	1	03/31/2018 20:25	WG1092116
Chloroform	U		0.000289	0.00631	1	03/31/2018 20:25	WG1092116
Chloromethane	U	J3	0.000473	0.00316	1	03/31/2018 20:25	WG1092116
2-Chlorotoluene	U		0.000380	0.00126	1	03/31/2018 20:25	WG1092116
4-Chlorotoluene	U		0.000303	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00631	1	03/31/2018 20:25	WG1092116
1,2-Dibromoethane	U		0.000433	0.00126	1	03/31/2018 20:25	WG1092116
Dibromomethane	U		0.000482	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dichlorobenzene	U		0.000385	0.00126	1	03/31/2018 20:25	WG1092116
1,3-Dichlorobenzene	U		0.000302	0.00126	1	03/31/2018 20:25	WG1092116
1,4-Dichlorobenzene	U		0.000285	0.00126	1	03/31/2018 20:25	WG1092116
Dichlorodifluoromethane	U	J3	0.000900	0.00631	1	03/31/2018 20:25	WG1092116
1,1-Dichloroethane	U		0.000251	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dichloroethane	U		0.000334	0.00126	1	03/31/2018 20:25	WG1092116
1,1-Dichloroethene	U	J3	0.000382	0.00126	1	03/31/2018 20:25	WG1092116
cis-1,2-Dichloroethene	0.00740		0.000297	0.00126	1	03/31/2018 20:25	WG1092116
trans-1,2-Dichloroethene	U	J3	0.000333	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dichloropropane	U		0.000452	0.00126	1	03/31/2018 20:25	WG1092116
1,1-Dichloropropene	U		0.000400	0.00126	1	03/31/2018 20:25	WG1092116
1,3-Dichloropropane	U		0.000261	0.00126	1	03/31/2018 20:25	WG1092116
cis-1,3-Dichloropropene	U		0.000331	0.00126	1	03/31/2018 20:25	WG1092116
trans-1,3-Dichloropropene	U		0.000337	0.00126	1	03/31/2018 20:25	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000982	0.00316	1	03/31/2018 20:25	WG1092116
2,2-Dichloropropane	U	J3	0.000352	0.00126	1	03/31/2018 20:25	WG1092116
Di-isopropyl ether	U		0.000313	0.00126	1	03/31/2018 20:25	WG1092116
Ethylbenzene	U	J3	0.000375	0.00126	1	03/31/2018 20:25	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000432	0.00126	1	03/31/2018 20:25	WG1092116
2-Hexanone	0.0102	J	0.00173	0.0126	1	03/31/2018 20:25	WG1092116
n-Hexane	U	J3	0.000366	0.0126	1	03/31/2018 20:25	WG1092116
Iodomethane	U	J3	0.00319	0.0126	1	03/31/2018 20:25	WG1092116
Isopropylbenzene	U		0.000307	0.00126	1	03/31/2018 20:25	WG1092116
p-Isopropyltoluene	U	J3	0.000257	0.00126	1	03/31/2018 20:25	WG1092116
2-Butanone (MEK)	0.0320	JO J3	0.00591	0.0126	1	03/31/2018 20:25	WG1092116
Methylene Chloride	U		0.00126	0.00631	1	03/31/2018 20:25	WG1092116
4-Methyl-2-pentanone (MIBK)	0.00267	J	0.00237	0.0126	1	03/31/2018 20:25	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 09:19

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000268	0.00126	1	03/31/2018 20:25	WG1092116
Naphthalene	U		0.00126	0.00631	1	03/31/2018 20:25	WG1092116
n-Propylbenzene	U		0.000260	0.00126	1	03/31/2018 20:25	WG1092116
Styrene	U		0.000295	0.00126	1	03/31/2018 20:25	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000333	0.00126	1	03/31/2018 20:25	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000461	0.00126	1	03/31/2018 20:25	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000461	0.00126	1	03/31/2018 20:25	WG1092116
Tetrachloroethene	0.0205	J3	0.000348	0.00126	1	03/31/2018 20:25	WG1092116
Toluene	0.00127	J	0.000548	0.00631	1	03/31/2018 20:25	WG1092116
1,2,3-Trichlorobenzene	U		0.000386	0.00126	1	03/31/2018 20:25	WG1092116
1,2,4-Trichlorobenzene	U		0.000490	0.00126	1	03/31/2018 20:25	WG1092116
1,1,1-Trichloroethane	U	J3	0.000361	0.00126	1	03/31/2018 20:25	WG1092116
1,1,2-Trichloroethane	U		0.000350	0.00126	1	03/31/2018 20:25	WG1092116
Trichloroethene	0.00511	J4	0.000352	0.00126	1	03/31/2018 20:25	WG1092116
Trichlorofluoromethane	U	J3	0.000482	0.00631	1	03/31/2018 20:25	WG1092116
1,2,3-Trichloropropane	U		0.000935	0.00316	1	03/31/2018 20:25	WG1092116
1,2,4-Trimethylbenzene	0.000583	J	0.000266	0.00126	1	03/31/2018 20:25	WG1092116
1,2,3-Trimethylbenzene	U		0.000362	0.00126	1	03/31/2018 20:25	WG1092116
1,3,5-Trimethylbenzene	U		0.000336	0.00126	1	03/31/2018 20:25	WG1092116
Vinyl acetate	U	J3	0.00302	0.0126	1	03/31/2018 20:25	WG1092116
Vinyl chloride	0.00137	J3	0.000367	0.00126	1	03/31/2018 20:25	WG1092116
Xylenes, Total	0.00133	J J3	0.000881	0.00379	1	03/31/2018 20:25	WG1092116
(S) Toluene-d8	98.5			80.0-120		03/31/2018 20:25	WG1092116
(S) Dibromofluoromethane	110			74.0-131		03/31/2018 20:25	WG1092116
(S) 4-Bromofluorobenzene	118			64.0-132		03/31/2018 20:25	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.9		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0308	J J3	0.0119	0.0596	1	03/31/2018 20:46	WG1092116
Acrylonitrile	U		0.00213	0.0119	1	03/31/2018 20:46	WG1092116
Benzene	0.000911	J	0.000322	0.00119	1	03/31/2018 20:46	WG1092116
Bromobenzene	U		0.000338	0.00119	1	03/31/2018 20:46	WG1092116
Bromodichloromethane	U		0.000303	0.00119	1	03/31/2018 20:46	WG1092116
Bromochloromethane	U		0.000465	0.00596	1	03/31/2018 20:46	WG1092116
Bromoform	U		0.000505	0.00119	1	03/31/2018 20:46	WG1092116
Bromomethane	U	J3	0.00160	0.00596	1	03/31/2018 20:46	WG1092116
n-Butylbenzene	U	J3	0.000307	0.00119	1	03/31/2018 20:46	WG1092116
sec-Butylbenzene	U	J3	0.000239	0.00119	1	03/31/2018 20:46	WG1092116
tert-Butylbenzene	U	J3	0.000245	0.00119	1	03/31/2018 20:46	WG1092116
Carbon disulfide	0.00132	J3	0.000263	0.00119	1	03/31/2018 20:46	WG1092116
Carbon tetrachloride	U	J3	0.000391	0.00119	1	03/31/2018 20:46	WG1092116
Chlorobenzene	U		0.000253	0.00119	1	03/31/2018 20:46	WG1092116
Chlorodibromomethane	U		0.000444	0.00119	1	03/31/2018 20:46	WG1092116
Chloroethane	U	J3	0.00113	0.00596	1	03/31/2018 20:46	WG1092116
Chloroform	U		0.000273	0.00596	1	03/31/2018 20:46	WG1092116
Chloromethane	U	J3	0.000447	0.00298	1	03/31/2018 20:46	WG1092116
2-Chlorotoluene	U		0.000359	0.00119	1	03/31/2018 20:46	WG1092116
4-Chlorotoluene	U		0.000286	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00125	0.00596	1	03/31/2018 20:46	WG1092116
1,2-Dibromoethane	U		0.000409	0.00119	1	03/31/2018 20:46	WG1092116
Dibromomethane	U		0.000455	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dichlorobenzene	U		0.000363	0.00119	1	03/31/2018 20:46	WG1092116
1,3-Dichlorobenzene	U		0.000285	0.00119	1	03/31/2018 20:46	WG1092116
1,4-Dichlorobenzene	U		0.000269	0.00119	1	03/31/2018 20:46	WG1092116
Dichlorodifluoromethane	U	J3	0.000850	0.00596	1	03/31/2018 20:46	WG1092116
1,1-Dichloroethane	U		0.000237	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dichloroethane	U		0.000316	0.00119	1	03/31/2018 20:46	WG1092116
1,1-Dichloroethene	U	J3	0.000361	0.00119	1	03/31/2018 20:46	WG1092116
cis-1,2-Dichloroethene	0.00128		0.000280	0.00119	1	03/31/2018 20:46	WG1092116
trans-1,2-Dichloroethene	U	J3	0.000315	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dichloropropane	U		0.000427	0.00119	1	03/31/2018 20:46	WG1092116
1,1-Dichloropropene	U		0.000378	0.00119	1	03/31/2018 20:46	WG1092116
1,3-Dichloropropane	U		0.000247	0.00119	1	03/31/2018 20:46	WG1092116
cis-1,3-Dichloropropene	U		0.000312	0.00119	1	03/31/2018 20:46	WG1092116
trans-1,3-Dichloropropene	U		0.000318	0.00119	1	03/31/2018 20:46	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000927	0.00298	1	03/31/2018 20:46	WG1092116
2,2-Dichloropropane	U	J3	0.000332	0.00119	1	03/31/2018 20:46	WG1092116
Di-isopropyl ether	U		0.000295	0.00119	1	03/31/2018 20:46	WG1092116
Ethylbenzene	U	J3	0.000354	0.00119	1	03/31/2018 20:46	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000407	0.00119	1	03/31/2018 20:46	WG1092116
2-Hexanone	U		0.00163	0.0119	1	03/31/2018 20:46	WG1092116
n-Hexane	U	J3	0.000346	0.0119	1	03/31/2018 20:46	WG1092116
Iodomethane	U	J3	0.00301	0.0119	1	03/31/2018 20:46	WG1092116
Isopropylbenzene	U		0.000290	0.00119	1	03/31/2018 20:46	WG1092116
p-Isopropyltoluene	U	J3	0.000243	0.00119	1	03/31/2018 20:46	WG1092116
2-Butanone (MEK)	0.00628	J JO J3	0.00558	0.0119	1	03/31/2018 20:46	WG1092116
Methylene Chloride	U		0.00119	0.00596	1	03/31/2018 20:46	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00224	0.0119	1	03/31/2018 20:46	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 09:46

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000253	0.00119	1	03/31/2018 20:46	WG1092116
Naphthalene	U		0.00119	0.00596	1	03/31/2018 20:46	WG1092116
n-Propylbenzene	U		0.000245	0.00119	1	03/31/2018 20:46	WG1092116
Styrene	U		0.000279	0.00119	1	03/31/2018 20:46	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000315	0.00119	1	03/31/2018 20:46	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000435	0.00119	1	03/31/2018 20:46	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000435	0.00119	1	03/31/2018 20:46	WG1092116
Tetrachloroethene	0.00727	J3	0.000329	0.00119	1	03/31/2018 20:46	WG1092116
Toluene	0.000594	J	0.000517	0.00596	1	03/31/2018 20:46	WG1092116
1,2,3-Trichlorobenzene	U		0.000365	0.00119	1	03/31/2018 20:46	WG1092116
1,2,4-Trichlorobenzene	U		0.000462	0.00119	1	03/31/2018 20:46	WG1092116
1,1,1-Trichloroethane	U	J3	0.000341	0.00119	1	03/31/2018 20:46	WG1092116
1,1,2-Trichloroethane	U		0.000330	0.00119	1	03/31/2018 20:46	WG1092116
Trichloroethene	0.000767	J J4	0.000332	0.00119	1	03/31/2018 20:46	WG1092116
Trichlorofluoromethane	U	J3	0.000455	0.00596	1	03/31/2018 20:46	WG1092116
1,2,3-Trichloropropane	U		0.000883	0.00298	1	03/31/2018 20:46	WG1092116
1,2,4-Trimethylbenzene	U		0.000251	0.00119	1	03/31/2018 20:46	WG1092116
1,2,3-Trimethylbenzene	U		0.000342	0.00119	1	03/31/2018 20:46	WG1092116
1,3,5-Trimethylbenzene	U		0.000317	0.00119	1	03/31/2018 20:46	WG1092116
Vinyl acetate	U	J3	0.00285	0.0119	1	03/31/2018 20:46	WG1092116
Vinyl chloride	0.000526	J J3	0.000347	0.00119	1	03/31/2018 20:46	WG1092116
Xylenes, Total	U	J3	0.000832	0.00357	1	03/31/2018 20:46	WG1092116
(S) Toluene-d8	102			80.0-120		03/31/2018 20:46	WG1092116
(S) Dibromofluoromethane	107			74.0-131		03/31/2018 20:46	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 20:46	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.6		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0138	J J3	0.0114	0.0570	1	03/31/2018 21:07	WG1092116
Acrylonitrile	U		0.00204	0.0114	1	03/31/2018 21:07	WG1092116
Benzene	U		0.000308	0.00114	1	03/31/2018 21:07	WG1092116
Bromobenzene	U		0.000324	0.00114	1	03/31/2018 21:07	WG1092116
Bromodichloromethane	U		0.000290	0.00114	1	03/31/2018 21:07	WG1092116
Bromochloromethane	U		0.000445	0.00570	1	03/31/2018 21:07	WG1092116
Bromoform	U		0.000484	0.00114	1	03/31/2018 21:07	WG1092116
Bromomethane	U	J3	0.00153	0.00570	1	03/31/2018 21:07	WG1092116
n-Butylbenzene	U	J3	0.000294	0.00114	1	03/31/2018 21:07	WG1092116
sec-Butylbenzene	U	J3	0.000229	0.00114	1	03/31/2018 21:07	WG1092116
tert-Butylbenzene	U	J3	0.000235	0.00114	1	03/31/2018 21:07	WG1092116
Carbon disulfide	0.00161	J3	0.000252	0.00114	1	03/31/2018 21:07	WG1092116
Carbon tetrachloride	U	J3	0.000374	0.00114	1	03/31/2018 21:07	WG1092116
Chlorobenzene	U		0.000242	0.00114	1	03/31/2018 21:07	WG1092116
Chlorodibromomethane	U		0.000426	0.00114	1	03/31/2018 21:07	WG1092116
Chloroethane	U	J3	0.00108	0.00570	1	03/31/2018 21:07	WG1092116
Chloroform	U		0.000261	0.00570	1	03/31/2018 21:07	WG1092116
Chloromethane	U	J3	0.000428	0.00285	1	03/31/2018 21:07	WG1092116
2-Chlorotoluene	U		0.000343	0.00114	1	03/31/2018 21:07	WG1092116
4-Chlorotoluene	U		0.000274	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00570	1	03/31/2018 21:07	WG1092116
1,2-Dibromoethane	U		0.000391	0.00114	1	03/31/2018 21:07	WG1092116
Dibromomethane	U		0.000436	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dichlorobenzene	U		0.000348	0.00114	1	03/31/2018 21:07	WG1092116
1,3-Dichlorobenzene	U		0.000273	0.00114	1	03/31/2018 21:07	WG1092116
1,4-Dichlorobenzene	U		0.000258	0.00114	1	03/31/2018 21:07	WG1092116
Dichlorodifluoromethane	U	J3	0.000814	0.00570	1	03/31/2018 21:07	WG1092116
1,1-Dichloroethane	U		0.000227	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dichloroethane	U		0.000302	0.00114	1	03/31/2018 21:07	WG1092116
1,1-Dichloroethene	U	J3	0.000346	0.00114	1	03/31/2018 21:07	WG1092116
cis-1,2-Dichloroethene	0.000833	J	0.000268	0.00114	1	03/31/2018 21:07	WG1092116
trans-1,2-Dichloroethene	U	J3	0.000301	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dichloropropane	U		0.000408	0.00114	1	03/31/2018 21:07	WG1092116
1,1-Dichloropropene	U		0.000362	0.00114	1	03/31/2018 21:07	WG1092116
1,3-Dichloropropane	U		0.000236	0.00114	1	03/31/2018 21:07	WG1092116
cis-1,3-Dichloropropene	U		0.000299	0.00114	1	03/31/2018 21:07	WG1092116
trans-1,3-Dichloropropene	U		0.000305	0.00114	1	03/31/2018 21:07	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000888	0.00285	1	03/31/2018 21:07	WG1092116
2,2-Dichloropropane	U	J3	0.000318	0.00114	1	03/31/2018 21:07	WG1092116
Di-isopropyl ether	U		0.000283	0.00114	1	03/31/2018 21:07	WG1092116
Ethylbenzene	U	J3	0.000339	0.00114	1	03/31/2018 21:07	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000390	0.00114	1	03/31/2018 21:07	WG1092116
2-Hexanone	U		0.00156	0.0114	1	03/31/2018 21:07	WG1092116
n-Hexane	U	J3	0.000331	0.0114	1	03/31/2018 21:07	WG1092116
Iodomethane	U	J3	0.00289	0.0114	1	03/31/2018 21:07	WG1092116
Isopropylbenzene	U		0.000277	0.00114	1	03/31/2018 21:07	WG1092116
p-Isopropyltoluene	U	J3	0.000233	0.00114	1	03/31/2018 21:07	WG1092116
2-Butanone (MEK)	U	J3	0.00534	0.0114	1	03/31/2018 21:07	WG1092116
Methylene Chloride	U		0.00114	0.00570	1	03/31/2018 21:07	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00215	0.0114	1	03/31/2018 21:07	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 09:54

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000242	0.00114	1	03/31/2018 21:07	WG1092116
Naphthalene	U		0.00114	0.00570	1	03/31/2018 21:07	WG1092116
n-Propylbenzene	U		0.000235	0.00114	1	03/31/2018 21:07	WG1092116
Styrene	U		0.000267	0.00114	1	03/31/2018 21:07	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000301	0.00114	1	03/31/2018 21:07	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000416	0.00114	1	03/31/2018 21:07	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000416	0.00114	1	03/31/2018 21:07	WG1092116
Tetrachloroethene	0.00254	J3	0.000315	0.00114	1	03/31/2018 21:07	WG1092116
Toluene	U		0.000495	0.00570	1	03/31/2018 21:07	WG1092116
1,2,3-Trichlorobenzene	U		0.000349	0.00114	1	03/31/2018 21:07	WG1092116
1,2,4-Trichlorobenzene	U		0.000443	0.00114	1	03/31/2018 21:07	WG1092116
1,1,1-Trichloroethane	U	J3	0.000326	0.00114	1	03/31/2018 21:07	WG1092116
1,1,2-Trichloroethane	U		0.000316	0.00114	1	03/31/2018 21:07	WG1092116
Trichloroethene	0.000615	J J4	0.000318	0.00114	1	03/31/2018 21:07	WG1092116
Trichlorofluoromethane	U	J3	0.000436	0.00570	1	03/31/2018 21:07	WG1092116
1,2,3-Trichloropropane	U		0.000845	0.00285	1	03/31/2018 21:07	WG1092116
1,2,4-Trimethylbenzene	U		0.000241	0.00114	1	03/31/2018 21:07	WG1092116
1,2,3-Trimethylbenzene	U		0.000327	0.00114	1	03/31/2018 21:07	WG1092116
1,3,5-Trimethylbenzene	U		0.000303	0.00114	1	03/31/2018 21:07	WG1092116
Vinyl acetate	U	J3	0.00273	0.0114	1	03/31/2018 21:07	WG1092116
Vinyl chloride	0.00102	J J3	0.000332	0.00114	1	03/31/2018 21:07	WG1092116
Xylenes, Total	U	J3	0.000796	0.00342	1	03/31/2018 21:07	WG1092116
(S) Toluene-d8	98.1			80.0-120		03/31/2018 21:07	WG1092116
(S) Dibromofluoromethane	109			74.0-131		03/31/2018 21:07	WG1092116
(S) 4-Bromofluorobenzene	100			64.0-132		03/31/2018 21:07	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.1		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0126	J J3	0.0113	0.0567	1	03/31/2018 21:29	WG1092116
Acrylonitrile	U		0.00203	0.0113	1	03/31/2018 21:29	WG1092116
Benzene	U		0.000306	0.00113	1	03/31/2018 21:29	WG1092116
Bromobenzene	U		0.000322	0.00113	1	03/31/2018 21:29	WG1092116
Bromodichloromethane	U		0.000288	0.00113	1	03/31/2018 21:29	WG1092116
Bromochloromethane	U		0.000442	0.00567	1	03/31/2018 21:29	WG1092116
Bromoform	U		0.000481	0.00113	1	03/31/2018 21:29	WG1092116
Bromomethane	U	J3	0.00152	0.00567	1	03/31/2018 21:29	WG1092116
n-Butylbenzene	U	J3	0.000293	0.00113	1	03/31/2018 21:29	WG1092116
sec-Butylbenzene	U	J3	0.000228	0.00113	1	03/31/2018 21:29	WG1092116
tert-Butylbenzene	U	J3	0.000234	0.00113	1	03/31/2018 21:29	WG1092116
Carbon disulfide	0.000710	J J3	0.000251	0.00113	1	03/31/2018 21:29	WG1092116
Carbon tetrachloride	U	J3	0.000372	0.00113	1	03/31/2018 21:29	WG1092116
Chlorobenzene	U		0.000241	0.00113	1	03/31/2018 21:29	WG1092116
Chlorodibromomethane	U		0.000423	0.00113	1	03/31/2018 21:29	WG1092116
Chloroethane	U	J3	0.00107	0.00567	1	03/31/2018 21:29	WG1092116
Chloroform	U		0.000260	0.00567	1	03/31/2018 21:29	WG1092116
Chloromethane	U	J3	0.000425	0.00284	1	03/31/2018 21:29	WG1092116
2-Chlorotoluene	U		0.000342	0.00113	1	03/31/2018 21:29	WG1092116
4-Chlorotoluene	U		0.000272	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00567	1	03/31/2018 21:29	WG1092116
1,2-Dibromoethane	U		0.000389	0.00113	1	03/31/2018 21:29	WG1092116
Dibromomethane	U		0.000433	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dichlorobenzene	U		0.000346	0.00113	1	03/31/2018 21:29	WG1092116
1,3-Dichlorobenzene	U		0.000271	0.00113	1	03/31/2018 21:29	WG1092116
1,4-Dichlorobenzene	U		0.000256	0.00113	1	03/31/2018 21:29	WG1092116
Dichlorodifluoromethane	U	J3	0.000809	0.00567	1	03/31/2018 21:29	WG1092116
1,1-Dichloroethane	U		0.000226	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dichloroethane	U		0.000301	0.00113	1	03/31/2018 21:29	WG1092116
1,1-Dichloroethene	U	J3	0.000344	0.00113	1	03/31/2018 21:29	WG1092116
cis-1,2-Dichloroethene	0.00537		0.000267	0.00113	1	03/31/2018 21:29	WG1092116
trans-1,2-Dichloroethene	0.000309	J J3	0.000300	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dichloropropane	U		0.000406	0.00113	1	03/31/2018 21:29	WG1092116
1,1-Dichloropropene	U		0.000360	0.00113	1	03/31/2018 21:29	WG1092116
1,3-Dichloropropane	U		0.000235	0.00113	1	03/31/2018 21:29	WG1092116
cis-1,3-Dichloropropene	U		0.000297	0.00113	1	03/31/2018 21:29	WG1092116
trans-1,3-Dichloropropene	U		0.000303	0.00113	1	03/31/2018 21:29	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000883	0.00284	1	03/31/2018 21:29	WG1092116
2,2-Dichloropropane	U	J3	0.000317	0.00113	1	03/31/2018 21:29	WG1092116
Di-isopropyl ether	U		0.000281	0.00113	1	03/31/2018 21:29	WG1092116
Ethylbenzene	U	J3	0.000337	0.00113	1	03/31/2018 21:29	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000388	0.00113	1	03/31/2018 21:29	WG1092116
2-Hexanone	U		0.00155	0.0113	1	03/31/2018 21:29	WG1092116
n-Hexane	U	J3	0.000329	0.0113	1	03/31/2018 21:29	WG1092116
Iodomethane	U	J3	0.00287	0.0113	1	03/31/2018 21:29	WG1092116
Isopropylbenzene	U		0.000276	0.00113	1	03/31/2018 21:29	WG1092116
p-Isopropyltoluene	U	J3	0.000231	0.00113	1	03/31/2018 21:29	WG1092116
2-Butanone (MEK)	U	J3	0.00531	0.0113	1	03/31/2018 21:29	WG1092116
Methylene Chloride	U		0.00113	0.00567	1	03/31/2018 21:29	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	03/31/2018 21:29	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 10:03

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00113	1	03/31/2018 21:29	WG1092116
Naphthalene	U		0.00113	0.00567	1	03/31/2018 21:29	WG1092116
n-Propylbenzene	U		0.000234	0.00113	1	03/31/2018 21:29	WG1092116
Styrene	U		0.000265	0.00113	1	03/31/2018 21:29	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000300	0.00113	1	03/31/2018 21:29	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	03/31/2018 21:29	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000414	0.00113	1	03/31/2018 21:29	WG1092116
Tetrachloroethene	0.000760	J J3	0.000313	0.00113	1	03/31/2018 21:29	WG1092116
Toluene	U		0.000492	0.00567	1	03/31/2018 21:29	WG1092116
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	03/31/2018 21:29	WG1092116
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	03/31/2018 21:29	WG1092116
1,1,1-Trichloroethane	U	J3	0.000324	0.00113	1	03/31/2018 21:29	WG1092116
1,1,2-Trichloroethane	U		0.000314	0.00113	1	03/31/2018 21:29	WG1092116
Trichloroethene	0.00185	J4	0.000317	0.00113	1	03/31/2018 21:29	WG1092116
Trichlorofluoromethane	U	J3	0.000433	0.00567	1	03/31/2018 21:29	WG1092116
1,2,3-Trichloropropane	U		0.000841	0.00284	1	03/31/2018 21:29	WG1092116
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	03/31/2018 21:29	WG1092116
1,2,3-Trimethylbenzene	U		0.000326	0.00113	1	03/31/2018 21:29	WG1092116
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	03/31/2018 21:29	WG1092116
Vinyl acetate	U	J3	0.00271	0.0113	1	03/31/2018 21:29	WG1092116
Vinyl chloride	0.000575	J J3	0.000330	0.00113	1	03/31/2018 21:29	WG1092116
Xylenes, Total	U	J3	0.000792	0.00340	1	03/31/2018 21:29	WG1092116
(S) Toluene-d8	98.5			80.0-120		03/31/2018 21:29	WG1092116
(S) Dibromofluoromethane	109			74.0-131		03/31/2018 21:29	WG1092116
(S) 4-Bromofluorobenzene	104			64.0-132		03/31/2018 21:29	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0107	J J3	0.0106	0.0529	1	03/31/2018 21:50	WG1092116
Acrylonitrile	U		0.00190	0.0106	1	03/31/2018 21:50	WG1092116
Benzene	U		0.000286	0.00106	1	03/31/2018 21:50	WG1092116
Bromobenzene	U		0.000301	0.00106	1	03/31/2018 21:50	WG1092116
Bromodichloromethane	U		0.000269	0.00106	1	03/31/2018 21:50	WG1092116
Bromochloromethane	U		0.000413	0.00529	1	03/31/2018 21:50	WG1092116
Bromoform	U		0.000449	0.00106	1	03/31/2018 21:50	WG1092116
Bromomethane	U	J3	0.00142	0.00529	1	03/31/2018 21:50	WG1092116
n-Butylbenzene	U	J3	0.000273	0.00106	1	03/31/2018 21:50	WG1092116
sec-Butylbenzene	U	J3	0.000213	0.00106	1	03/31/2018 21:50	WG1092116
tert-Butylbenzene	U	J3	0.000218	0.00106	1	03/31/2018 21:50	WG1092116
Carbon disulfide	U	J3	0.000234	0.00106	1	03/31/2018 21:50	WG1092116
Carbon tetrachloride	U	J3	0.000347	0.00106	1	03/31/2018 21:50	WG1092116
Chlorobenzene	U		0.000224	0.00106	1	03/31/2018 21:50	WG1092116
Chlorodibromomethane	U		0.000395	0.00106	1	03/31/2018 21:50	WG1092116
Chloroethane	U	J3	0.00100	0.00529	1	03/31/2018 21:50	WG1092116
Chloroform	U		0.000242	0.00529	1	03/31/2018 21:50	WG1092116
Chloromethane	U	J3	0.000397	0.00265	1	03/31/2018 21:50	WG1092116
2-Chlorotoluene	U		0.000319	0.00106	1	03/31/2018 21:50	WG1092116
4-Chlorotoluene	U		0.000254	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00111	0.00529	1	03/31/2018 21:50	WG1092116
1,2-Dibromoethane	U		0.000363	0.00106	1	03/31/2018 21:50	WG1092116
Dibromomethane	U		0.000404	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dichlorobenzene	U		0.000323	0.00106	1	03/31/2018 21:50	WG1092116
1,3-Dichlorobenzene	U		0.000253	0.00106	1	03/31/2018 21:50	WG1092116
1,4-Dichlorobenzene	U		0.000239	0.00106	1	03/31/2018 21:50	WG1092116
Dichlorodifluoromethane	U	J3	0.000755	0.00529	1	03/31/2018 21:50	WG1092116
1,1-Dichloroethane	U		0.000211	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dichloroethane	U		0.000281	0.00106	1	03/31/2018 21:50	WG1092116
1,1-Dichloroethene	U	J3	0.000321	0.00106	1	03/31/2018 21:50	WG1092116
cis-1,2-Dichloroethene	0.00556		0.000249	0.00106	1	03/31/2018 21:50	WG1092116
trans-1,2-Dichloroethene	U	J3	0.000280	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dichloropropane	U		0.000379	0.00106	1	03/31/2018 21:50	WG1092116
1,1-Dichloropropene	U		0.000336	0.00106	1	03/31/2018 21:50	WG1092116
1,3-Dichloropropane	U		0.000219	0.00106	1	03/31/2018 21:50	WG1092116
cis-1,3-Dichloropropene	U		0.000277	0.00106	1	03/31/2018 21:50	WG1092116
trans-1,3-Dichloropropene	U		0.000283	0.00106	1	03/31/2018 21:50	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000824	0.00265	1	03/31/2018 21:50	WG1092116
2,2-Dichloropropane	U	J3	0.000295	0.00106	1	03/31/2018 21:50	WG1092116
Di-isopropyl ether	U		0.000263	0.00106	1	03/31/2018 21:50	WG1092116
Ethylbenzene	U	J3	0.000314	0.00106	1	03/31/2018 21:50	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000362	0.00106	1	03/31/2018 21:50	WG1092116
2-Hexanone	U		0.00145	0.0106	1	03/31/2018 21:50	WG1092116
n-Hexane	U	J3	0.000307	0.0106	1	03/31/2018 21:50	WG1092116
Iodomethane	U	J3	0.00268	0.0106	1	03/31/2018 21:50	WG1092116
Isopropylbenzene	U		0.000257	0.00106	1	03/31/2018 21:50	WG1092116
p-Isopropyltoluene	U	J3	0.000216	0.00106	1	03/31/2018 21:50	WG1092116
2-Butanone (MEK)	U	J3	0.00495	0.0106	1	03/31/2018 21:50	WG1092116
Methylene Chloride	U		0.00106	0.00529	1	03/31/2018 21:50	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0106	1	03/31/2018 21:50	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 10:11

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000224	0.00106	1	03/31/2018 21:50	WG1092116
Naphthalene	U		0.00106	0.00529	1	03/31/2018 21:50	WG1092116
n-Propylbenzene	U		0.000218	0.00106	1	03/31/2018 21:50	WG1092116
Styrene	U		0.000248	0.00106	1	03/31/2018 21:50	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000280	0.00106	1	03/31/2018 21:50	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000386	0.00106	1	03/31/2018 21:50	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000386	0.00106	1	03/31/2018 21:50	WG1092116
Tetrachloroethene	U	J3	0.000292	0.00106	1	03/31/2018 21:50	WG1092116
Toluene	U		0.000459	0.00529	1	03/31/2018 21:50	WG1092116
1,2,3-Trichlorobenzene	U		0.000324	0.00106	1	03/31/2018 21:50	WG1092116
1,2,4-Trichlorobenzene	U		0.000411	0.00106	1	03/31/2018 21:50	WG1092116
1,1,1-Trichloroethane	U	J3	0.000303	0.00106	1	03/31/2018 21:50	WG1092116
1,1,2-Trichloroethane	U		0.000293	0.00106	1	03/31/2018 21:50	WG1092116
Trichloroethene	0.000296	J J4	0.000295	0.00106	1	03/31/2018 21:50	WG1092116
Trichlorofluoromethane	U	J3	0.000404	0.00529	1	03/31/2018 21:50	WG1092116
1,2,3-Trichloropropane	U		0.000785	0.00265	1	03/31/2018 21:50	WG1092116
1,2,4-Trimethylbenzene	U		0.000223	0.00106	1	03/31/2018 21:50	WG1092116
1,2,3-Trimethylbenzene	U		0.000304	0.00106	1	03/31/2018 21:50	WG1092116
1,3,5-Trimethylbenzene	U		0.000282	0.00106	1	03/31/2018 21:50	WG1092116
Vinyl acetate	U	J3	0.00253	0.0106	1	03/31/2018 21:50	WG1092116
Vinyl chloride	0.00150	J3	0.000308	0.00106	1	03/31/2018 21:50	WG1092116
Xylenes, Total	U	J3	0.000739	0.00318	1	03/31/2018 21:50	WG1092116
(S) Toluene-d8	99.1			80.0-120		03/31/2018 21:50	WG1092116
(S) Dibromofluoromethane	106			74.0-131		03/31/2018 21:50	WG1092116
(S) 4-Bromofluorobenzene	101			64.0-132		03/31/2018 21:50	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.5		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0133	J J3	0.0109	0.0547	1	03/31/2018 22:11	WG1092116
Acrylonitrile	U		0.00196	0.0109	1	03/31/2018 22:11	WG1092116
Benzene	U		0.000295	0.00109	1	03/31/2018 22:11	WG1092116
Bromobenzene	U		0.000311	0.00109	1	03/31/2018 22:11	WG1092116
Bromodichloromethane	U		0.000278	0.00109	1	03/31/2018 22:11	WG1092116
Bromochloromethane	U		0.000426	0.00547	1	03/31/2018 22:11	WG1092116
Bromoform	U		0.000464	0.00109	1	03/31/2018 22:11	WG1092116
Bromomethane	U	J3	0.00147	0.00547	1	03/31/2018 22:11	WG1092116
n-Butylbenzene	U	J3	0.000282	0.00109	1	03/31/2018 22:11	WG1092116
sec-Butylbenzene	U	J3	0.000220	0.00109	1	03/31/2018 22:11	WG1092116
tert-Butylbenzene	U	J3	0.000225	0.00109	1	03/31/2018 22:11	WG1092116
Carbon disulfide	0.000655	J J3	0.000242	0.00109	1	03/31/2018 22:11	WG1092116
Carbon tetrachloride	U	J3	0.000359	0.00109	1	03/31/2018 22:11	WG1092116
Chlorobenzene	U		0.000232	0.00109	1	03/31/2018 22:11	WG1092116
Chlorodibromomethane	U		0.000408	0.00109	1	03/31/2018 22:11	WG1092116
Chloroethane	U	J3	0.00103	0.00547	1	03/31/2018 22:11	WG1092116
Chloroform	U		0.000250	0.00547	1	03/31/2018 22:11	WG1092116
Chloromethane	U	J3	0.000410	0.00273	1	03/31/2018 22:11	WG1092116
2-Chlorotoluene	U		0.000329	0.00109	1	03/31/2018 22:11	WG1092116
4-Chlorotoluene	U		0.000262	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00547	1	03/31/2018 22:11	WG1092116
1,2-Dibromoethane	U		0.000375	0.00109	1	03/31/2018 22:11	WG1092116
Dibromomethane	U		0.000418	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dichlorobenzene	U		0.000333	0.00109	1	03/31/2018 22:11	WG1092116
1,3-Dichlorobenzene	U		0.000261	0.00109	1	03/31/2018 22:11	WG1092116
1,4-Dichlorobenzene	U		0.000247	0.00109	1	03/31/2018 22:11	WG1092116
Dichlorodifluoromethane	U	J3	0.000780	0.00547	1	03/31/2018 22:11	WG1092116
1,1-Dichloroethane	U		0.000218	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dichloroethane	U		0.000290	0.00109	1	03/31/2018 22:11	WG1092116
1,1-Dichloroethene	0.000672	J J3	0.000331	0.00109	1	03/31/2018 22:11	WG1092116
cis-1,2-Dichloroethene	0.0243		0.000257	0.00109	1	03/31/2018 22:11	WG1092116
trans-1,2-Dichloroethene	0.00106	J J3	0.000289	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dichloropropane	U		0.000391	0.00109	1	03/31/2018 22:11	WG1092116
1,1-Dichloropropene	U		0.000347	0.00109	1	03/31/2018 22:11	WG1092116
1,3-Dichloropropane	U		0.000226	0.00109	1	03/31/2018 22:11	WG1092116
cis-1,3-Dichloropropene	U		0.000286	0.00109	1	03/31/2018 22:11	WG1092116
trans-1,3-Dichloropropene	U		0.000292	0.00109	1	03/31/2018 22:11	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000851	0.00273	1	03/31/2018 22:11	WG1092116
2,2-Dichloropropane	U	J3	0.000305	0.00109	1	03/31/2018 22:11	WG1092116
Di-isopropyl ether	U		0.000271	0.00109	1	03/31/2018 22:11	WG1092116
Ethylbenzene	U	J3	0.000325	0.00109	1	03/31/2018 22:11	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000374	0.00109	1	03/31/2018 22:11	WG1092116
2-Hexanone	U		0.00150	0.0109	1	03/31/2018 22:11	WG1092116
n-Hexane	U	J3	0.000317	0.0109	1	03/31/2018 22:11	WG1092116
Iodomethane	U	J3	0.00277	0.0109	1	03/31/2018 22:11	WG1092116
Isopropylbenzene	U		0.000266	0.00109	1	03/31/2018 22:11	WG1092116
p-Isopropyltoluene	U	J3	0.000223	0.00109	1	03/31/2018 22:11	WG1092116
2-Butanone (MEK)	U	J3	0.00512	0.0109	1	03/31/2018 22:11	WG1092116
Methylene Chloride	U		0.00109	0.00547	1	03/31/2018 22:11	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00206	0.0109	1	03/31/2018 22:11	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 10:32

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000232	0.00109	1	03/31/2018 22:11	WG1092116
Naphthalene	U		0.00109	0.00547	1	03/31/2018 22:11	WG1092116
n-Propylbenzene	U		0.000225	0.00109	1	03/31/2018 22:11	WG1092116
Styrene	U		0.000256	0.00109	1	03/31/2018 22:11	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000289	0.00109	1	03/31/2018 22:11	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000399	0.00109	1	03/31/2018 22:11	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000399	0.00109	1	03/31/2018 22:11	WG1092116
Tetrachloroethene	0.00210	J3	0.000302	0.00109	1	03/31/2018 22:11	WG1092116
Toluene	U		0.000475	0.00547	1	03/31/2018 22:11	WG1092116
1,2,3-Trichlorobenzene	U		0.000335	0.00109	1	03/31/2018 22:11	WG1092116
1,2,4-Trichlorobenzene	U		0.000424	0.00109	1	03/31/2018 22:11	WG1092116
1,1,1-Trichloroethane	U	J3	0.000313	0.00109	1	03/31/2018 22:11	WG1092116
1,1,2-Trichloroethane	U		0.000303	0.00109	1	03/31/2018 22:11	WG1092116
Trichloroethene	U	J4	0.000305	0.00109	1	03/31/2018 22:11	WG1092116
Trichlorofluoromethane	U	J3	0.000418	0.00547	1	03/31/2018 22:11	WG1092116
1,2,3-Trichloropropane	U		0.000810	0.00273	1	03/31/2018 22:11	WG1092116
1,2,4-Trimethylbenzene	U		0.000231	0.00109	1	03/31/2018 22:11	WG1092116
1,2,3-Trimethylbenzene	U		0.000314	0.00109	1	03/31/2018 22:11	WG1092116
1,3,5-Trimethylbenzene	U		0.000291	0.00109	1	03/31/2018 22:11	WG1092116
Vinyl acetate	U	J3	0.00261	0.0109	1	03/31/2018 22:11	WG1092116
Vinyl chloride	0.00144	J3	0.000318	0.00109	1	03/31/2018 22:11	WG1092116
Xylenes, Total	U	J3	0.000763	0.00328	1	03/31/2018 22:11	WG1092116
(S) Toluene-d8	99.4			80.0-120		03/31/2018 22:11	WG1092116
(S) Dibromofluoromethane	108			74.0-131		03/31/2018 22:11	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 22:11	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.1		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0135	J J3	0.0115	0.0574	1	03/31/2018 22:32	WG1092116
Acrylonitrile	U		0.00206	0.0115	1	03/31/2018 22:32	WG1092116
Benzene	U		0.000310	0.00115	1	03/31/2018 22:32	WG1092116
Bromobenzene	U		0.000326	0.00115	1	03/31/2018 22:32	WG1092116
Bromodichloromethane	U		0.000292	0.00115	1	03/31/2018 22:32	WG1092116
Bromochloromethane	U		0.000448	0.00574	1	03/31/2018 22:32	WG1092116
Bromoform	U		0.000487	0.00115	1	03/31/2018 22:32	WG1092116
Bromomethane	U	J3	0.00154	0.00574	1	03/31/2018 22:32	WG1092116
n-Butylbenzene	U	J3	0.000296	0.00115	1	03/31/2018 22:32	WG1092116
sec-Butylbenzene	U	J3	0.000231	0.00115	1	03/31/2018 22:32	WG1092116
tert-Butylbenzene	U	J3	0.000237	0.00115	1	03/31/2018 22:32	WG1092116
Carbon disulfide	0.00116	J3	0.000254	0.00115	1	03/31/2018 22:32	WG1092116
Carbon tetrachloride	U	J3	0.000377	0.00115	1	03/31/2018 22:32	WG1092116
Chlorobenzene	U		0.000243	0.00115	1	03/31/2018 22:32	WG1092116
Chlorodibromomethane	U		0.000428	0.00115	1	03/31/2018 22:32	WG1092116
Chloroethane	U	J3	0.00109	0.00574	1	03/31/2018 22:32	WG1092116
Chloroform	U		0.000263	0.00574	1	03/31/2018 22:32	WG1092116
Chloromethane	U	J3	0.000431	0.00287	1	03/31/2018 22:32	WG1092116
2-Chlorotoluene	U		0.000346	0.00115	1	03/31/2018 22:32	WG1092116
4-Chlorotoluene	U		0.000276	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00574	1	03/31/2018 22:32	WG1092116
1,2-Dibromoethane	U		0.000394	0.00115	1	03/31/2018 22:32	WG1092116
Dibromomethane	U		0.000439	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dichlorobenzene	U		0.000350	0.00115	1	03/31/2018 22:32	WG1092116
1,3-Dichlorobenzene	U		0.000275	0.00115	1	03/31/2018 22:32	WG1092116
1,4-Dichlorobenzene	U		0.000260	0.00115	1	03/31/2018 22:32	WG1092116
Dichlorodifluoromethane	U	J3	0.000819	0.00574	1	03/31/2018 22:32	WG1092116
1,1-Dichloroethane	U		0.000229	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dichloroethane	U		0.000304	0.00115	1	03/31/2018 22:32	WG1092116
1,1-Dichloroethene	0.000446	J J3	0.000348	0.00115	1	03/31/2018 22:32	WG1092116
cis-1,2-Dichloroethene	0.0522		0.000270	0.00115	1	03/31/2018 22:32	WG1092116
trans-1,2-Dichloroethene	0.00211	J3	0.000303	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dichloropropane	U		0.000411	0.00115	1	03/31/2018 22:32	WG1092116
1,1-Dichloropropene	U		0.000364	0.00115	1	03/31/2018 22:32	WG1092116
1,3-Dichloropropane	U		0.000238	0.00115	1	03/31/2018 22:32	WG1092116
cis-1,3-Dichloropropene	U		0.000301	0.00115	1	03/31/2018 22:32	WG1092116
trans-1,3-Dichloropropene	U		0.000307	0.00115	1	03/31/2018 22:32	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000894	0.00287	1	03/31/2018 22:32	WG1092116
2,2-Dichloropropane	U	J3	0.000320	0.00115	1	03/31/2018 22:32	WG1092116
Di-isopropyl ether	U		0.000285	0.00115	1	03/31/2018 22:32	WG1092116
Ethylbenzene	U	J3	0.000341	0.00115	1	03/31/2018 22:32	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000393	0.00115	1	03/31/2018 22:32	WG1092116
2-Hexanone	U		0.00157	0.0115	1	03/31/2018 22:32	WG1092116
n-Hexane	U	J3	0.000333	0.0115	1	03/31/2018 22:32	WG1092116
Iodomethane	U	J3	0.00291	0.0115	1	03/31/2018 22:32	WG1092116
Isopropylbenzene	U		0.000279	0.00115	1	03/31/2018 22:32	WG1092116
p-Isopropyltoluene	U	J3	0.000234	0.00115	1	03/31/2018 22:32	WG1092116
2-Butanone (MEK)	U	J3	0.00538	0.0115	1	03/31/2018 22:32	WG1092116
Methylene Chloride	U		0.00115	0.00574	1	03/31/2018 22:32	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	03/31/2018 22:32	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 10:41

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	03/31/2018 22:32	WG1092116
Naphthalene	U		0.00115	0.00574	1	03/31/2018 22:32	WG1092116
n-Propylbenzene	U		0.000237	0.00115	1	03/31/2018 22:32	WG1092116
Styrene	U		0.000269	0.00115	1	03/31/2018 22:32	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000303	0.00115	1	03/31/2018 22:32	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	03/31/2018 22:32	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000419	0.00115	1	03/31/2018 22:32	WG1092116
Tetrachloroethene	0.0158	J3	0.000317	0.00115	1	03/31/2018 22:32	WG1092116
Toluene	U		0.000498	0.00574	1	03/31/2018 22:32	WG1092116
1,2,3-Trichlorobenzene	U		0.000351	0.00115	1	03/31/2018 22:32	WG1092116
1,2,4-Trichlorobenzene	U		0.000446	0.00115	1	03/31/2018 22:32	WG1092116
1,1,1-Trichloroethane	U	J3	0.000328	0.00115	1	03/31/2018 22:32	WG1092116
1,1,2-Trichloroethane	U		0.000318	0.00115	1	03/31/2018 22:32	WG1092116
Trichloroethene	0.00357	J4	0.000320	0.00115	1	03/31/2018 22:32	WG1092116
Trichlorofluoromethane	U	J3	0.000439	0.00574	1	03/31/2018 22:32	WG1092116
1,2,3-Trichloropropane	U		0.000851	0.00287	1	03/31/2018 22:32	WG1092116
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	03/31/2018 22:32	WG1092116
1,2,3-Trimethylbenzene	U		0.000330	0.00115	1	03/31/2018 22:32	WG1092116
1,3,5-Trimethylbenzene	U		0.000306	0.00115	1	03/31/2018 22:32	WG1092116
Vinyl acetate	U	J3	0.00275	0.0115	1	03/31/2018 22:32	WG1092116
Vinyl chloride	0.00668	J3	0.000334	0.00115	1	03/31/2018 22:32	WG1092116
Xylenes, Total	U	J3	0.000802	0.00345	1	03/31/2018 22:32	WG1092116
(S) Toluene-d8	99.2			80.0-120		03/31/2018 22:32	WG1092116
(S) Dibromofluoromethane	108			74.0-131		03/31/2018 22:32	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 22:32	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>J3</u>	0.0110	0.0551	1	03/31/2018 22:53	WG1092116
Acrylonitrile	U		0.00197	0.0110	1	03/31/2018 22:53	WG1092116
Benzene	U		0.000298	0.00110	1	03/31/2018 22:53	WG1092116
Bromobenzene	U		0.000313	0.00110	1	03/31/2018 22:53	WG1092116
Bromodichloromethane	U		0.000280	0.00110	1	03/31/2018 22:53	WG1092116
Bromochloromethane	U		0.000430	0.00551	1	03/31/2018 22:53	WG1092116
Bromoform	U		0.000468	0.00110	1	03/31/2018 22:53	WG1092116
Bromomethane	U	<u>J3</u>	0.00148	0.00551	1	03/31/2018 22:53	WG1092116
n-Butylbenzene	U	<u>J3</u>	0.000285	0.00110	1	03/31/2018 22:53	WG1092116
sec-Butylbenzene	U	<u>J3</u>	0.000222	0.00110	1	03/31/2018 22:53	WG1092116
tert-Butylbenzene	U	<u>J3</u>	0.000227	0.00110	1	03/31/2018 22:53	WG1092116
Carbon disulfide	0.000822	<u>J J3</u>	0.000244	0.00110	1	03/31/2018 22:53	WG1092116
Carbon tetrachloride	U	<u>J3</u>	0.000362	0.00110	1	03/31/2018 22:53	WG1092116
Chlorobenzene	U		0.000234	0.00110	1	03/31/2018 22:53	WG1092116
Chlorodibromomethane	U		0.000411	0.00110	1	03/31/2018 22:53	WG1092116
Chloroethane	U	<u>J3</u>	0.00104	0.00551	1	03/31/2018 22:53	WG1092116
Chloroform	U		0.000253	0.00551	1	03/31/2018 22:53	WG1092116
Chloromethane	U	<u>J3</u>	0.000414	0.00276	1	03/31/2018 22:53	WG1092116
2-Chlorotoluene	U		0.000332	0.00110	1	03/31/2018 22:53	WG1092116
4-Chlorotoluene	U		0.000265	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	03/31/2018 22:53	WG1092116
1,2-Dibromoethane	U		0.000378	0.00110	1	03/31/2018 22:53	WG1092116
Dibromomethane	U		0.000421	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dichlorobenzene	U		0.000336	0.00110	1	03/31/2018 22:53	WG1092116
1,3-Dichlorobenzene	U		0.000264	0.00110	1	03/31/2018 22:53	WG1092116
1,4-Dichlorobenzene	U		0.000249	0.00110	1	03/31/2018 22:53	WG1092116
Dichlorodifluoromethane	U	<u>J3</u>	0.000786	0.00551	1	03/31/2018 22:53	WG1092116
1,1-Dichloroethane	U		0.000219	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dichloroethane	U		0.000292	0.00110	1	03/31/2018 22:53	WG1092116
1,1-Dichloroethene	0.000845	<u>J J3</u>	0.000334	0.00110	1	03/31/2018 22:53	WG1092116
cis-1,2-Dichloroethene	2.00		0.00648	0.0276	25	04/06/2018 00:44	WG1092116
trans-1,2-Dichloroethene	0.0665	<u>J3</u>	0.000291	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dichloropropane	U		0.000395	0.00110	1	03/31/2018 22:53	WG1092116
1,1-Dichloropropene	U		0.000350	0.00110	1	03/31/2018 22:53	WG1092116
1,3-Dichloropropane	U		0.000228	0.00110	1	03/31/2018 22:53	WG1092116
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	03/31/2018 22:53	WG1092116
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	03/31/2018 22:53	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000858	0.00276	1	03/31/2018 22:53	WG1092116
2,2-Dichloropropane	U	<u>J3</u>	0.000308	0.00110	1	03/31/2018 22:53	WG1092116
Di-isopropyl ether	U		0.000274	0.00110	1	03/31/2018 22:53	WG1092116
Ethylbenzene	U	<u>J3</u>	0.000328	0.00110	1	03/31/2018 22:53	WG1092116
Hexachloro-1,3-butadiene	U	<u>J3</u>	0.000377	0.00110	1	03/31/2018 22:53	WG1092116
2-Hexanone	U		0.00151	0.0110	1	03/31/2018 22:53	WG1092116
n-Hexane	U	<u>J3</u>	0.000320	0.0110	1	03/31/2018 22:53	WG1092116
Iodomethane	U	<u>J3</u>	0.00279	0.0110	1	03/31/2018 22:53	WG1092116
Isopropylbenzene	U		0.000268	0.00110	1	03/31/2018 22:53	WG1092116
p-Isopropyltoluene	U	<u>J3</u>	0.000225	0.00110	1	03/31/2018 22:53	WG1092116
2-Butanone (MEK)	U	<u>J3</u>	0.00516	0.0110	1	03/31/2018 22:53	WG1092116
Methylene Chloride	U		0.00110	0.00551	1	03/31/2018 22:53	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	03/31/2018 22:53	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 10:49

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	03/31/2018 22:53	WG1092116
Naphthalene	U		0.00110	0.00551	1	03/31/2018 22:53	WG1092116
n-Propylbenzene	U		0.000227	0.00110	1	03/31/2018 22:53	WG1092116
Styrene	U		0.000258	0.00110	1	03/31/2018 22:53	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	03/31/2018 22:53	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	03/31/2018 22:53	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000403	0.00110	1	03/31/2018 22:53	WG1092116
Tetrachloroethene	0.00131	J3	0.000304	0.00110	1	03/31/2018 22:53	WG1092116
Toluene	U		0.000479	0.00551	1	03/31/2018 22:53	WG1092116
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	03/31/2018 22:53	WG1092116
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	03/31/2018 22:53	WG1092116
1,1,1-Trichloroethane	U	J3	0.000315	0.00110	1	03/31/2018 22:53	WG1092116
1,1,2-Trichloroethane	U		0.000305	0.00110	1	03/31/2018 22:53	WG1092116
Trichloroethene	0.000382	J J4	0.000308	0.00110	1	03/31/2018 22:53	WG1092116
Trichlorofluoromethane	U	J3	0.000421	0.00551	1	03/31/2018 22:53	WG1092116
1,2,3-Trichloropropane	U		0.000817	0.00276	1	03/31/2018 22:53	WG1092116
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	03/31/2018 22:53	WG1092116
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	03/31/2018 22:53	WG1092116
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	03/31/2018 22:53	WG1092116
Vinyl acetate	U	J3	0.00264	0.0110	1	03/31/2018 22:53	WG1092116
Vinyl chloride	1.35	J3	0.00803	0.0276	25	04/06/2018 00:44	WG1092116
Xylenes, Total	U	J3	0.000770	0.00331	1	03/31/2018 22:53	WG1092116
(S) Toluene-d8	97.8			80.0-120		03/31/2018 22:53	WG1092116
(S) Toluene-d8	97.5			80.0-120		04/06/2018 00:44	WG1092116
(S) Dibromofluoromethane	111			74.0-131		03/31/2018 22:53	WG1092116
(S) Dibromofluoromethane	95.2			74.0-131		04/06/2018 00:44	WG1092116
(S) 4-Bromofluorobenzene	103			64.0-132		03/31/2018 22:53	WG1092116
(S) 4-Bromofluorobenzene	98.8			64.0-132		04/06/2018 00:44	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.281	1.41	25	04/01/2018 01:19	WG1092116
Acrylonitrile	U	J3	0.0504	0.281	25	04/01/2018 01:19	WG1092116
Benzene	U	J3	0.00759	0.0281	25	04/01/2018 01:19	WG1092116
Bromobenzene	U	J3	0.00799	0.0281	25	04/01/2018 01:19	WG1092116
Bromodichloromethane	U	J3 J5	0.00714	0.0281	25	04/01/2018 01:19	WG1092116
Bromochloromethane	U	J3 J5	0.0110	0.141	25	04/01/2018 01:19	WG1092116
Bromoform	U	J3	0.0119	0.0281	25	04/01/2018 01:19	WG1092116
Bromomethane	U	J3	0.0377	0.141	25	04/01/2018 01:19	WG1092116
n-Butylbenzene	U	J3	0.00726	0.0281	25	04/01/2018 01:19	WG1092116
sec-Butylbenzene	U	J3	0.00565	0.0281	25	04/01/2018 01:19	WG1092116
tert-Butylbenzene	U	J3	0.00579	0.0281	25	04/01/2018 01:19	WG1092116
Carbon disulfide	U	J3 J5	0.00621	0.0281	25	04/01/2018 01:19	WG1092116
Carbon tetrachloride	U	J3	0.00923	0.0281	25	04/01/2018 01:19	WG1092116
Chlorobenzene	U	J3	0.00596	0.0281	25	04/01/2018 01:19	WG1092116
Chlorodibromomethane	U	J3	0.0105	0.0281	25	04/01/2018 01:19	WG1092116
Chloroethane	U	J3	0.0266	0.141	25	04/01/2018 01:19	WG1092116
Chloroform	U	J3	0.00644	0.141	25	04/01/2018 01:19	WG1092116
Chloromethane	U	J3	0.0106	0.0703	25	04/01/2018 01:19	WG1092116
2-Chlorotoluene	U	J3	0.00846	0.0281	25	04/01/2018 01:19	WG1092116
4-Chlorotoluene	U	J3	0.00675	0.0281	25	04/01/2018 01:19	WG1092116
1,2-Dibromo-3-Chloropropane	U	J3	0.0295	0.141	25	04/01/2018 01:19	WG1092116
1,2-Dibromoethane	U	J3	0.00965	0.0281	25	04/01/2018 01:19	WG1092116
Dibromomethane	U	J3 J5	0.0107	0.0281	25	04/01/2018 01:19	WG1092116
1,2-Dichlorobenzene	U	J3	0.00857	0.0281	25	04/01/2018 01:19	WG1092116
1,3-Dichlorobenzene	U	J3	0.00673	0.0281	25	04/01/2018 01:19	WG1092116
1,4-Dichlorobenzene	U	J3	0.00636	0.0281	25	04/01/2018 01:19	WG1092116
Dichlorodifluoromethane	U	J3	0.0200	0.141	25	04/01/2018 01:19	WG1092116
1,1-Dichloroethane	U	J3	0.00560	0.0281	25	04/01/2018 01:19	WG1092116
1,2-Dichloroethane	U	J3	0.00745	0.0281	25	04/01/2018 01:19	WG1092116
1,1-Dichloroethene	U	J3	0.00853	0.0281	25	04/01/2018 01:19	WG1092116
cis-1,2-Dichloroethene	0.886		0.00662	0.0281	25	04/01/2018 01:19	WG1092116
trans-1,2-Dichloroethene	0.0882	J3 J5	0.00743	0.0281	25	04/01/2018 01:19	WG1092116
1,2-Dichloropropane	U	J3	0.0101	0.0281	25	04/01/2018 01:19	WG1092116
1,1-Dichloropropene	U	J3	0.00891	0.0281	25	04/01/2018 01:19	WG1092116
1,3-Dichloropropane	U	J3	0.00583	0.0281	25	04/01/2018 01:19	WG1092116
cis-1,3-Dichloropropene	U	J3	0.00737	0.0281	25	04/01/2018 01:19	WG1092116
trans-1,3-Dichloropropene	U	J3	0.00752	0.0281	25	04/01/2018 01:19	WG1092116
trans-1,4-Dichloro-2-butene	U	J3	0.0218	0.0703	25	04/01/2018 01:19	WG1092116
2,2-Dichloropropane	U	J3	0.00785	0.0281	25	04/01/2018 01:19	WG1092116
Di-isopropyl ether	U	J3	0.00698	0.0281	25	04/01/2018 01:19	WG1092116
Ethylbenzene	U	J3	0.00835	0.0281	25	04/01/2018 01:19	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.00962	0.0281	25	04/01/2018 01:19	WG1092116
2-Hexanone	U	J3	0.0385	0.281	25	04/01/2018 01:19	WG1092116
n-Hexane	U	J3 J5	0.00816	0.281	25	04/01/2018 01:19	WG1092116
Iodomethane	U	J3	0.0711	0.281	25	04/01/2018 01:19	WG1092116
Isopropylbenzene	U	J3	0.00684	0.0281	25	04/01/2018 01:19	WG1092116
p-Isopropyltoluene	U	J3	0.00574	0.0281	25	04/01/2018 01:19	WG1092116
2-Butanone (MEK)	U	J3	0.132	0.281	25	04/01/2018 01:19	WG1092116
Methylene Chloride	U	J3 J5	0.0281	0.141	25	04/01/2018 01:19	WG1092116
4-Methyl-2-pentanone (MIBK)	U	J3	0.0529	0.281	25	04/01/2018 01:19	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 10:55

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U	J3 J5	0.00596	0.0281	25	04/01/2018 01:19	WG1092116
Naphthalene	U	J3	0.0281	0.141	25	04/01/2018 01:19	WG1092116
n-Propylbenzene	U	J3	0.00579	0.0281	25	04/01/2018 01:19	WG1092116
Styrene	U	J3	0.00658	0.0281	25	04/01/2018 01:19	WG1092116
1,1,1,2-Tetrachloroethane	U	J3	0.00743	0.0281	25	04/01/2018 01:19	WG1092116
1,1,2,2-Tetrachloroethane	U	J3	0.0103	0.0281	25	04/01/2018 01:19	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.0103	0.0281	25	04/01/2018 01:19	WG1092116
Tetrachloroethene	0.237	J3	0.00776	0.0281	25	04/01/2018 01:19	WG1092116
Toluene	U	J3	0.0122	0.141	25	04/01/2018 01:19	WG1092116
1,2,3-Trichlorobenzene	U	J3	0.00861	0.0281	25	04/01/2018 01:19	WG1092116
1,2,4-Trichlorobenzene	U	J3	0.0109	0.0281	25	04/01/2018 01:19	WG1092116
1,1,1-Trichloroethane	U	J3	0.00804	0.0281	25	04/01/2018 01:19	WG1092116
1,1,2-Trichloroethane	U	J3	0.00779	0.0281	25	04/01/2018 01:19	WG1092116
Trichloroethene	0.0208	J J3 J4 J5	0.00785	0.0281	25	04/01/2018 01:19	WG1092116
Trichlorofluoromethane	U	J3	0.0107	0.141	25	04/01/2018 01:19	WG1092116
1,2,3-Trichloropropane	U	J3	0.0208	0.0703	25	04/01/2018 01:19	WG1092116
1,2,4-Trimethylbenzene	U	J3	0.00594	0.0281	25	04/01/2018 01:19	WG1092116
1,2,3-Trimethylbenzene	U	J3	0.00808	0.0281	25	04/01/2018 01:19	WG1092116
1,3,5-Trimethylbenzene	U	J3	0.00748	0.0281	25	04/01/2018 01:19	WG1092116
Vinyl acetate	U	J3	0.0673	0.281	25	04/01/2018 01:19	WG1092116
Vinyl chloride	0.256	J3	0.00819	0.0281	25	04/01/2018 01:19	WG1092116
Xylenes, Total	U	J3	0.0196	0.0844	25	04/01/2018 01:19	WG1092116
(S) Toluene-d8	99.5			80.0-120		04/01/2018 01:19	WG1092116
(S) Dibromofluoromethane	102			74.0-131		04/01/2018 01:19	WG1092116
(S) 4-Bromofluorobenzene	102			64.0-132		04/01/2018 01:19	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L981889-09 WG1092116: Cannot be analyzed at a lower dilution due to high levels of target analytes.



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0273	J J3	0.0113	0.0563	1	03/31/2018 23:13	WG1092116
Acrylonitrile	U		0.00201	0.0113	1	03/31/2018 23:13	WG1092116
Benzene	U		0.000304	0.00113	1	03/31/2018 23:13	WG1092116
Bromobenzene	U		0.000320	0.00113	1	03/31/2018 23:13	WG1092116
Bromodichloromethane	U		0.000286	0.00113	1	03/31/2018 23:13	WG1092116
Bromochloromethane	U		0.000439	0.00563	1	03/31/2018 23:13	WG1092116
Bromoform	U		0.000477	0.00113	1	03/31/2018 23:13	WG1092116
Bromomethane	U	J3	0.00151	0.00563	1	03/31/2018 23:13	WG1092116
n-Butylbenzene	U	J3	0.000290	0.00113	1	03/31/2018 23:13	WG1092116
sec-Butylbenzene	U	J3	0.000226	0.00113	1	03/31/2018 23:13	WG1092116
tert-Butylbenzene	U	J3	0.000232	0.00113	1	03/31/2018 23:13	WG1092116
Carbon disulfide	0.00162	J3	0.000249	0.00113	1	03/31/2018 23:13	WG1092116
Carbon tetrachloride	U	J3	0.000369	0.00113	1	03/31/2018 23:13	WG1092116
Chlorobenzene	U		0.000239	0.00113	1	03/31/2018 23:13	WG1092116
Chlorodibromomethane	U		0.000420	0.00113	1	03/31/2018 23:13	WG1092116
Chloroethane	U	J3	0.00106	0.00563	1	03/31/2018 23:13	WG1092116
Chloroform	U		0.000258	0.00563	1	03/31/2018 23:13	WG1092116
Chloromethane	0.00475	J3	0.000422	0.00281	1	03/31/2018 23:13	WG1092116
2-Chlorotoluene	U		0.000339	0.00113	1	03/31/2018 23:13	WG1092116
4-Chlorotoluene	U		0.000270	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00563	1	03/31/2018 23:13	WG1092116
1,2-Dibromoethane	U		0.000386	0.00113	1	03/31/2018 23:13	WG1092116
Dibromomethane	U		0.000430	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dichlorobenzene	U		0.000343	0.00113	1	03/31/2018 23:13	WG1092116
1,3-Dichlorobenzene	U		0.000269	0.00113	1	03/31/2018 23:13	WG1092116
1,4-Dichlorobenzene	U		0.000254	0.00113	1	03/31/2018 23:13	WG1092116
Dichlorodifluoromethane	U	J3	0.000802	0.00563	1	03/31/2018 23:13	WG1092116
1,1-Dichloroethane	U		0.000224	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dichloroethane	U		0.000298	0.00113	1	03/31/2018 23:13	WG1092116
1,1-Dichloroethene	0.00376	J3	0.000341	0.00113	1	03/31/2018 23:13	WG1092116
cis-1,2-Dichloroethene	5.01		0.0529	0.225	200	04/06/2018 14:19	WG1092116
trans-1,2-Dichloroethene	0.0619	J3	0.000297	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dichloropropane	U		0.000403	0.00113	1	03/31/2018 23:13	WG1092116
1,1-Dichloropropene	U		0.000357	0.00113	1	03/31/2018 23:13	WG1092116
1,3-Dichloropropane	U		0.000233	0.00113	1	03/31/2018 23:13	WG1092116
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	03/31/2018 23:13	WG1092116
trans-1,3-Dichloropropene	U		0.000301	0.00113	1	03/31/2018 23:13	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000876	0.00281	1	03/31/2018 23:13	WG1092116
2,2-Dichloropropane	U	J3	0.000314	0.00113	1	03/31/2018 23:13	WG1092116
Di-isopropyl ether	U		0.000279	0.00113	1	03/31/2018 23:13	WG1092116
Ethylbenzene	U	J3	0.000334	0.00113	1	03/31/2018 23:13	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000385	0.00113	1	03/31/2018 23:13	WG1092116
2-Hexanone	U		0.00154	0.0113	1	03/31/2018 23:13	WG1092116
n-Hexane	U	J3	0.000326	0.0113	1	03/31/2018 23:13	WG1092116
Iodomethane	U	J3	0.00285	0.0113	1	03/31/2018 23:13	WG1092116
Isopropylbenzene	U		0.000273	0.00113	1	03/31/2018 23:13	WG1092116
p-Isopropyltoluene	U	J3	0.000230	0.00113	1	03/31/2018 23:13	WG1092116
2-Butanone (MEK)	0.00730	J J3	0.00527	0.0113	1	03/31/2018 23:13	WG1092116
Methylene Chloride	U		0.00113	0.00563	1	03/31/2018 23:13	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	03/31/2018 23:13	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:02

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	03/31/2018 23:13	WG1092116
Naphthalene	U		0.00113	0.00563	1	03/31/2018 23:13	WG1092116
n-Propylbenzene	U		0.000232	0.00113	1	03/31/2018 23:13	WG1092116
Styrene	U		0.000263	0.00113	1	03/31/2018 23:13	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000297	0.00113	1	03/31/2018 23:13	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	03/31/2018 23:13	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000411	0.00113	1	03/31/2018 23:13	WG1092116
Tetrachloroethene	0.0323	J3	0.000311	0.00113	1	03/31/2018 23:13	WG1092116
Toluene	U		0.000488	0.00563	1	03/31/2018 23:13	WG1092116
1,2,3-Trichlorobenzene	U		0.000344	0.00113	1	03/31/2018 23:13	WG1092116
1,2,4-Trichlorobenzene	U		0.000437	0.00113	1	03/31/2018 23:13	WG1092116
1,1,1-Trichloroethane	U	J3	0.000322	0.00113	1	03/31/2018 23:13	WG1092116
1,1,2-Trichloroethane	U		0.000312	0.00113	1	03/31/2018 23:13	WG1092116
Trichloroethene	0.0212	J4	0.000314	0.00113	1	03/31/2018 23:13	WG1092116
Trichlorofluoromethane	U	J3	0.000430	0.00563	1	03/31/2018 23:13	WG1092116
1,2,3-Trichloropropane	U		0.000834	0.00281	1	03/31/2018 23:13	WG1092116
1,2,4-Trimethylbenzene	U		0.000237	0.00113	1	03/31/2018 23:13	WG1092116
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	03/31/2018 23:13	WG1092116
1,3,5-Trimethylbenzene	U		0.000299	0.00113	1	03/31/2018 23:13	WG1092116
Vinyl acetate	U	J3	0.00269	0.0113	1	03/31/2018 23:13	WG1092116
Vinyl chloride	0.858	J3	0.0164	0.0563	50	04/06/2018 01:05	WG1092116
Xylenes, Total	U	J3	0.000786	0.00338	1	03/31/2018 23:13	WG1092116
(S) Toluene-d8	101			80.0-120		03/31/2018 23:13	WG1092116
(S) Toluene-d8	104			80.0-120		04/06/2018 14:19	WG1092116
(S) Toluene-d8	93.2			80.0-120		04/06/2018 01:05	WG1092116
(S) Dibromofluoromethane	102			74.0-131		04/06/2018 14:19	WG1092116
(S) Dibromofluoromethane	110			74.0-131		03/31/2018 23:13	WG1092116
(S) Dibromofluoromethane	93.6			74.0-131		04/06/2018 01:05	WG1092116
(S) 4-Bromofluorobenzene	106			64.0-132		03/31/2018 23:13	WG1092116
(S) 4-Bromofluorobenzene	99.7			64.0-132		04/06/2018 14:19	WG1092116
(S) 4-Bromofluorobenzene	95.3			64.0-132		04/06/2018 01:05	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.4		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0285	J J3	0.0111	0.0553	1	03/31/2018 23:34	WG1092116
Acrylonitrile	U		0.00198	0.0111	1	03/31/2018 23:34	WG1092116
Benzene	U		0.000299	0.00111	1	03/31/2018 23:34	WG1092116
Bromobenzene	U		0.000314	0.00111	1	03/31/2018 23:34	WG1092116
Bromodichloromethane	U		0.000281	0.00111	1	03/31/2018 23:34	WG1092116
Bromochloromethane	U		0.000431	0.00553	1	03/31/2018 23:34	WG1092116
Bromoform	U		0.000469	0.00111	1	03/31/2018 23:34	WG1092116
Bromomethane	U	J3	0.00148	0.00553	1	03/31/2018 23:34	WG1092116
n-Butylbenzene	U	J3	0.000285	0.00111	1	03/31/2018 23:34	WG1092116
sec-Butylbenzene	U	J3	0.000222	0.00111	1	03/31/2018 23:34	WG1092116
tert-Butylbenzene	U	J3	0.000228	0.00111	1	03/31/2018 23:34	WG1092116
Carbon disulfide	0.00124	J3	0.000244	0.00111	1	03/31/2018 23:34	WG1092116
Carbon tetrachloride	U	J3	0.000363	0.00111	1	03/31/2018 23:34	WG1092116
Chlorobenzene	U		0.000234	0.00111	1	03/31/2018 23:34	WG1092116
Chlorodibromomethane	U		0.000413	0.00111	1	03/31/2018 23:34	WG1092116
Chloroethane	U	J3	0.00105	0.00553	1	03/31/2018 23:34	WG1092116
Chloroform	U		0.000253	0.00553	1	03/31/2018 23:34	WG1092116
Chloromethane	0.000967	J J3	0.000415	0.00276	1	03/31/2018 23:34	WG1092116
2-Chlorotoluene	U		0.000333	0.00111	1	03/31/2018 23:34	WG1092116
4-Chlorotoluene	U		0.000265	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00553	1	03/31/2018 23:34	WG1092116
1,2-Dibromoethane	U		0.000379	0.00111	1	03/31/2018 23:34	WG1092116
Dibromomethane	U		0.000422	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dichlorobenzene	U		0.000337	0.00111	1	03/31/2018 23:34	WG1092116
1,3-Dichlorobenzene	U		0.000264	0.00111	1	03/31/2018 23:34	WG1092116
1,4-Dichlorobenzene	U		0.000250	0.00111	1	03/31/2018 23:34	WG1092116
Dichlorodifluoromethane	U	J3	0.000789	0.00553	1	03/31/2018 23:34	WG1092116
1,1-Dichloroethane	U		0.000220	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dichloroethane	U		0.000293	0.00111	1	03/31/2018 23:34	WG1092116
1,1-Dichloroethene	0.00268	J3	0.000335	0.00111	1	03/31/2018 23:34	WG1092116
cis-1,2-Dichloroethene	4.57		0.0130	0.0553	50	04/06/2018 01:26	WG1092116
trans-1,2-Dichloroethene	0.0339	J3	0.000292	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dichloropropane	U		0.000396	0.00111	1	03/31/2018 23:34	WG1092116
1,1-Dichloropropene	U		0.000351	0.00111	1	03/31/2018 23:34	WG1092116
1,3-Dichloropropane	U		0.000229	0.00111	1	03/31/2018 23:34	WG1092116
cis-1,3-Dichloropropene	U		0.000290	0.00111	1	03/31/2018 23:34	WG1092116
trans-1,3-Dichloropropene	U		0.000295	0.00111	1	03/31/2018 23:34	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000860	0.00276	1	03/31/2018 23:34	WG1092116
2,2-Dichloropropane	U	J3	0.000309	0.00111	1	03/31/2018 23:34	WG1092116
Di-isopropyl ether	U		0.000274	0.00111	1	03/31/2018 23:34	WG1092116
Ethylbenzene	U	J3	0.000328	0.00111	1	03/31/2018 23:34	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000378	0.00111	1	03/31/2018 23:34	WG1092116
2-Hexanone	U		0.00152	0.0111	1	03/31/2018 23:34	WG1092116
n-Hexane	U	J3	0.000321	0.0111	1	03/31/2018 23:34	WG1092116
Iodomethane	U	J3	0.00280	0.0111	1	03/31/2018 23:34	WG1092116
Isopropylbenzene	U		0.000269	0.00111	1	03/31/2018 23:34	WG1092116
p-Isopropyltoluene	U	J3	0.000226	0.00111	1	03/31/2018 23:34	WG1092116
2-Butanone (MEK)	U	J3	0.00518	0.0111	1	03/31/2018 23:34	WG1092116
Methylene Chloride	U		0.00111	0.00553	1	03/31/2018 23:34	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00208	0.0111	1	03/31/2018 23:34	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:14

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.0011	1	03/31/2018 23:34	WG1092116
Naphthalene	U		0.0011	0.00553	1	03/31/2018 23:34	WG1092116
n-Propylbenzene	U		0.000228	0.0011	1	03/31/2018 23:34	WG1092116
Styrene	U		0.000259	0.0011	1	03/31/2018 23:34	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000292	0.0011	1	03/31/2018 23:34	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000404	0.0011	1	03/31/2018 23:34	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000404	0.0011	1	03/31/2018 23:34	WG1092116
Tetrachloroethene	0.0352	J3	0.000305	0.0011	1	03/31/2018 23:34	WG1092116
Toluene	U		0.000480	0.00553	1	03/31/2018 23:34	WG1092116
1,2,3-Trichlorobenzene	U		0.000338	0.0011	1	03/31/2018 23:34	WG1092116
1,2,4-Trichlorobenzene	U		0.000429	0.0011	1	03/31/2018 23:34	WG1092116
1,1,1-Trichloroethane	U	J3	0.000316	0.0011	1	03/31/2018 23:34	WG1092116
1,1,2-Trichloroethane	U		0.000306	0.0011	1	03/31/2018 23:34	WG1092116
Trichloroethene	0.0107	J4	0.000309	0.0011	1	03/31/2018 23:34	WG1092116
Trichlorofluoromethane	U	J3	0.000422	0.00553	1	03/31/2018 23:34	WG1092116
1,2,3-Trichloropropane	U		0.000819	0.00276	1	03/31/2018 23:34	WG1092116
1,2,4-Trimethylbenzene	U		0.000233	0.0011	1	03/31/2018 23:34	WG1092116
1,2,3-Trimethylbenzene	U		0.000317	0.0011	1	03/31/2018 23:34	WG1092116
1,3,5-Trimethylbenzene	U		0.000294	0.0011	1	03/31/2018 23:34	WG1092116
Vinyl acetate	U	J3	0.00264	0.011	1	03/31/2018 23:34	WG1092116
Vinyl chloride	0.0824	J3	0.000322	0.0011	1	03/31/2018 23:34	WG1092116
Xylenes, Total	U	J3	0.000772	0.00332	1	03/31/2018 23:34	WG1092116
(S) Toluene-d8	107			80.0-120		04/06/2018 01:26	WG1092116
(S) Toluene-d8	99.1			80.0-120		03/31/2018 23:34	WG1092116
(S) Dibromofluoromethane	109			74.0-131		03/31/2018 23:34	WG1092116
(S) Dibromofluoromethane	93.0			74.0-131		04/06/2018 01:26	WG1092116
(S) 4-Bromofluorobenzene	98.2			64.0-132		04/06/2018 01:26	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 23:34	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.8		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0177	J J3	0.0110	0.0551	1	03/31/2018 23:55	WG1092116
Acrylonitrile	U		0.00197	0.0110	1	03/31/2018 23:55	WG1092116
Benzene	U		0.000297	0.00110	1	03/31/2018 23:55	WG1092116
Bromobenzene	U		0.000313	0.00110	1	03/31/2018 23:55	WG1092116
Bromodichloromethane	U		0.000280	0.00110	1	03/31/2018 23:55	WG1092116
Bromochloromethane	U		0.000429	0.00551	1	03/31/2018 23:55	WG1092116
Bromoform	U		0.000467	0.00110	1	03/31/2018 23:55	WG1092116
Bromomethane	U	J3	0.00148	0.00551	1	03/31/2018 23:55	WG1092116
n-Butylbenzene	U	J3	0.000284	0.00110	1	03/31/2018 23:55	WG1092116
sec-Butylbenzene	U	J3	0.000221	0.00110	1	03/31/2018 23:55	WG1092116
tert-Butylbenzene	U	J3	0.000227	0.00110	1	03/31/2018 23:55	WG1092116
Carbon disulfide	0.00270	J3	0.000243	0.00110	1	03/31/2018 23:55	WG1092116
Carbon tetrachloride	U	J3	0.000361	0.00110	1	03/31/2018 23:55	WG1092116
Chlorobenzene	U		0.000233	0.00110	1	03/31/2018 23:55	WG1092116
Chlorodibromomethane	U		0.000411	0.00110	1	03/31/2018 23:55	WG1092116
Chloroethane	U	J3	0.00104	0.00551	1	03/31/2018 23:55	WG1092116
Chloroform	U		0.000252	0.00551	1	03/31/2018 23:55	WG1092116
Chloromethane	U	J3	0.000413	0.00275	1	03/31/2018 23:55	WG1092116
2-Chlorotoluene	U		0.000331	0.00110	1	03/31/2018 23:55	WG1092116
4-Chlorotoluene	U		0.000264	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	03/31/2018 23:55	WG1092116
1,2-Dibromoethane	U		0.000378	0.00110	1	03/31/2018 23:55	WG1092116
Dibromomethane	U		0.000421	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dichlorobenzene	U		0.000336	0.00110	1	03/31/2018 23:55	WG1092116
1,3-Dichlorobenzene	U		0.000263	0.00110	1	03/31/2018 23:55	WG1092116
1,4-Dichlorobenzene	U		0.000249	0.00110	1	03/31/2018 23:55	WG1092116
Dichlorodifluoromethane	U	J3	0.000785	0.00551	1	03/31/2018 23:55	WG1092116
1,1-Dichloroethane	U		0.000219	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dichloroethane	U		0.000292	0.00110	1	03/31/2018 23:55	WG1092116
1,1-Dichloroethene	0.00501	J3	0.000334	0.00110	1	03/31/2018 23:55	WG1092116
cis-1,2-Dichloroethene	6.54		0.259	1.10	1000	04/06/2018 14:58	WG1092116
trans-1,2-Dichloroethene	0.0502	J3	0.000291	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dichloropropane	U		0.000394	0.00110	1	03/31/2018 23:55	WG1092116
1,1-Dichloropropene	U		0.000349	0.00110	1	03/31/2018 23:55	WG1092116
1,3-Dichloropropane	U		0.000228	0.00110	1	03/31/2018 23:55	WG1092116
cis-1,3-Dichloropropene	U		0.000288	0.00110	1	03/31/2018 23:55	WG1092116
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	03/31/2018 23:55	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000857	0.00275	1	03/31/2018 23:55	WG1092116
2,2-Dichloropropane	U	J3	0.000307	0.00110	1	03/31/2018 23:55	WG1092116
Di-isopropyl ether	U		0.000273	0.00110	1	03/31/2018 23:55	WG1092116
Ethylbenzene	U	J3	0.000327	0.00110	1	03/31/2018 23:55	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000377	0.00110	1	03/31/2018 23:55	WG1092116
2-Hexanone	U		0.00151	0.0110	1	03/31/2018 23:55	WG1092116
n-Hexane	U	J3	0.000319	0.0110	1	03/31/2018 23:55	WG1092116
Iodomethane	U	J3	0.00279	0.0110	1	03/31/2018 23:55	WG1092116
Isopropylbenzene	U		0.000268	0.00110	1	03/31/2018 23:55	WG1092116
p-Isopropyltoluene	U	J3	0.000225	0.00110	1	03/31/2018 23:55	WG1092116
2-Butanone (MEK)	U	J3	0.00515	0.0110	1	03/31/2018 23:55	WG1092116
Methylene Chloride	U		0.00110	0.00551	1	03/31/2018 23:55	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	03/31/2018 23:55	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:21

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	03/31/2018 23:55	WG1092116
Naphthalene	U		0.00110	0.00551	1	03/31/2018 23:55	WG1092116
n-Propylbenzene	U		0.000227	0.00110	1	03/31/2018 23:55	WG1092116
Styrene	U		0.000258	0.00110	1	03/31/2018 23:55	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	03/31/2018 23:55	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000402	0.00110	1	03/31/2018 23:55	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000402	0.00110	1	03/31/2018 23:55	WG1092116
Tetrachloroethene	0.0635	J3	0.000304	0.00110	1	03/31/2018 23:55	WG1092116
Toluene	U		0.000478	0.00551	1	03/31/2018 23:55	WG1092116
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	03/31/2018 23:55	WG1092116
1,2,4-Trichlorobenzene	U		0.000427	0.00110	1	03/31/2018 23:55	WG1092116
1,1,1-Trichloroethane	U	J3	0.000315	0.00110	1	03/31/2018 23:55	WG1092116
1,1,2-Trichloroethane	U		0.000305	0.00110	1	03/31/2018 23:55	WG1092116
Trichloroethene	0.0408	J4	0.000307	0.00110	1	03/31/2018 23:55	WG1092116
Trichlorofluoromethane	U	J3	0.000421	0.00551	1	03/31/2018 23:55	WG1092116
1,2,3-Trichloropropane	U		0.000816	0.00275	1	03/31/2018 23:55	WG1092116
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	03/31/2018 23:55	WG1092116
1,2,3-Trimethylbenzene	U		0.000316	0.00110	1	03/31/2018 23:55	WG1092116
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	03/31/2018 23:55	WG1092116
Vinyl acetate	U	J3	0.00263	0.0110	1	03/31/2018 23:55	WG1092116
Vinyl chloride	0.0120	J3	0.000320	0.00110	1	03/31/2018 23:55	WG1092116
Xylenes, Total	U	J3	0.000769	0.00330	1	03/31/2018 23:55	WG1092116
(S) Toluene-d8	105			80.0-120		04/06/2018 14:58	WG1092116
(S) Toluene-d8	98.4			80.0-120		03/31/2018 23:55	WG1092116
(S) Dibromofluoromethane	108			74.0-131		03/31/2018 23:55	WG1092116
(S) Dibromofluoromethane	100			74.0-131		04/06/2018 14:58	WG1092116
(S) 4-Bromofluorobenzene	106			64.0-132		03/31/2018 23:55	WG1092116
(S) 4-Bromofluorobenzene	99.7			64.0-132		04/06/2018 14:58	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0411	J J3	0.0112	0.0558	1	04/01/2018 00:16	WG1092116
Acrylonitrile	U		0.00200	0.0112	1	04/01/2018 00:16	WG1092116
Benzene	U		0.000301	0.00112	1	04/01/2018 00:16	WG1092116
Bromobenzene	U		0.000317	0.00112	1	04/01/2018 00:16	WG1092116
Bromodichloromethane	U		0.000284	0.00112	1	04/01/2018 00:16	WG1092116
Bromochloromethane	U		0.000435	0.00558	1	04/01/2018 00:16	WG1092116
Bromoform	U		0.000473	0.00112	1	04/01/2018 00:16	WG1092116
Bromomethane	U	J3	0.00150	0.00558	1	04/01/2018 00:16	WG1092116
n-Butylbenzene	U	J3	0.000288	0.00112	1	04/01/2018 00:16	WG1092116
sec-Butylbenzene	U	J3	0.000224	0.00112	1	04/01/2018 00:16	WG1092116
tert-Butylbenzene	U	J3	0.000230	0.00112	1	04/01/2018 00:16	WG1092116
Carbon disulfide	0.00140	J3	0.000247	0.00112	1	04/01/2018 00:16	WG1092116
Carbon tetrachloride	U	J3	0.000366	0.00112	1	04/01/2018 00:16	WG1092116
Chlorobenzene	U		0.000237	0.00112	1	04/01/2018 00:16	WG1092116
Chlorodibromomethane	U		0.000416	0.00112	1	04/01/2018 00:16	WG1092116
Chloroethane	U	J3	0.00106	0.00558	1	04/01/2018 00:16	WG1092116
Chloroform	U		0.000256	0.00558	1	04/01/2018 00:16	WG1092116
Chloromethane	U	J3	0.000419	0.00279	1	04/01/2018 00:16	WG1092116
2-Chlorotoluene	U		0.000336	0.00112	1	04/01/2018 00:16	WG1092116
4-Chlorotoluene	U		0.000268	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00558	1	04/01/2018 00:16	WG1092116
1,2-Dibromoethane	U		0.000383	0.00112	1	04/01/2018 00:16	WG1092116
Dibromomethane	U		0.000426	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dichlorobenzene	U		0.000340	0.00112	1	04/01/2018 00:16	WG1092116
1,3-Dichlorobenzene	U		0.000267	0.00112	1	04/01/2018 00:16	WG1092116
1,4-Dichlorobenzene	U		0.000252	0.00112	1	04/01/2018 00:16	WG1092116
Dichlorodifluoromethane	U	J3	0.000796	0.00558	1	04/01/2018 00:16	WG1092116
1,1-Dichloroethane	U		0.000222	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dichloroethane	U		0.000296	0.00112	1	04/01/2018 00:16	WG1092116
1,1-Dichloroethene	0.00703	J3	0.000338	0.00112	1	04/01/2018 00:16	WG1092116
cis-1,2-Dichloroethene	4.83		0.0525	0.223	200	04/06/2018 14:00	WG1092116
trans-1,2-Dichloroethene	0.0297	J3	0.000295	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dichloropropane	U		0.000400	0.00112	1	04/01/2018 00:16	WG1092116
1,1-Dichloropropene	U		0.000354	0.00112	1	04/01/2018 00:16	WG1092116
1,3-Dichloropropane	U		0.000231	0.00112	1	04/01/2018 00:16	WG1092116
cis-1,3-Dichloropropene	U		0.000292	0.00112	1	04/01/2018 00:16	WG1092116
trans-1,3-Dichloropropene	U		0.000298	0.00112	1	04/01/2018 00:16	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000869	0.00279	1	04/01/2018 00:16	WG1092116
2,2-Dichloropropane	U	J3	0.000311	0.00112	1	04/01/2018 00:16	WG1092116
Di-isopropyl ether	U		0.000277	0.00112	1	04/01/2018 00:16	WG1092116
Ethylbenzene	U	J3	0.000332	0.00112	1	04/01/2018 00:16	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000382	0.00112	1	04/01/2018 00:16	WG1092116
2-Hexanone	U		0.00153	0.0112	1	04/01/2018 00:16	WG1092116
n-Hexane	U	J3	0.000324	0.0112	1	04/01/2018 00:16	WG1092116
Iodomethane	U	J3	0.00282	0.0112	1	04/01/2018 00:16	WG1092116
Isopropylbenzene	U		0.000271	0.00112	1	04/01/2018 00:16	WG1092116
p-Isopropyltoluene	U	J3	0.000228	0.00112	1	04/01/2018 00:16	WG1092116
2-Butanone (MEK)	U	J3	0.00522	0.0112	1	04/01/2018 00:16	WG1092116
Methylene Chloride	U		0.00112	0.00558	1	04/01/2018 00:16	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	04/01/2018 00:16	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:32

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/01/2018 00:16	WG1092116
Naphthalene	U		0.00112	0.00558	1	04/01/2018 00:16	WG1092116
n-Propylbenzene	U		0.000230	0.00112	1	04/01/2018 00:16	WG1092116
Styrene	U		0.000261	0.00112	1	04/01/2018 00:16	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/01/2018 00:16	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000407	0.00112	1	04/01/2018 00:16	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000407	0.00112	1	04/01/2018 00:16	WG1092116
Tetrachloroethene	5.05	J3	0.0616	0.223	200	04/06/2018 14:00	WG1092116
Toluene	U		0.000485	0.00558	1	04/01/2018 00:16	WG1092116
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/01/2018 00:16	WG1092116
1,2,4-Trichlorobenzene	U		0.000433	0.00112	1	04/01/2018 00:16	WG1092116
1,1,1-Trichloroethane	U	J3	0.000319	0.00112	1	04/01/2018 00:16	WG1092116
1,1,2-Trichloroethane	U		0.000309	0.00112	1	04/01/2018 00:16	WG1092116
Trichloroethene	0.127	J4	0.000311	0.00112	1	04/01/2018 00:16	WG1092116
Trichlorofluoromethane	U	J3	0.000426	0.00558	1	04/01/2018 00:16	WG1092116
1,2,3-Trichloropropane	U		0.000827	0.00279	1	04/01/2018 00:16	WG1092116
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/01/2018 00:16	WG1092116
1,2,3-Trimethylbenzene	U		0.000320	0.00112	1	04/01/2018 00:16	WG1092116
1,3,5-Trimethylbenzene	U		0.000297	0.00112	1	04/01/2018 00:16	WG1092116
Vinyl acetate	U	J3	0.00267	0.0112	1	04/01/2018 00:16	WG1092116
Vinyl chloride	0.0104	J3	0.000325	0.00112	1	04/01/2018 00:16	WG1092116
Xylenes, Total	U	J3	0.000779	0.00335	1	04/01/2018 00:16	WG1092116
(S) Toluene-d8	98.2			80.0-120		04/01/2018 00:16	WG1092116
(S) Toluene-d8	87.0			80.0-120		04/06/2018 14:00	WG1092116
(S) Dibromofluoromethane	99.8			74.0-131		04/06/2018 14:00	WG1092116
(S) Dibromofluoromethane	107			74.0-131		04/01/2018 00:16	WG1092116
(S) 4-Bromofluorobenzene	98.7			64.0-132		04/06/2018 14:00	WG1092116
(S) 4-Bromofluorobenzene	103			64.0-132		04/01/2018 00:16	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0220	J J3	0.0113	0.0567	1	04/01/2018 00:37	WG1092116
Acrylonitrile	U		0.00203	0.0113	1	04/01/2018 00:37	WG1092116
Benzene	0.00184		0.000306	0.00113	1	04/01/2018 00:37	WG1092116
Bromobenzene	U		0.000322	0.00113	1	04/01/2018 00:37	WG1092116
Bromodichloromethane	U		0.000288	0.00113	1	04/01/2018 00:37	WG1092116
Bromochloromethane	U		0.000442	0.00567	1	04/01/2018 00:37	WG1092116
Bromoform	U		0.000481	0.00113	1	04/01/2018 00:37	WG1092116
Bromomethane	U	J3	0.00152	0.00567	1	04/01/2018 00:37	WG1092116
n-Butylbenzene	U	J3	0.000293	0.00113	1	04/01/2018 00:37	WG1092116
sec-Butylbenzene	U	J3	0.000228	0.00113	1	04/01/2018 00:37	WG1092116
tert-Butylbenzene	U	J3	0.000234	0.00113	1	04/01/2018 00:37	WG1092116
Carbon disulfide	0.00144	J3	0.000251	0.00113	1	04/01/2018 00:37	WG1092116
Carbon tetrachloride	U	J3	0.000372	0.00113	1	04/01/2018 00:37	WG1092116
Chlorobenzene	U		0.000240	0.00113	1	04/01/2018 00:37	WG1092116
Chlorodibromomethane	U		0.000423	0.00113	1	04/01/2018 00:37	WG1092116
Chloroethane	U	J3	0.00107	0.00567	1	04/01/2018 00:37	WG1092116
Chloroform	U		0.000260	0.00567	1	04/01/2018 00:37	WG1092116
Chloromethane	U	J3	0.000425	0.00283	1	04/01/2018 00:37	WG1092116
2-Chlorotoluene	U		0.000341	0.00113	1	04/01/2018 00:37	WG1092116
4-Chlorotoluene	U		0.000272	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00567	1	04/01/2018 00:37	WG1092116
1,2-Dibromoethane	U		0.000389	0.00113	1	04/01/2018 00:37	WG1092116
Dibromomethane	U		0.000433	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dichlorobenzene	U		0.000346	0.00113	1	04/01/2018 00:37	WG1092116
1,3-Dichlorobenzene	U		0.000271	0.00113	1	04/01/2018 00:37	WG1092116
1,4-Dichlorobenzene	U		0.000256	0.00113	1	04/01/2018 00:37	WG1092116
Dichlorodifluoromethane	U	J3	0.000808	0.00567	1	04/01/2018 00:37	WG1092116
1,1-Dichloroethane	U		0.000226	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dichloroethane	U		0.000300	0.00113	1	04/01/2018 00:37	WG1092116
1,1-Dichloroethene	0.00576	J3	0.000344	0.00113	1	04/01/2018 00:37	WG1092116
cis-1,2-Dichloroethene	0.918		0.0151	0.0641	56.5	04/06/2018 02:30	WG1092116
trans-1,2-Dichloroethene	0.0169	J3	0.000299	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dichloropropane	U		0.000406	0.00113	1	04/01/2018 00:37	WG1092116
1,1-Dichloropropene	U		0.000359	0.00113	1	04/01/2018 00:37	WG1092116
1,3-Dichloropropane	U		0.000235	0.00113	1	04/01/2018 00:37	WG1092116
cis-1,3-Dichloropropene	U		0.000297	0.00113	1	04/01/2018 00:37	WG1092116
trans-1,3-Dichloropropene	U		0.000303	0.00113	1	04/01/2018 00:37	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000882	0.00283	1	04/01/2018 00:37	WG1092116
2,2-Dichloropropane	U	J3	0.000316	0.00113	1	04/01/2018 00:37	WG1092116
Di-isopropyl ether	U		0.000281	0.00113	1	04/01/2018 00:37	WG1092116
Ethylbenzene	U	J3	0.000337	0.00113	1	04/01/2018 00:37	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000388	0.00113	1	04/01/2018 00:37	WG1092116
2-Hexanone	U		0.00155	0.0113	1	04/01/2018 00:37	WG1092116
n-Hexane	U	J3	0.000329	0.0113	1	04/01/2018 00:37	WG1092116
Iodomethane	U	J3	0.00287	0.0113	1	04/01/2018 00:37	WG1092116
Isopropylbenzene	U		0.000275	0.00113	1	04/01/2018 00:37	WG1092116
p-Isopropyltoluene	U	J3	0.000231	0.00113	1	04/01/2018 00:37	WG1092116
2-Butanone (MEK)	0.00655	J J3	0.00531	0.0113	1	04/01/2018 00:37	WG1092116
Methylene Chloride	U		0.00113	0.00567	1	04/01/2018 00:37	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	04/01/2018 00:37	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:51

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/01/2018 00:37	WG1092116
Naphthalene	U		0.00113	0.00567	1	04/01/2018 00:37	WG1092116
n-Propylbenzene	U		0.000234	0.00113	1	04/01/2018 00:37	WG1092116
Styrene	U		0.000265	0.00113	1	04/01/2018 00:37	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/01/2018 00:37	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/01/2018 00:37	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000414	0.00113	1	04/01/2018 00:37	WG1092116
Tetrachloroethene	0.504	J3	0.0177	0.0641	56.5	04/06/2018 02:30	WG1092116
Toluene	0.000670	J	0.000492	0.00567	1	04/01/2018 00:37	WG1092116
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	04/01/2018 00:37	WG1092116
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	04/01/2018 00:37	WG1092116
1,1,1-Trichloroethane	U	J3	0.000324	0.00113	1	04/01/2018 00:37	WG1092116
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/01/2018 00:37	WG1092116
Trichloroethene	0.0970	J4	0.000316	0.00113	1	04/01/2018 00:37	WG1092116
Trichlorofluoromethane	U	J3	0.000433	0.00567	1	04/01/2018 00:37	WG1092116
1,2,3-Trichloropropane	U		0.000840	0.00283	1	04/01/2018 00:37	WG1092116
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/01/2018 00:37	WG1092116
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/01/2018 00:37	WG1092116
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	04/01/2018 00:37	WG1092116
Vinyl acetate	U	J3	0.00271	0.0113	1	04/01/2018 00:37	WG1092116
Vinyl chloride	0.0244	J3	0.000330	0.00113	1	04/01/2018 00:37	WG1092116
Xylenes, Total	U	J3	0.000791	0.00340	1	04/01/2018 00:37	WG1092116
(S) Toluene-d8	100			80.0-120		04/01/2018 00:37	WG1092116
(S) Toluene-d8	103			80.0-120		04/06/2018 02:30	WG1092116
(S) Dibromofluoromethane	93.8			74.0-131		04/06/2018 02:30	WG1092116
(S) Dibromofluoromethane	104			74.0-131		04/01/2018 00:37	WG1092116
(S) 4-Bromofluorobenzene	96.7			64.0-132		04/06/2018 02:30	WG1092116
(S) 4-Bromofluorobenzene	109			64.0-132		04/01/2018 00:37	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.1		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0157	J J3	0.0109	0.0543	1	04/01/2018 00:58	WG1092116
Acrylonitrile	U		0.00194	0.0109	1	04/01/2018 00:58	WG1092116
Benzene	U		0.000293	0.00109	1	04/01/2018 00:58	WG1092116
Bromobenzene	U		0.000308	0.00109	1	04/01/2018 00:58	WG1092116
Bromodichloromethane	U		0.000276	0.00109	1	04/01/2018 00:58	WG1092116
Bromochloromethane	U		0.000423	0.00543	1	04/01/2018 00:58	WG1092116
Bromoform	U		0.000460	0.00109	1	04/01/2018 00:58	WG1092116
Bromomethane	U	J3	0.00145	0.00543	1	04/01/2018 00:58	WG1092116
n-Butylbenzene	U	J3	0.000280	0.00109	1	04/01/2018 00:58	WG1092116
sec-Butylbenzene	U	J3	0.000218	0.00109	1	04/01/2018 00:58	WG1092116
tert-Butylbenzene	U	J3	0.000224	0.00109	1	04/01/2018 00:58	WG1092116
Carbon disulfide	0.00118	J3	0.000240	0.00109	1	04/01/2018 00:58	WG1092116
Carbon tetrachloride	U	J3	0.000356	0.00109	1	04/01/2018 00:58	WG1092116
Chlorobenzene	U		0.000230	0.00109	1	04/01/2018 00:58	WG1092116
Chlorodibromomethane	U		0.000405	0.00109	1	04/01/2018 00:58	WG1092116
Chloroethane	U	J3	0.00103	0.00543	1	04/01/2018 00:58	WG1092116
Chloroform	U		0.000249	0.00543	1	04/01/2018 00:58	WG1092116
Chloromethane	U	J3	0.000407	0.00271	1	04/01/2018 00:58	WG1092116
2-Chlorotoluene	U		0.000327	0.00109	1	04/01/2018 00:58	WG1092116
4-Chlorotoluene	U		0.000261	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00543	1	04/01/2018 00:58	WG1092116
1,2-Dibromoethane	U		0.000372	0.00109	1	04/01/2018 00:58	WG1092116
Dibromomethane	U		0.000415	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dichlorobenzene	U		0.000331	0.00109	1	04/01/2018 00:58	WG1092116
1,3-Dichlorobenzene	U		0.000259	0.00109	1	04/01/2018 00:58	WG1092116
1,4-Dichlorobenzene	U		0.000245	0.00109	1	04/01/2018 00:58	WG1092116
Dichlorodifluoromethane	U	J3	0.000774	0.00543	1	04/01/2018 00:58	WG1092116
1,1-Dichloroethane	U		0.000216	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dichloroethane	U		0.000288	0.00109	1	04/01/2018 00:58	WG1092116
1,1-Dichloroethene	0.0119	J3	0.000329	0.00109	1	04/01/2018 00:58	WG1092116
cis-1,2-Dichloroethene	6.08		0.255	1.09	1000	04/06/2018 14:39	WG1092116
trans-1,2-Dichloroethene	0.0240	J3	0.000287	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dichloropropane	U		0.000389	0.00109	1	04/01/2018 00:58	WG1092116
1,1-Dichloropropene	U		0.000344	0.00109	1	04/01/2018 00:58	WG1092116
1,3-Dichloropropane	U		0.000225	0.00109	1	04/01/2018 00:58	WG1092116
cis-1,3-Dichloropropene	U		0.000284	0.00109	1	04/01/2018 00:58	WG1092116
trans-1,3-Dichloropropene	U		0.000290	0.00109	1	04/01/2018 00:58	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000845	0.00271	1	04/01/2018 00:58	WG1092116
2,2-Dichloropropane	U	J3	0.000303	0.00109	1	04/01/2018 00:58	WG1092116
Di-isopropyl ether	U		0.000269	0.00109	1	04/01/2018 00:58	WG1092116
Ethylbenzene	U	J3	0.000322	0.00109	1	04/01/2018 00:58	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000371	0.00109	1	04/01/2018 00:58	WG1092116
2-Hexanone	U		0.00149	0.0109	1	04/01/2018 00:58	WG1092116
n-Hexane	U	J3	0.000315	0.0109	1	04/01/2018 00:58	WG1092116
Iodomethane	U	J3	0.00275	0.0109	1	04/01/2018 00:58	WG1092116
Isopropylbenzene	U		0.000264	0.00109	1	04/01/2018 00:58	WG1092116
p-Isopropyltoluene	U	J3	0.000221	0.00109	1	04/01/2018 00:58	WG1092116
2-Butanone (MEK)	U	J3	0.00508	0.0109	1	04/01/2018 00:58	WG1092116
Methylene Chloride	U		0.00109	0.00543	1	04/01/2018 00:58	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0109	1	04/01/2018 00:58	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 12:50

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00109	1	04/01/2018 00:58	WG1092116
Naphthalene	U		0.00109	0.00543	1	04/01/2018 00:58	WG1092116
n-Propylbenzene	U		0.000224	0.00109	1	04/01/2018 00:58	WG1092116
Styrene	U		0.000254	0.00109	1	04/01/2018 00:58	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/01/2018 00:58	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000396	0.00109	1	04/01/2018 00:58	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000396	0.00109	1	04/01/2018 00:58	WG1092116
Tetrachloroethene	0.0620	J3	0.000300	0.00109	1	04/01/2018 00:58	WG1092116
Toluene	U		0.000471	0.00543	1	04/01/2018 00:58	WG1092116
1,2,3-Trichlorobenzene	U		0.000332	0.00109	1	04/01/2018 00:58	WG1092116
1,2,4-Trichlorobenzene	U		0.000421	0.00109	1	04/01/2018 00:58	WG1092116
1,1,1-Trichloroethane	U	J3	0.000310	0.00109	1	04/01/2018 00:58	WG1092116
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/01/2018 00:58	WG1092116
Trichloroethene	0.0320	J4	0.000303	0.00109	1	04/01/2018 00:58	WG1092116
Trichlorofluoromethane	U	J3	0.000415	0.00543	1	04/01/2018 00:58	WG1092116
1,2,3-Trichloropropane	U		0.000804	0.00271	1	04/01/2018 00:58	WG1092116
1,2,4-Trimethylbenzene	U		0.000229	0.00109	1	04/01/2018 00:58	WG1092116
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/01/2018 00:58	WG1092116
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/01/2018 00:58	WG1092116
Vinyl acetate	U	J3	0.00259	0.0109	1	04/01/2018 00:58	WG1092116
Vinyl chloride	0.00878	J3	0.000316	0.00109	1	04/01/2018 00:58	WG1092116
Xylenes, Total	U	J3	0.000758	0.00326	1	04/01/2018 00:58	WG1092116
(S) Toluene-d8	101			80.0-120		04/06/2018 14:39	WG1092116
(S) Toluene-d8	100			80.0-120		04/01/2018 00:58	WG1092116
(S) Dibromofluoromethane	107			74.0-131		04/06/2018 14:39	WG1092116
(S) Dibromofluoromethane	108			74.0-131		04/01/2018 00:58	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		04/01/2018 00:58	WG1092116
(S) 4-Bromofluorobenzene	96.0			64.0-132		04/06/2018 14:39	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.2		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0128	J	0.0115	0.0573	1	04/02/2018 01:40	WG1092315
Acrylonitrile	U		0.00205	0.0115	1	04/02/2018 01:40	WG1092315
Benzene	U		0.000310	0.00115	1	04/02/2018 01:40	WG1092315
Bromobenzene	U		0.000326	0.00115	1	04/02/2018 01:40	WG1092315
Bromodichloromethane	U		0.000291	0.00115	1	04/02/2018 01:40	WG1092315
Bromochloromethane	U		0.000447	0.00573	1	04/02/2018 01:40	WG1092315
Bromoform	U		0.000486	0.00115	1	04/02/2018 01:40	WG1092315
Bromomethane	U		0.00154	0.00573	1	04/02/2018 01:40	WG1092315
n-Butylbenzene	U		0.000296	0.00115	1	04/02/2018 01:40	WG1092315
sec-Butylbenzene	U		0.000231	0.00115	1	04/02/2018 01:40	WG1092315
tert-Butylbenzene	U		0.000236	0.00115	1	04/02/2018 01:40	WG1092315
Carbon disulfide	0.000969	J	0.000253	0.00115	1	04/02/2018 01:40	WG1092315
Carbon tetrachloride	U		0.000376	0.00115	1	04/02/2018 01:40	WG1092315
Chlorobenzene	U		0.000243	0.00115	1	04/02/2018 01:40	WG1092315
Chlorodibromomethane	U		0.000428	0.00115	1	04/02/2018 01:40	WG1092315
Chloroethane	U		0.00108	0.00573	1	04/02/2018 01:40	WG1092315
Chloroform	U		0.000263	0.00573	1	04/02/2018 01:40	WG1092315
Chloromethane	U		0.000430	0.00287	1	04/02/2018 01:40	WG1092315
2-Chlorotoluene	U		0.000345	0.00115	1	04/02/2018 01:40	WG1092315
4-Chlorotoluene	U		0.000275	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00573	1	04/02/2018 01:40	WG1092315
1,2-Dibromoethane	U		0.000393	0.00115	1	04/02/2018 01:40	WG1092315
Dibromomethane	U		0.000438	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dichlorobenzene	U		0.000350	0.00115	1	04/02/2018 01:40	WG1092315
1,3-Dichlorobenzene	U		0.000274	0.00115	1	04/02/2018 01:40	WG1092315
1,4-Dichlorobenzene	U		0.000259	0.00115	1	04/02/2018 01:40	WG1092315
Dichlorodifluoromethane	U		0.000818	0.00573	1	04/02/2018 01:40	WG1092315
1,1-Dichloroethane	U		0.000228	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dichloroethane	U		0.000304	0.00115	1	04/02/2018 01:40	WG1092315
1,1-Dichloroethene	0.00664		0.000348	0.00115	1	04/02/2018 01:40	WG1092315
cis-1,2-Dichloroethene	5.77		0.0135	0.0573	50	04/06/2018 04:15	WG1092315
trans-1,2-Dichloroethene	0.00337		0.000303	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dichloropropane	U		0.000411	0.00115	1	04/02/2018 01:40	WG1092315
1,1-Dichloropropene	U		0.000364	0.00115	1	04/02/2018 01:40	WG1092315
1,3-Dichloropropane	U		0.000237	0.00115	1	04/02/2018 01:40	WG1092315
cis-1,3-Dichloropropene	U		0.000300	0.00115	1	04/02/2018 01:40	WG1092315
trans-1,3-Dichloropropene	U		0.000306	0.00115	1	04/02/2018 01:40	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000892	0.00287	1	04/02/2018 01:40	WG1092315
2,2-Dichloropropane	U		0.000320	0.00115	1	04/02/2018 01:40	WG1092315
Di-isopropyl ether	U		0.000284	0.00115	1	04/02/2018 01:40	WG1092315
Ethylbenzene	U		0.000341	0.00115	1	04/02/2018 01:40	WG1092315
Hexachloro-1,3-butadiene	U		0.000392	0.00115	1	04/02/2018 01:40	WG1092315
2-Hexanone	U		0.00157	0.0115	1	04/02/2018 01:40	WG1092315
n-Hexane	0.000507	B J	0.000333	0.0115	1	04/02/2018 01:40	WG1092315
Iodomethane	U		0.00290	0.0115	1	04/02/2018 01:40	WG1092315
Isopropylbenzene	U		0.000279	0.00115	1	04/02/2018 01:40	WG1092315
p-Isopropyltoluene	U		0.000234	0.00115	1	04/02/2018 01:40	WG1092315
2-Butanone (MEK)	U		0.00537	0.0115	1	04/02/2018 01:40	WG1092315
Methylene Chloride	U		0.00115	0.00573	1	04/02/2018 01:40	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	04/02/2018 01:40	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 13:05

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	04/02/2018 01:40	WG1092315
Naphthalene	U		0.00115	0.00573	1	04/02/2018 01:40	WG1092315
n-Propylbenzene	U		0.000236	0.00115	1	04/02/2018 01:40	WG1092315
Styrene	U		0.000268	0.00115	1	04/02/2018 01:40	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000303	0.00115	1	04/02/2018 01:40	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	04/02/2018 01:40	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000419	0.00115	1	04/02/2018 01:40	WG1092315
Tetrachloroethene	0.00375		0.000317	0.00115	1	04/02/2018 01:40	WG1092315
Toluene	U		0.000498	0.00573	1	04/02/2018 01:40	WG1092315
1,2,3-Trichlorobenzene	U		0.000351	0.00115	1	04/02/2018 01:40	WG1092315
1,2,4-Trichlorobenzene	U		0.000445	0.00115	1	04/02/2018 01:40	WG1092315
1,1,1-Trichloroethane	U		0.000328	0.00115	1	04/02/2018 01:40	WG1092315
1,1,2-Trichloroethane	U		0.000318	0.00115	1	04/02/2018 01:40	WG1092315
Trichloroethene	0.00183		0.000320	0.00115	1	04/02/2018 01:40	WG1092315
Trichlorofluoromethane	U		0.000438	0.00573	1	04/02/2018 01:40	WG1092315
1,2,3-Trichloropropane	U		0.000850	0.00287	1	04/02/2018 01:40	WG1092315
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/02/2018 01:40	WG1092315
1,2,3-Trimethylbenzene	U		0.000329	0.00115	1	04/02/2018 01:40	WG1092315
1,3,5-Trimethylbenzene	U		0.000305	0.00115	1	04/02/2018 01:40	WG1092315
Vinyl acetate	U		0.00274	0.0115	1	04/02/2018 01:40	WG1092315
Vinyl chloride	0.0252		0.000334	0.00115	1	04/02/2018 01:40	WG1092315
Xylenes, Total	U		0.000801	0.00344	1	04/02/2018 01:40	WG1092315
(S) Toluene-d8	103			80.0-120		04/02/2018 01:40	WG1092315
(S) Toluene-d8	106			80.0-120		04/06/2018 04:15	WG1092315
(S) Dibromofluoromethane	91.5			74.0-131		04/06/2018 04:15	WG1092315
(S) Dibromofluoromethane	99.9			74.0-131		04/02/2018 01:40	WG1092315
(S) 4-Bromofluorobenzene	102			64.0-132		04/02/2018 01:40	WG1092315
(S) 4-Bromofluorobenzene	96.7			64.0-132		04/06/2018 04:15	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.0		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0116	0.0581	1	04/02/2018 02:01	WG1092315
Acrylonitrile	U		0.00208	0.0116	1	04/02/2018 02:01	WG1092315
Benzene	U		0.000314	0.00116	1	04/02/2018 02:01	WG1092315
Bromobenzene	U		0.000330	0.00116	1	04/02/2018 02:01	WG1092315
Bromodichloromethane	U		0.000295	0.00116	1	04/02/2018 02:01	WG1092315
Bromochloromethane	U		0.000453	0.00581	1	04/02/2018 02:01	WG1092315
Bromoform	U		0.000493	0.00116	1	04/02/2018 02:01	WG1092315
Bromomethane	U		0.00156	0.00581	1	04/02/2018 02:01	WG1092315
n-Butylbenzene	U		0.000300	0.00116	1	04/02/2018 02:01	WG1092315
sec-Butylbenzene	U		0.000234	0.00116	1	04/02/2018 02:01	WG1092315
tert-Butylbenzene	U		0.000239	0.00116	1	04/02/2018 02:01	WG1092315
Carbon disulfide	U		0.000257	0.00116	1	04/02/2018 02:01	WG1092315
Carbon tetrachloride	U		0.000381	0.00116	1	04/02/2018 02:01	WG1092315
Chlorobenzene	U		0.000246	0.00116	1	04/02/2018 02:01	WG1092315
Chlorodibromomethane	U		0.000434	0.00116	1	04/02/2018 02:01	WG1092315
Chloroethane	U		0.00110	0.00581	1	04/02/2018 02:01	WG1092315
Chloroform	U		0.000266	0.00581	1	04/02/2018 02:01	WG1092315
Chloromethane	U		0.000436	0.00291	1	04/02/2018 02:01	WG1092315
2-Chlorotoluene	U		0.000350	0.00116	1	04/02/2018 02:01	WG1092315
4-Chlorotoluene	U		0.000279	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00581	1	04/02/2018 02:01	WG1092315
1,2-Dibromoethane	U		0.000399	0.00116	1	04/02/2018 02:01	WG1092315
Dibromomethane	U		0.000444	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dichlorobenzene	U		0.000355	0.00116	1	04/02/2018 02:01	WG1092315
1,3-Dichlorobenzene	U		0.000278	0.00116	1	04/02/2018 02:01	WG1092315
1,4-Dichlorobenzene	U		0.000263	0.00116	1	04/02/2018 02:01	WG1092315
Dichlorodifluoromethane	U		0.000829	0.00581	1	04/02/2018 02:01	WG1092315
1,1-Dichloroethane	U		0.000231	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dichloroethane	U		0.000308	0.00116	1	04/02/2018 02:01	WG1092315
1,1-Dichloroethene	U		0.000352	0.00116	1	04/02/2018 02:01	WG1092315
cis-1,2-Dichloroethene	0.0188		0.000273	0.00116	1	04/06/2018 04:37	WG1092315
trans-1,2-Dichloroethene	0.000314	J	0.000307	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dichloropropane	U		0.000416	0.00116	1	04/02/2018 02:01	WG1092315
1,1-Dichloropropene	U		0.000369	0.00116	1	04/02/2018 02:01	WG1092315
1,3-Dichloropropane	U		0.000241	0.00116	1	04/02/2018 02:01	WG1092315
cis-1,3-Dichloropropene	U		0.000305	0.00116	1	04/02/2018 02:01	WG1092315
trans-1,3-Dichloropropene	U		0.000310	0.00116	1	04/02/2018 02:01	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000904	0.00291	1	04/02/2018 02:01	WG1092315
2,2-Dichloropropane	U		0.000324	0.00116	1	04/02/2018 02:01	WG1092315
Di-isopropyl ether	U		0.000288	0.00116	1	04/02/2018 02:01	WG1092315
Ethylbenzene	U		0.000345	0.00116	1	04/02/2018 02:01	WG1092315
Hexachloro-1,3-butadiene	U		0.000398	0.00116	1	04/02/2018 02:01	WG1092315
2-Hexanone	U		0.00159	0.0116	1	04/02/2018 02:01	WG1092315
n-Hexane	0.000649	B J	0.000337	0.0116	1	04/02/2018 02:01	WG1092315
Iodomethane	U		0.00294	0.0116	1	04/02/2018 02:01	WG1092315
Isopropylbenzene	U		0.000282	0.00116	1	04/02/2018 02:01	WG1092315
p-Isopropyltoluene	U		0.000237	0.00116	1	04/02/2018 02:01	WG1092315
2-Butanone (MEK)	U		0.00544	0.0116	1	04/02/2018 02:01	WG1092315
Methylene Chloride	U		0.00116	0.00581	1	04/02/2018 02:01	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00219	0.0116	1	04/02/2018 02:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 13:13

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/02/2018 02:01	WG1092315
Naphthalene	U		0.00116	0.00581	1	04/02/2018 02:01	WG1092315
n-Propylbenzene	U		0.000239	0.00116	1	04/02/2018 02:01	WG1092315
Styrene	U		0.000272	0.00116	1	04/02/2018 02:01	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000307	0.00116	1	04/02/2018 02:01	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000424	0.00116	1	04/02/2018 02:01	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000424	0.00116	1	04/02/2018 02:01	WG1092315
Tetrachloroethene	0.00219		0.000321	0.00116	1	04/02/2018 02:01	WG1092315
Toluene	U		0.000505	0.00581	1	04/02/2018 02:01	WG1092315
1,2,3-Trichlorobenzene	U		0.000356	0.00116	1	04/02/2018 02:01	WG1092315
1,2,4-Trichlorobenzene	U		0.000451	0.00116	1	04/02/2018 02:01	WG1092315
1,1,1-Trichloroethane	U		0.000332	0.00116	1	04/02/2018 02:01	WG1092315
1,1,2-Trichloroethane	U		0.000322	0.00116	1	04/02/2018 02:01	WG1092315
Trichloroethene	0.000678	J	0.000324	0.00116	1	04/02/2018 02:01	WG1092315
Trichlorofluoromethane	U		0.000444	0.00581	1	04/02/2018 02:01	WG1092315
1,2,3-Trichloropropane	U		0.000861	0.00291	1	04/02/2018 02:01	WG1092315
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	04/02/2018 02:01	WG1092315
1,2,3-Trimethylbenzene	U		0.000334	0.00116	1	04/02/2018 02:01	WG1092315
1,3,5-Trimethylbenzene	U		0.000309	0.00116	1	04/02/2018 02:01	WG1092315
Vinyl acetate	U		0.00278	0.0116	1	04/02/2018 02:01	WG1092315
Vinyl chloride	0.00399		0.000338	0.00116	1	04/02/2018 02:01	WG1092315
Xylenes, Total	U		0.000811	0.00349	1	04/02/2018 02:01	WG1092315
(S) Toluene-d8	104			80.0-120		04/02/2018 02:01	WG1092315
(S) Toluene-d8	101			80.0-120		04/06/2018 04:37	WG1092315
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 02:01	WG1092315
(S) Dibromofluoromethane	100			74.0-131		04/06/2018 04:37	WG1092315
(S) 4-Bromofluorobenzene	97.4			64.0-132		04/06/2018 04:37	WG1092315
(S) 4-Bromofluorobenzene	103			64.0-132		04/02/2018 02:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0151	J	0.0109	0.0544	1	04/02/2018 02:22	WG1092315
Acrylonitrile	U		0.00195	0.0109	1	04/02/2018 02:22	WG1092315
Benzene	U		0.000294	0.00109	1	04/02/2018 02:22	WG1092315
Bromobenzene	U		0.000309	0.00109	1	04/02/2018 02:22	WG1092315
Bromodichloromethane	U		0.000277	0.00109	1	04/02/2018 02:22	WG1092315
Bromochloromethane	U		0.000425	0.00544	1	04/02/2018 02:22	WG1092315
Bromoform	U		0.000462	0.00109	1	04/02/2018 02:22	WG1092315
Bromomethane	U		0.00146	0.00544	1	04/02/2018 02:22	WG1092315
n-Butylbenzene	U		0.000281	0.00109	1	04/02/2018 02:22	WG1092315
sec-Butylbenzene	U		0.000219	0.00109	1	04/02/2018 02:22	WG1092315
tert-Butylbenzene	U		0.000224	0.00109	1	04/02/2018 02:22	WG1092315
Carbon disulfide	0.000931	J	0.000241	0.00109	1	04/02/2018 02:22	WG1092315
Carbon tetrachloride	U		0.000357	0.00109	1	04/02/2018 02:22	WG1092315
Chlorobenzene	U		0.000231	0.00109	1	04/02/2018 02:22	WG1092315
Chlorodibromomethane	U		0.000406	0.00109	1	04/02/2018 02:22	WG1092315
Chloroethane	U		0.00103	0.00544	1	04/02/2018 02:22	WG1092315
Chloroform	U		0.000249	0.00544	1	04/02/2018 02:22	WG1092315
Chloromethane	U		0.000408	0.00272	1	04/02/2018 02:22	WG1092315
2-Chlorotoluene	U		0.000328	0.00109	1	04/02/2018 02:22	WG1092315
4-Chlorotoluene	U		0.000261	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00544	1	04/02/2018 02:22	WG1092315
1,2-Dibromoethane	U		0.000373	0.00109	1	04/02/2018 02:22	WG1092315
Dibromomethane	U		0.000416	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dichlorobenzene	U		0.000332	0.00109	1	04/02/2018 02:22	WG1092315
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/02/2018 02:22	WG1092315
1,4-Dichlorobenzene	U		0.000246	0.00109	1	04/02/2018 02:22	WG1092315
Dichlorodifluoromethane	U		0.000776	0.00544	1	04/02/2018 02:22	WG1092315
1,1-Dichloroethane	U		0.000217	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dichloroethane	U		0.000288	0.00109	1	04/02/2018 02:22	WG1092315
1,1-Dichloroethene	0.0143		0.000330	0.00109	1	04/02/2018 02:22	WG1092315
cis-1,2-Dichloroethene	6.39		0.0512	0.218	200	04/06/2018 04:58	WG1092315
trans-1,2-Dichloroethene	0.0209		0.000287	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dichloropropane	U		0.000390	0.00109	1	04/02/2018 02:22	WG1092315
1,1-Dichloropropene	U		0.000345	0.00109	1	04/02/2018 02:22	WG1092315
1,3-Dichloropropane	U		0.000225	0.00109	1	04/02/2018 02:22	WG1092315
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/02/2018 02:22	WG1092315
trans-1,3-Dichloropropene	U		0.000291	0.00109	1	04/02/2018 02:22	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000847	0.00272	1	04/02/2018 02:22	WG1092315
2,2-Dichloropropane	U		0.000304	0.00109	1	04/02/2018 02:22	WG1092315
Di-isopropyl ether	U		0.000270	0.00109	1	04/02/2018 02:22	WG1092315
Ethylbenzene	U		0.000323	0.00109	1	04/02/2018 02:22	WG1092315
Hexachloro-1,3-butadiene	U		0.000372	0.00109	1	04/02/2018 02:22	WG1092315
2-Hexanone	U		0.00149	0.0109	1	04/02/2018 02:22	WG1092315
n-Hexane	0.00100	B, J	0.000316	0.0109	1	04/02/2018 02:22	WG1092315
Iodomethane	U		0.00275	0.0109	1	04/02/2018 02:22	WG1092315
Isopropylbenzene	U		0.000265	0.00109	1	04/02/2018 02:22	WG1092315
p-Isopropyltoluene	U		0.000222	0.00109	1	04/02/2018 02:22	WG1092315
2-Butanone (MEK)	U		0.00509	0.0109	1	04/02/2018 02:22	WG1092315
Methylene Chloride	U		0.00109	0.00544	1	04/02/2018 02:22	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0109	1	04/02/2018 02:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000231	0.00109	1	04/02/2018 02:22	WG1092315
Naphthalene	U		0.00109	0.00544	1	04/02/2018 02:22	WG1092315
n-Propylbenzene	U		0.000224	0.00109	1	04/02/2018 02:22	WG1092315
Styrene	U		0.000255	0.00109	1	04/02/2018 02:22	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/02/2018 02:22	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000397	0.00109	1	04/02/2018 02:22	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000397	0.00109	1	04/02/2018 02:22	WG1092315
Tetrachloroethene	0.0176		0.000300	0.00109	1	04/02/2018 02:22	WG1092315
Toluene	U		0.000472	0.00544	1	04/02/2018 02:22	WG1092315
1,2,3-Trichlorobenzene	U		0.000333	0.00109	1	04/02/2018 02:22	WG1092315
1,2,4-Trichlorobenzene	U		0.000422	0.00109	1	04/02/2018 02:22	WG1092315
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/02/2018 02:22	WG1092315
1,1,2-Trichloroethane	U		0.000302	0.00109	1	04/02/2018 02:22	WG1092315
Trichloroethene	0.00987		0.000304	0.00109	1	04/02/2018 02:22	WG1092315
Trichlorofluoromethane	U		0.000416	0.00544	1	04/02/2018 02:22	WG1092315
1,2,3-Trichloropropane	U		0.000807	0.00272	1	04/02/2018 02:22	WG1092315
1,2,4-Trimethylbenzene	U		0.000230	0.00109	1	04/02/2018 02:22	WG1092315
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/02/2018 02:22	WG1092315
1,3,5-Trimethylbenzene	U		0.000290	0.00109	1	04/02/2018 02:22	WG1092315
Vinyl acetate	U		0.00260	0.0109	1	04/02/2018 02:22	WG1092315
Vinyl chloride	0.0139		0.000317	0.00109	1	04/02/2018 02:22	WG1092315
Xylenes, Total	U		0.000760	0.00327	1	04/02/2018 02:22	WG1092315
(S) Toluene-d8	102			80.0-120		04/02/2018 02:22	WG1092315
(S) Toluene-d8	109			80.0-120		04/06/2018 04:58	WG1092315
(S) Dibromofluoromethane	108			74.0-131		04/02/2018 02:22	WG1092315
(S) Dibromofluoromethane	91.9			74.0-131		04/06/2018 04:58	WG1092315
(S) 4-Bromofluorobenzene	96.2			64.0-132		04/06/2018 04:58	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 02:22	WG1092315

- 1
Cp
- 2
Tc
- 3
Ss
- 4
Cn
- 5
Sr
- 6
Qc
- 7
Gl
- 8
Al
- 9
Sc



Collected date/time: 03/28/18 00:00

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	03/31/2018 18:26	WG1092115
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	03/31/2018 18:26	WG1092115
Benzene	U		0.0896	0.500	1	03/31/2018 18:26	WG1092115
Bromobenzene	U		0.133	0.500	1	03/31/2018 18:26	WG1092115
Bromodichloromethane	U		0.0800	0.500	1	03/31/2018 18:26	WG1092115
Bromochloromethane	U		0.145	0.500	1	03/31/2018 18:26	WG1092115
Bromoform	U		0.186	0.500	1	03/31/2018 18:26	WG1092115
Bromomethane	U		0.157	2.50	1	03/31/2018 18:26	WG1092115
n-Butylbenzene	U		0.143	0.500	1	03/31/2018 18:26	WG1092115
sec-Butylbenzene	U		0.134	0.500	1	03/31/2018 18:26	WG1092115
tert-Butylbenzene	U		0.183	0.500	1	03/31/2018 18:26	WG1092115
Carbon disulfide	U		0.101	0.500	1	03/31/2018 18:26	WG1092115
Carbon tetrachloride	U		0.159	0.500	1	03/31/2018 18:26	WG1092115
Chlorobenzene	U		0.140	0.500	1	03/31/2018 18:26	WG1092115
Chlorodibromomethane	U		0.128	0.500	1	03/31/2018 18:26	WG1092115
Chloroethane	U		0.141	2.50	1	03/31/2018 18:26	WG1092115
Chloroform	U		0.0860	0.500	1	03/31/2018 18:26	WG1092115
Chloromethane	U		0.153	1.25	1	03/31/2018 18:26	WG1092115
2-Chlorotoluene	U		0.111	0.500	1	03/31/2018 18:26	WG1092115
4-Chlorotoluene	U		0.0972	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	03/31/2018 18:26	WG1092115
1,2-Dibromoethane	U		0.193	0.500	1	03/31/2018 18:26	WG1092115
Dibromomethane	U		0.117	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dichlorobenzene	U		0.101	0.500	1	03/31/2018 18:26	WG1092115
1,3-Dichlorobenzene	U		0.130	0.500	1	03/31/2018 18:26	WG1092115
1,4-Dichlorobenzene	U		0.121	0.500	1	03/31/2018 18:26	WG1092115
Dichlorodifluoromethane	U		0.127	2.50	1	03/31/2018 18:26	WG1092115
1,1-Dichloroethane	U		0.114	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dichloroethane	U		0.108	0.500	1	03/31/2018 18:26	WG1092115
1,1-Dichloroethene	U		0.188	0.500	1	03/31/2018 18:26	WG1092115
cis-1,2-Dichloroethene	U	<u>JO</u>	0.0933	0.500	1	03/31/2018 18:26	WG1092115
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dichloropropane	U		0.190	0.500	1	03/31/2018 18:26	WG1092115
1,1-Dichloropropene	U		0.128	0.500	1	03/31/2018 18:26	WG1092115
1,3-Dichloropropane	U		0.147	1.00	1	03/31/2018 18:26	WG1092115
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/31/2018 18:26	WG1092115
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/31/2018 18:26	WG1092115
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/31/2018 18:26	WG1092115
2,2-Dichloropropane	U		0.0929	0.500	1	03/31/2018 18:26	WG1092115
Di-isopropyl ether	U		0.0924	0.500	1	03/31/2018 18:26	WG1092115
Ethylbenzene	U		0.158	0.500	1	03/31/2018 18:26	WG1092115
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/31/2018 18:26	WG1092115
2-Hexanone	U		0.757	5.00	1	03/31/2018 18:26	WG1092115
n-Hexane	U		0.305	5.00	1	03/31/2018 18:26	WG1092115
Iodomethane	U		0.377	10.0	1	03/31/2018 18:26	WG1092115
Isopropylbenzene	U		0.126	0.500	1	03/31/2018 18:26	WG1092115
p-Isopropyltoluene	U		0.138	0.500	1	03/31/2018 18:26	WG1092115
2-Butanone (MEK)	U		1.28	5.00	1	03/31/2018 18:26	WG1092115
Methylene Chloride	U		1.07	2.50	1	03/31/2018 18:26	WG1092115
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	03/31/2018 18:26	WG1092115
Methyl tert-butyl ether	U		0.102	0.500	1	03/31/2018 18:26	WG1092115
Naphthalene	U		0.174	2.50	1	03/31/2018 18:26	WG1092115
n-Propylbenzene	U		0.162	0.500	1	03/31/2018 18:26	WG1092115
Styrene	U		0.117	0.500	1	03/31/2018 18:26	WG1092115
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/31/2018 18:26	WG1092115
1,1,2,2-Tetrachloroethane	U	<u>JO</u>	0.130	0.500	1	03/31/2018 18:26	WG1092115

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/28/18 00:00

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/31/2018 18:26	WG1092115
Tetrachloroethene	U		0.199	0.500	1	03/31/2018 18:26	WG1092115
Toluene	U		0.412	0.500	1	03/31/2018 18:26	WG1092115
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/31/2018 18:26	WG1092115
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/31/2018 18:26	WG1092115
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/31/2018 18:26	WG1092115
1,1,2-Trichloroethane	U		0.186	0.500	1	03/31/2018 18:26	WG1092115
Trichloroethene	U		0.153	0.500	1	03/31/2018 18:26	WG1092115
Trichlorofluoromethane	U	J4	0.130	2.50	1	03/31/2018 18:26	WG1092115
1,2,3-Trichloropropane	U		0.247	2.50	1	03/31/2018 18:26	WG1092115
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/31/2018 18:26	WG1092115
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/31/2018 18:26	WG1092115
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/31/2018 18:26	WG1092115
Vinyl acetate	U		0.645	5.00	1	03/31/2018 18:26	WG1092115
Vinyl chloride	U		0.118	0.500	1	03/31/2018 18:26	WG1092115
Xylenes, Total	U		0.316	1.50	1	03/31/2018 18:26	WG1092115
(S) Toluene-d8	102			80.0-120		03/31/2018 18:26	WG1092115
(S) Dibromofluoromethane	107			76.0-123		03/31/2018 18:26	WG1092115
(S) 4-Bromofluorobenzene	96.1			80.0-120		03/31/2018 18:26	WG1092115

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0278	J	0.0109	0.0544	1	04/02/2018 02:43	WG1092315
Acrylonitrile	U		0.00195	0.0109	1	04/02/2018 02:43	WG1092315
Benzene	U		0.000294	0.00109	1	04/02/2018 02:43	WG1092315
Bromobenzene	U		0.000309	0.00109	1	04/02/2018 02:43	WG1092315
Bromodichloromethane	U		0.000276	0.00109	1	04/02/2018 02:43	WG1092315
Bromochloromethane	U		0.000424	0.00544	1	04/02/2018 02:43	WG1092315
Bromoform	U		0.000461	0.00109	1	04/02/2018 02:43	WG1092315
Bromomethane	U		0.00146	0.00544	1	04/02/2018 02:43	WG1092315
n-Butylbenzene	U		0.000281	0.00109	1	04/02/2018 02:43	WG1092315
sec-Butylbenzene	U		0.000219	0.00109	1	04/02/2018 02:43	WG1092315
tert-Butylbenzene	U		0.000224	0.00109	1	04/02/2018 02:43	WG1092315
Carbon disulfide	U		0.000240	0.00109	1	04/02/2018 02:43	WG1092315
Carbon tetrachloride	U		0.000357	0.00109	1	04/02/2018 02:43	WG1092315
Chlorobenzene	U		0.000231	0.00109	1	04/02/2018 02:43	WG1092315
Chlorodibromomethane	U		0.000406	0.00109	1	04/02/2018 02:43	WG1092315
Chloroethane	U		0.00103	0.00544	1	04/02/2018 02:43	WG1092315
Chloroform	U		0.000249	0.00544	1	04/02/2018 02:43	WG1092315
Chloromethane	U		0.000408	0.00272	1	04/02/2018 02:43	WG1092315
2-Chlorotoluene	U		0.000328	0.00109	1	04/02/2018 02:43	WG1092315
4-Chlorotoluene	U		0.000261	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00544	1	04/02/2018 02:43	WG1092315
1,2-Dibromoethane	U		0.000373	0.00109	1	04/02/2018 02:43	WG1092315
Dibromomethane	U		0.000416	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dichlorobenzene	U		0.000332	0.00109	1	04/02/2018 02:43	WG1092315
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/02/2018 02:43	WG1092315
1,4-Dichlorobenzene	U		0.000246	0.00109	1	04/02/2018 02:43	WG1092315
Dichlorodifluoromethane	U		0.000776	0.00544	1	04/02/2018 02:43	WG1092315
1,1-Dichloroethane	U		0.000217	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dichloroethane	U		0.000288	0.00109	1	04/02/2018 02:43	WG1092315
1,1-Dichloroethene	U		0.000330	0.00109	1	04/02/2018 02:43	WG1092315
cis-1,2-Dichloroethene	0.000490	J	0.000256	0.00109	1	04/06/2018 05:19	WG1092315
trans-1,2-Dichloroethene	U		0.000287	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dichloropropane	U		0.000390	0.00109	1	04/02/2018 02:43	WG1092315
1,1-Dichloropropene	U		0.000345	0.00109	1	04/02/2018 02:43	WG1092315
1,3-Dichloropropane	U		0.000225	0.00109	1	04/02/2018 02:43	WG1092315
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/02/2018 02:43	WG1092315
trans-1,3-Dichloropropene	U		0.000291	0.00109	1	04/02/2018 02:43	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000847	0.00272	1	04/02/2018 02:43	WG1092315
2,2-Dichloropropane	U		0.000304	0.00109	1	04/02/2018 02:43	WG1092315
Di-isopropyl ether	U		0.000270	0.00109	1	04/02/2018 02:43	WG1092315
Ethylbenzene	U		0.000323	0.00109	1	04/02/2018 02:43	WG1092315
Hexachloro-1,3-butadiene	U		0.000372	0.00109	1	04/02/2018 02:43	WG1092315
2-Hexanone	U		0.00149	0.0109	1	04/02/2018 02:43	WG1092315
n-Hexane	0.000383	B, J	0.000316	0.0109	1	04/02/2018 02:43	WG1092315
Iodomethane	U		0.00275	0.0109	1	04/02/2018 02:43	WG1092315
Isopropylbenzene	U		0.000264	0.00109	1	04/02/2018 02:43	WG1092315
p-Isopropyltoluene	U		0.000222	0.00109	1	04/02/2018 02:43	WG1092315
2-Butanone (MEK)	U		0.00509	0.0109	1	04/02/2018 02:43	WG1092315
Methylene Chloride	U		0.00109	0.00544	1	04/02/2018 02:43	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0109	1	04/02/2018 02:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 15:26

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000231	0.00109	1	04/02/2018 02:43	WG1092315
Naphthalene	U		0.00109	0.00544	1	04/02/2018 02:43	WG1092315
n-Propylbenzene	U		0.000224	0.00109	1	04/02/2018 02:43	WG1092315
Styrene	U		0.000255	0.00109	1	04/02/2018 02:43	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/02/2018 02:43	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000397	0.00109	1	04/02/2018 02:43	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000397	0.00109	1	04/02/2018 02:43	WG1092315
Tetrachloroethene	0.00371		0.000300	0.00109	1	04/02/2018 02:43	WG1092315
Toluene	U		0.000472	0.00544	1	04/02/2018 02:43	WG1092315
1,2,3-Trichlorobenzene	U		0.000333	0.00109	1	04/02/2018 02:43	WG1092315
1,2,4-Trichlorobenzene	U		0.000422	0.00109	1	04/02/2018 02:43	WG1092315
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/02/2018 02:43	WG1092315
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/02/2018 02:43	WG1092315
Trichloroethene	U		0.000304	0.00109	1	04/02/2018 02:43	WG1092315
Trichlorofluoromethane	U		0.000416	0.00544	1	04/02/2018 02:43	WG1092315
1,2,3-Trichloropropane	U		0.000806	0.00272	1	04/02/2018 02:43	WG1092315
1,2,4-Trimethylbenzene	U		0.000230	0.00109	1	04/02/2018 02:43	WG1092315
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/02/2018 02:43	WG1092315
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/02/2018 02:43	WG1092315
Vinyl acetate	U		0.00260	0.0109	1	04/02/2018 02:43	WG1092315
Vinyl chloride	0.00142		0.000317	0.00109	1	04/02/2018 02:43	WG1092315
Xylenes, Total	U		0.000760	0.00326	1	04/02/2018 02:43	WG1092315
(S) Toluene-d8	102			80.0-120		04/02/2018 02:43	WG1092315
(S) Toluene-d8	103			80.0-120		04/06/2018 05:19	WG1092315
(S) Dibromofluoromethane	99.5			74.0-131		04/06/2018 05:19	WG1092315
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 02:43	WG1092315
(S) 4-Bromofluorobenzene	97.6			64.0-132		04/06/2018 05:19	WG1092315
(S) 4-Bromofluorobenzene	101			64.0-132		04/02/2018 02:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.2		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0115	0.0574	1	04/02/2018 03:04	WG1092315
Acrylonitrile	U		0.00205	0.0115	1	04/02/2018 03:04	WG1092315
Benzene	U		0.000310	0.00115	1	04/02/2018 03:04	WG1092315
Bromobenzene	U		0.000326	0.00115	1	04/02/2018 03:04	WG1092315
Bromodichloromethane	U		0.000291	0.00115	1	04/02/2018 03:04	WG1092315
Bromochloromethane	U		0.000447	0.00574	1	04/02/2018 03:04	WG1092315
Bromoform	U		0.000486	0.00115	1	04/02/2018 03:04	WG1092315
Bromomethane	U		0.00154	0.00574	1	04/02/2018 03:04	WG1092315
n-Butylbenzene	U		0.000296	0.00115	1	04/02/2018 03:04	WG1092315
sec-Butylbenzene	U		0.000231	0.00115	1	04/02/2018 03:04	WG1092315
tert-Butylbenzene	U		0.000236	0.00115	1	04/02/2018 03:04	WG1092315
Carbon disulfide	U		0.000254	0.00115	1	04/02/2018 03:04	WG1092315
Carbon tetrachloride	U		0.000376	0.00115	1	04/02/2018 03:04	WG1092315
Chlorobenzene	U		0.000243	0.00115	1	04/02/2018 03:04	WG1092315
Chlorodibromomethane	U		0.000428	0.00115	1	04/02/2018 03:04	WG1092315
Chloroethane	U		0.00109	0.00574	1	04/02/2018 03:04	WG1092315
Chloroform	U		0.000263	0.00574	1	04/02/2018 03:04	WG1092315
Chloromethane	U		0.000430	0.00287	1	04/02/2018 03:04	WG1092315
2-Chlorotoluene	U		0.000345	0.00115	1	04/02/2018 03:04	WG1092315
4-Chlorotoluene	U		0.000275	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00574	1	04/02/2018 03:04	WG1092315
1,2-Dibromoethane	U		0.000393	0.00115	1	04/02/2018 03:04	WG1092315
Dibromomethane	U		0.000438	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dichlorobenzene	U		0.000350	0.00115	1	04/02/2018 03:04	WG1092315
1,3-Dichlorobenzene	U		0.000274	0.00115	1	04/02/2018 03:04	WG1092315
1,4-Dichlorobenzene	U		0.000259	0.00115	1	04/02/2018 03:04	WG1092315
Dichlorodifluoromethane	U		0.000818	0.00574	1	04/02/2018 03:04	WG1092315
1,1-Dichloroethane	U		0.000228	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dichloroethane	U		0.000304	0.00115	1	04/02/2018 03:04	WG1092315
1,1-Dichloroethene	U		0.000348	0.00115	1	04/02/2018 03:04	WG1092315
cis-1,2-Dichloroethene	0.00132		0.000270	0.00115	1	04/06/2018 05:40	WG1092315
trans-1,2-Dichloroethene	U		0.000303	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dichloropropane	U		0.000411	0.00115	1	04/02/2018 03:04	WG1092315
1,1-Dichloropropene	U		0.000364	0.00115	1	04/02/2018 03:04	WG1092315
1,3-Dichloropropane	U		0.000237	0.00115	1	04/02/2018 03:04	WG1092315
cis-1,3-Dichloropropene	U		0.000301	0.00115	1	04/02/2018 03:04	WG1092315
trans-1,3-Dichloropropene	U		0.000306	0.00115	1	04/02/2018 03:04	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000893	0.00287	1	04/02/2018 03:04	WG1092315
2,2-Dichloropropane	U		0.000320	0.00115	1	04/02/2018 03:04	WG1092315
Di-isopropyl ether	U		0.000285	0.00115	1	04/02/2018 03:04	WG1092315
Ethylbenzene	U		0.000341	0.00115	1	04/02/2018 03:04	WG1092315
Hexachloro-1,3-butadiene	U		0.000392	0.00115	1	04/02/2018 03:04	WG1092315
2-Hexanone	U		0.00157	0.0115	1	04/02/2018 03:04	WG1092315
n-Hexane	U		0.000333	0.0115	1	04/02/2018 03:04	WG1092315
Iodomethane	U		0.00290	0.0115	1	04/02/2018 03:04	WG1092315
Isopropylbenzene	U		0.000279	0.00115	1	04/02/2018 03:04	WG1092315
p-Isopropyltoluene	U		0.000234	0.00115	1	04/02/2018 03:04	WG1092315
2-Butanone (MEK)	U		0.00537	0.0115	1	04/02/2018 03:04	WG1092315
Methylene Chloride	U		0.00115	0.00574	1	04/02/2018 03:04	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	04/02/2018 03:04	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 15:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	04/02/2018 03:04	WG1092315
Naphthalene	U		0.00115	0.00574	1	04/02/2018 03:04	WG1092315
n-Propylbenzene	U		0.000236	0.00115	1	04/02/2018 03:04	WG1092315
Styrene	U		0.000268	0.00115	1	04/02/2018 03:04	WG1092315
1,1,1-Tetrachloroethane	U		0.000303	0.00115	1	04/02/2018 03:04	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	04/02/2018 03:04	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000419	0.00115	1	04/02/2018 03:04	WG1092315
Tetrachloroethene	0.00419		0.000317	0.00115	1	04/02/2018 03:04	WG1092315
Toluene	U		0.000498	0.00574	1	04/02/2018 03:04	WG1092315
1,2,3-Trichlorobenzene	U		0.000351	0.00115	1	04/02/2018 03:04	WG1092315
1,2,4-Trichlorobenzene	U		0.000445	0.00115	1	04/02/2018 03:04	WG1092315
1,1,1-Trichloroethane	U		0.000328	0.00115	1	04/02/2018 03:04	WG1092315
1,1,2-Trichloroethane	U		0.000318	0.00115	1	04/02/2018 03:04	WG1092315
Trichloroethene	U		0.000320	0.00115	1	04/02/2018 03:04	WG1092315
Trichlorofluoromethane	U		0.000438	0.00574	1	04/02/2018 03:04	WG1092315
1,2,3-Trichloropropane	U		0.000850	0.00287	1	04/02/2018 03:04	WG1092315
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/02/2018 03:04	WG1092315
1,2,3-Trimethylbenzene	U		0.000329	0.00115	1	04/02/2018 03:04	WG1092315
1,3,5-Trimethylbenzene	U		0.000305	0.00115	1	04/02/2018 03:04	WG1092315
Vinyl acetate	U		0.00274	0.0115	1	04/02/2018 03:04	WG1092315
Vinyl chloride	U		0.000334	0.00115	1	04/02/2018 03:04	WG1092315
Xylenes, Total	U		0.000801	0.00344	1	04/02/2018 03:04	WG1092315
(S) Toluene-d8	103			80.0-120		04/02/2018 03:04	WG1092315
(S) Toluene-d8	103			80.0-120		04/06/2018 05:40	WG1092315
(S) Dibromofluoromethane	99.9			74.0-131		04/06/2018 05:40	WG1092315
(S) Dibromofluoromethane	105			74.0-131		04/02/2018 03:04	WG1092315
(S) 4-Bromofluorobenzene	101			64.0-132		04/02/2018 03:04	WG1092315
(S) 4-Bromofluorobenzene	96.0			64.0-132		04/06/2018 05:40	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.3		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0121	J	0.0116	0.0579	1	04/06/2018 06:01	WG1092315
Acrylonitrile	U		0.00207	0.0116	1	04/06/2018 06:01	WG1092315
Benzene	U		0.000313	0.00116	1	04/06/2018 06:01	WG1092315
Bromobenzene	U		0.000329	0.00116	1	04/06/2018 06:01	WG1092315
Bromodichloromethane	U		0.000294	0.00116	1	04/06/2018 06:01	WG1092315
Bromochloromethane	U		0.000452	0.00579	1	04/06/2018 06:01	WG1092315
Bromoform	U		0.000491	0.00116	1	04/06/2018 06:01	WG1092315
Bromomethane	U		0.00155	0.00579	1	04/06/2018 06:01	WG1092315
n-Butylbenzene	U		0.000299	0.00116	1	04/06/2018 06:01	WG1092315
sec-Butylbenzene	U		0.000233	0.00116	1	04/06/2018 06:01	WG1092315
tert-Butylbenzene	U		0.000239	0.00116	1	04/06/2018 06:01	WG1092315
Carbon disulfide	U		0.000256	0.00116	1	04/06/2018 06:01	WG1092315
Carbon tetrachloride	U		0.000380	0.00116	1	04/06/2018 06:01	WG1092315
Chlorobenzene	U		0.000246	0.00116	1	04/06/2018 06:01	WG1092315
Chlorodibromomethane	U		0.000432	0.00116	1	04/06/2018 06:01	WG1092315
Chloroethane	U		0.00110	0.00579	1	04/06/2018 06:01	WG1092315
Chloroform	U		0.000265	0.00579	1	04/06/2018 06:01	WG1092315
Chloromethane	U		0.000435	0.00290	1	04/06/2018 06:01	WG1092315
2-Chlorotoluene	U		0.000349	0.00116	1	04/06/2018 06:01	WG1092315
4-Chlorotoluene	U		0.000278	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00579	1	04/06/2018 06:01	WG1092315
1,2-Dibromoethane	U		0.000397	0.00116	1	04/06/2018 06:01	WG1092315
Dibromomethane	U		0.000443	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dichlorobenzene	U		0.000353	0.00116	1	04/06/2018 06:01	WG1092315
1,3-Dichlorobenzene	U		0.000277	0.00116	1	04/06/2018 06:01	WG1092315
1,4-Dichlorobenzene	U		0.000262	0.00116	1	04/06/2018 06:01	WG1092315
Dichlorodifluoromethane	U		0.000826	0.00579	1	04/06/2018 06:01	WG1092315
1,1-Dichloroethane	U		0.000231	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dichloroethane	U		0.000307	0.00116	1	04/06/2018 06:01	WG1092315
1,1-Dichloroethene	U		0.000351	0.00116	1	04/06/2018 06:01	WG1092315
cis-1,2-Dichloroethene	0.00502		0.000272	0.00116	1	04/06/2018 06:01	WG1092315
trans-1,2-Dichloroethene	U		0.000306	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dichloropropane	U		0.000415	0.00116	1	04/06/2018 06:01	WG1092315
1,1-Dichloropropene	U		0.000367	0.00116	1	04/06/2018 06:01	WG1092315
1,3-Dichloropropane	U		0.000240	0.00116	1	04/06/2018 06:01	WG1092315
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	04/06/2018 06:01	WG1092315
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	04/06/2018 06:01	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000902	0.00290	1	04/06/2018 06:01	WG1092315
2,2-Dichloropropane	U		0.000323	0.00116	1	04/06/2018 06:01	WG1092315
Di-isopropyl ether	U		0.000287	0.00116	1	04/06/2018 06:01	WG1092315
Ethylbenzene	U		0.000344	0.00116	1	04/06/2018 06:01	WG1092315
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	04/06/2018 06:01	WG1092315
2-Hexanone	U		0.00159	0.0116	1	04/06/2018 06:01	WG1092315
n-Hexane	U		0.000336	0.0116	1	04/06/2018 06:01	WG1092315
Iodomethane	U		0.00293	0.0116	1	04/06/2018 06:01	WG1092315
Isopropylbenzene	U		0.000282	0.00116	1	04/06/2018 06:01	WG1092315
p-Isopropyltoluene	U		0.000236	0.00116	1	04/06/2018 06:01	WG1092315
2-Butanone (MEK)	U		0.00542	0.0116	1	04/06/2018 06:01	WG1092315
Methylene Chloride	U		0.00116	0.00579	1	04/06/2018 06:01	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	04/06/2018 06:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 15:55

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/06/2018 06:01	WG1092315
Naphthalene	U		0.00116	0.00579	1	04/06/2018 06:01	WG1092315
n-Propylbenzene	U		0.000239	0.00116	1	04/06/2018 06:01	WG1092315
Styrene	U		0.000271	0.00116	1	04/06/2018 06:01	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	04/06/2018 06:01	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000423	0.00116	1	04/06/2018 06:01	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000423	0.00116	1	04/06/2018 06:01	WG1092315
Tetrachloroethene	0.0317		0.000320	0.00116	1	04/06/2018 06:01	WG1092315
Toluene	U		0.000503	0.00579	1	04/06/2018 06:01	WG1092315
1,2,3-Trichlorobenzene	U		0.000355	0.00116	1	04/06/2018 06:01	WG1092315
1,2,4-Trichlorobenzene	U		0.000450	0.00116	1	04/06/2018 06:01	WG1092315
1,1,1-Trichloroethane	U		0.000331	0.00116	1	04/06/2018 06:01	WG1092315
1,1,2-Trichloroethane	U		0.000321	0.00116	1	04/06/2018 06:01	WG1092315
Trichloroethene	0.00188		0.000323	0.00116	1	04/06/2018 06:01	WG1092315
Trichlorofluoromethane	U		0.000443	0.00579	1	04/06/2018 06:01	WG1092315
1,2,3-Trichloropropane	U		0.000859	0.00290	1	04/06/2018 06:01	WG1092315
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	04/06/2018 06:01	WG1092315
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	04/06/2018 06:01	WG1092315
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	04/06/2018 06:01	WG1092315
Vinyl acetate	U		0.00277	0.0116	1	04/06/2018 06:01	WG1092315
Vinyl chloride	0.000458	J	0.000337	0.00116	1	04/06/2018 06:01	WG1092315
Xylenes, Total	U		0.000809	0.00348	1	04/06/2018 06:01	WG1092315
(S) Toluene-d8	105			80.0-120		04/06/2018 06:01	WG1092315
(S) Dibromofluoromethane	99.0			74.0-131		04/06/2018 06:01	WG1092315
(S) 4-Bromofluorobenzene	98.0			64.0-132		04/06/2018 06:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.6		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0108	0.0540	1	04/02/2018 03:46	WG1092315
Acrylonitrile	U		0.00193	0.0108	1	04/02/2018 03:46	WG1092315
Benzene	U		0.000292	0.00108	1	04/02/2018 03:46	WG1092315
Bromobenzene	U		0.000307	0.00108	1	04/02/2018 03:46	WG1092315
Bromodichloromethane	U		0.000274	0.00108	1	04/02/2018 03:46	WG1092315
Bromochloromethane	U		0.000421	0.00540	1	04/02/2018 03:46	WG1092315
Bromoform	U		0.000458	0.00108	1	04/02/2018 03:46	WG1092315
Bromomethane	U		0.00145	0.00540	1	04/02/2018 03:46	WG1092315
n-Butylbenzene	U		0.000279	0.00108	1	04/02/2018 03:46	WG1092315
sec-Butylbenzene	U		0.000217	0.00108	1	04/02/2018 03:46	WG1092315
tert-Butylbenzene	U		0.000222	0.00108	1	04/02/2018 03:46	WG1092315
Carbon disulfide	U		0.000239	0.00108	1	04/02/2018 03:46	WG1092315
Carbon tetrachloride	U		0.000354	0.00108	1	04/02/2018 03:46	WG1092315
Chlorobenzene	U		0.000229	0.00108	1	04/02/2018 03:46	WG1092315
Chlorodibromomethane	U		0.000403	0.00108	1	04/02/2018 03:46	WG1092315
Chloroethane	U		0.00102	0.00540	1	04/02/2018 03:46	WG1092315
Chloroform	U		0.000247	0.00540	1	04/02/2018 03:46	WG1092315
Chloromethane	U		0.000405	0.00270	1	04/02/2018 03:46	WG1092315
2-Chlorotoluene	U		0.000325	0.00108	1	04/02/2018 03:46	WG1092315
4-Chlorotoluene	U		0.000259	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00540	1	04/02/2018 03:46	WG1092315
1,2-Dibromoethane	U		0.000370	0.00108	1	04/02/2018 03:46	WG1092315
Dibromomethane	U		0.000413	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dichlorobenzene	U		0.000329	0.00108	1	04/02/2018 03:46	WG1092315
1,3-Dichlorobenzene	U		0.000258	0.00108	1	04/02/2018 03:46	WG1092315
1,4-Dichlorobenzene	U		0.000244	0.00108	1	04/02/2018 03:46	WG1092315
Dichlorodifluoromethane	U		0.000770	0.00540	1	04/02/2018 03:46	WG1092315
1,1-Dichloroethane	U		0.000215	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dichloroethane	U		0.000286	0.00108	1	04/02/2018 03:46	WG1092315
1,1-Dichloroethene	U		0.000327	0.00108	1	04/02/2018 03:46	WG1092315
cis-1,2-Dichloroethene	0.00265		0.000254	0.00108	1	04/02/2018 03:46	WG1092315
trans-1,2-Dichloroethene	U		0.000285	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dichloropropane	U		0.000387	0.00108	1	04/02/2018 03:46	WG1092315
1,1-Dichloropropene	U		0.000342	0.00108	1	04/02/2018 03:46	WG1092315
1,3-Dichloropropane	U		0.000224	0.00108	1	04/02/2018 03:46	WG1092315
cis-1,3-Dichloropropene	U		0.000283	0.00108	1	04/02/2018 03:46	WG1092315
trans-1,3-Dichloropropene	U		0.000288	0.00108	1	04/02/2018 03:46	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000840	0.00270	1	04/02/2018 03:46	WG1092315
2,2-Dichloropropane	U		0.000301	0.00108	1	04/02/2018 03:46	WG1092315
Di-isopropyl ether	U		0.000268	0.00108	1	04/02/2018 03:46	WG1092315
Ethylbenzene	U		0.000321	0.00108	1	04/02/2018 03:46	WG1092315
Hexachloro-1,3-butadiene	U		0.000369	0.00108	1	04/02/2018 03:46	WG1092315
2-Hexanone	U		0.00148	0.0108	1	04/02/2018 03:46	WG1092315
n-Hexane	0.000509	B J	0.000313	0.0108	1	04/02/2018 03:46	WG1092315
Iodomethane	U		0.00273	0.0108	1	04/02/2018 03:46	WG1092315
Isopropylbenzene	U		0.000262	0.00108	1	04/02/2018 03:46	WG1092315
p-Isopropyltoluene	U		0.000220	0.00108	1	04/02/2018 03:46	WG1092315
2-Butanone (MEK)	U		0.00505	0.0108	1	04/02/2018 03:46	WG1092315
Methylene Chloride	U		0.00108	0.00540	1	04/02/2018 03:46	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00203	0.0108	1	04/02/2018 03:46	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 16:03

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000229	0.00108	1	04/02/2018 03:46	WG1092315
Naphthalene	U		0.00108	0.00540	1	04/02/2018 03:46	WG1092315
n-Propylbenzene	U		0.000222	0.00108	1	04/02/2018 03:46	WG1092315
Styrene	U		0.000253	0.00108	1	04/02/2018 03:46	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000285	0.00108	1	04/02/2018 03:46	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000394	0.00108	1	04/02/2018 03:46	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000394	0.00108	1	04/02/2018 03:46	WG1092315
Tetrachloroethene	0.00746		0.000298	0.00108	1	04/02/2018 03:46	WG1092315
Toluene	U		0.000469	0.00540	1	04/02/2018 03:46	WG1092315
1,2,3-Trichlorobenzene	U		0.000330	0.00108	1	04/02/2018 03:46	WG1092315
1,2,4-Trichlorobenzene	U		0.000419	0.00108	1	04/02/2018 03:46	WG1092315
1,1,1-Trichloroethane	U		0.000309	0.00108	1	04/02/2018 03:46	WG1092315
1,1,2-Trichloroethane	U		0.000299	0.00108	1	04/02/2018 03:46	WG1092315
Trichloroethene	0.000868	U	0.000301	0.00108	1	04/02/2018 03:46	WG1092315
Trichlorofluoromethane	U		0.000413	0.00540	1	04/02/2018 03:46	WG1092315
1,2,3-Trichloropropane	U		0.000800	0.00270	1	04/02/2018 03:46	WG1092315
1,2,4-Trimethylbenzene	U		0.000228	0.00108	1	04/02/2018 03:46	WG1092315
1,2,3-Trimethylbenzene	U		0.000310	0.00108	1	04/02/2018 03:46	WG1092315
1,3,5-Trimethylbenzene	U		0.000287	0.00108	1	04/02/2018 03:46	WG1092315
Vinyl acetate	U		0.00258	0.0108	1	04/02/2018 03:46	WG1092315
Vinyl chloride	0.000458	U	0.000314	0.00108	1	04/02/2018 03:46	WG1092315
Xylenes, Total	U		0.000754	0.00324	1	04/02/2018 03:46	WG1092315
(S) Toluene-d8	99.0			80.0-120		04/02/2018 03:46	WG1092315
(S) Dibromofluoromethane	106			74.0-131		04/02/2018 03:46	WG1092315
(S) 4-Bromofluorobenzene	100			64.0-132		04/02/2018 03:46	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.4		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0121	J	0.0113	0.0566	1	04/02/2018 04:07	WG1092315
Acrylonitrile	U		0.00203	0.0113	1	04/02/2018 04:07	WG1092315
Benzene	U		0.000306	0.00113	1	04/02/2018 04:07	WG1092315
Bromobenzene	U		0.000321	0.00113	1	04/02/2018 04:07	WG1092315
Bromodichloromethane	U		0.000287	0.00113	1	04/02/2018 04:07	WG1092315
Bromochloromethane	U		0.000441	0.00566	1	04/02/2018 04:07	WG1092315
Bromoform	U		0.000480	0.00113	1	04/02/2018 04:07	WG1092315
Bromomethane	U		0.00152	0.00566	1	04/02/2018 04:07	WG1092315
n-Butylbenzene	U		0.000292	0.00113	1	04/02/2018 04:07	WG1092315
sec-Butylbenzene	U		0.000227	0.00113	1	04/02/2018 04:07	WG1092315
tert-Butylbenzene	U		0.000233	0.00113	1	04/02/2018 04:07	WG1092315
Carbon disulfide	U		0.000250	0.00113	1	04/02/2018 04:07	WG1092315
Carbon tetrachloride	U		0.000371	0.00113	1	04/02/2018 04:07	WG1092315
Chlorobenzene	U		0.000240	0.00113	1	04/02/2018 04:07	WG1092315
Chlorodibromomethane	U		0.000422	0.00113	1	04/02/2018 04:07	WG1092315
Chloroethane	U		0.00107	0.00566	1	04/02/2018 04:07	WG1092315
Chloroform	U		0.000259	0.00566	1	04/02/2018 04:07	WG1092315
Chloromethane	U		0.000424	0.00283	1	04/02/2018 04:07	WG1092315
2-Chlorotoluene	U		0.000341	0.00113	1	04/02/2018 04:07	WG1092315
4-Chlorotoluene	U		0.000272	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00566	1	04/02/2018 04:07	WG1092315
1,2-Dibromoethane	U		0.000388	0.00113	1	04/02/2018 04:07	WG1092315
Dibromomethane	U		0.000432	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dichlorobenzene	U		0.000345	0.00113	1	04/02/2018 04:07	WG1092315
1,3-Dichlorobenzene	U		0.000270	0.00113	1	04/02/2018 04:07	WG1092315
1,4-Dichlorobenzene	U		0.000256	0.00113	1	04/02/2018 04:07	WG1092315
Dichlorodifluoromethane	U		0.000807	0.00566	1	04/02/2018 04:07	WG1092315
1,1-Dichloroethane	U		0.000225	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dichloroethane	U		0.000300	0.00113	1	04/02/2018 04:07	WG1092315
1,1-Dichloroethene	U		0.000343	0.00113	1	04/02/2018 04:07	WG1092315
cis-1,2-Dichloroethene	0.00148		0.000266	0.00113	1	04/02/2018 04:07	WG1092315
trans-1,2-Dichloroethene	U		0.000299	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dichloropropane	U		0.000405	0.00113	1	04/02/2018 04:07	WG1092315
1,1-Dichloropropene	U		0.000359	0.00113	1	04/02/2018 04:07	WG1092315
1,3-Dichloropropane	U		0.000234	0.00113	1	04/02/2018 04:07	WG1092315
cis-1,3-Dichloropropene	U		0.000296	0.00113	1	04/02/2018 04:07	WG1092315
trans-1,3-Dichloropropene	U		0.000302	0.00113	1	04/02/2018 04:07	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000880	0.00283	1	04/02/2018 04:07	WG1092315
2,2-Dichloropropane	U		0.000316	0.00113	1	04/02/2018 04:07	WG1092315
Di-isopropyl ether	U		0.000281	0.00113	1	04/02/2018 04:07	WG1092315
Ethylbenzene	U		0.000336	0.00113	1	04/02/2018 04:07	WG1092315
Hexachloro-1,3-butadiene	U		0.000387	0.00113	1	04/02/2018 04:07	WG1092315
2-Hexanone	U		0.00155	0.0113	1	04/02/2018 04:07	WG1092315
n-Hexane	0.000403	B J	0.000328	0.0113	1	04/02/2018 04:07	WG1092315
Iodomethane	U		0.00286	0.0113	1	04/02/2018 04:07	WG1092315
Isopropylbenzene	U		0.000275	0.00113	1	04/02/2018 04:07	WG1092315
p-Isopropyltoluene	U		0.000231	0.00113	1	04/02/2018 04:07	WG1092315
2-Butanone (MEK)	U		0.00530	0.0113	1	04/02/2018 04:07	WG1092315
Methylene Chloride	U		0.00113	0.00566	1	04/02/2018 04:07	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	04/02/2018 04:07	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 16:13

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/02/2018 04:07	WG1092315
Naphthalene	U		0.00113	0.00566	1	04/02/2018 04:07	WG1092315
n-Propylbenzene	U		0.000233	0.00113	1	04/02/2018 04:07	WG1092315
Styrene	U		0.000265	0.00113	1	04/02/2018 04:07	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/02/2018 04:07	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000413	0.00113	1	04/02/2018 04:07	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000413	0.00113	1	04/02/2018 04:07	WG1092315
Tetrachloroethene	0.00364		0.000312	0.00113	1	04/02/2018 04:07	WG1092315
Toluene	U		0.000491	0.00566	1	04/02/2018 04:07	WG1092315
1,2,3-Trichlorobenzene	U		0.000346	0.00113	1	04/02/2018 04:07	WG1092315
1,2,4-Trichlorobenzene	U		0.000439	0.00113	1	04/02/2018 04:07	WG1092315
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/02/2018 04:07	WG1092315
1,1,2-Trichloroethane	U		0.000313	0.00113	1	04/02/2018 04:07	WG1092315
Trichloroethene	0.000464	U	0.000316	0.00113	1	04/02/2018 04:07	WG1092315
Trichlorofluoromethane	U		0.000432	0.00566	1	04/02/2018 04:07	WG1092315
1,2,3-Trichloropropane	U		0.000839	0.00283	1	04/02/2018 04:07	WG1092315
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/02/2018 04:07	WG1092315
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/02/2018 04:07	WG1092315
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	04/02/2018 04:07	WG1092315
Vinyl acetate	U		0.00270	0.0113	1	04/02/2018 04:07	WG1092315
Vinyl chloride	0.000466	U	0.000329	0.00113	1	04/02/2018 04:07	WG1092315
Xylenes, Total	U		0.000790	0.00339	1	04/02/2018 04:07	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 04:07	WG1092315
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 04:07	WG1092315
(S) 4-Bromofluorobenzene	101			64.0-132		04/02/2018 04:07	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.1		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0659	J	0.0215	0.108	1.55	04/02/2018 04:28	WG1092315
Acrylonitrile	U		0.00384	0.0215	1.55	04/02/2018 04:28	WG1092315
Benzene	U		0.000580	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromobenzene	U		0.000610	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromodichloromethane	U		0.000547	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromochloromethane	U		0.000838	0.0108	1.55	04/02/2018 04:28	WG1092315
Bromoform	U		0.000912	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromomethane	U		0.00289	0.0108	1.55	04/02/2018 04:28	WG1092315
n-Butylbenzene	U		0.000555	0.00215	1.55	04/02/2018 04:28	WG1092315
sec-Butylbenzene	U		0.000433	0.00215	1.55	04/02/2018 04:28	WG1092315
tert-Butylbenzene	U		0.000443	0.00215	1.55	04/02/2018 04:28	WG1092315
Carbon disulfide	0.00248		0.000474	0.00215	1.55	04/02/2018 04:28	WG1092315
Carbon tetrachloride	U		0.000705	0.00215	1.55	04/02/2018 04:28	WG1092315
Chlorobenzene	U		0.000456	0.00215	1.55	04/02/2018 04:28	WG1092315
Chlorodibromomethane	U		0.000802	0.00215	1.55	04/02/2018 04:28	WG1092315
Chloroethane	U		0.00204	0.0108	1.55	04/02/2018 04:28	WG1092315
Chloroform	U		0.000493	0.0108	1.55	04/02/2018 04:28	WG1092315
Chloromethane	U		0.000806	0.00538	1.55	04/02/2018 04:28	WG1092315
2-Chlorotoluene	U		0.000647	0.00215	1.55	04/02/2018 04:28	WG1092315
4-Chlorotoluene	U		0.000516	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00226	0.0108	1.55	04/02/2018 04:28	WG1092315
1,2-Dibromoethane	U		0.000738	0.00215	1.55	04/02/2018 04:28	WG1092315
Dibromomethane	U		0.000821	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dichlorobenzene	U		0.000656	0.00215	1.55	04/02/2018 04:28	WG1092315
1,3-Dichlorobenzene	U		0.000513	0.00215	1.55	04/02/2018 04:28	WG1092315
1,4-Dichlorobenzene	U		0.000486	0.00215	1.55	04/02/2018 04:28	WG1092315
Dichlorodifluoromethane	U		0.00153	0.0108	1.55	04/02/2018 04:28	WG1092315
1,1-Dichloroethane	U		0.000427	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dichloroethane	U		0.000570	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1-Dichloroethene	0.0259		0.000652	0.00215	1.55	04/02/2018 04:28	WG1092315
cis-1,2-Dichloroethene	4.73		0.0816	0.347	250	04/06/2018 06:22	WG1092315
trans-1,2-Dichloroethene	0.00437		0.000567	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dichloropropane	U		0.000770	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1-Dichloropropene	U		0.000681	0.00215	1.55	04/02/2018 04:28	WG1092315
1,3-Dichloropropane	U		0.000445	0.00215	1.55	04/02/2018 04:28	WG1092315
cis-1,3-Dichloropropene	U		0.000563	0.00215	1.55	04/02/2018 04:28	WG1092315
trans-1,3-Dichloropropene	U		0.000574	0.00215	1.55	04/02/2018 04:28	WG1092315
trans-1,4-Dichloro-2-butene	U		0.00166	0.00538	1.55	04/02/2018 04:28	WG1092315
2,2-Dichloropropane	U		0.000599	0.00215	1.55	04/02/2018 04:28	WG1092315
Di-isopropyl ether	U		0.000533	0.00215	1.55	04/02/2018 04:28	WG1092315
Ethylbenzene	U		0.000638	0.00215	1.55	04/02/2018 04:28	WG1092315
Hexachloro-1,3-butadiene	U		0.000735	0.00215	1.55	04/02/2018 04:28	WG1092315
2-Hexanone	U		0.00294	0.0215	1.55	04/02/2018 04:28	WG1092315
n-Hexane	0.00113	B J	0.000624	0.0215	1.55	04/02/2018 04:28	WG1092315
Iodomethane	U		0.00544	0.0215	1.55	04/02/2018 04:28	WG1092315
Isopropylbenzene	U		0.000523	0.00215	1.55	04/02/2018 04:28	WG1092315
p-Isopropyltoluene	U		0.000438	0.00215	1.55	04/02/2018 04:28	WG1092315
2-Butanone (MEK)	U		0.0101	0.0215	1.55	04/02/2018 04:28	WG1092315
Methylene Chloride	U		0.00215	0.0108	1.55	04/02/2018 04:28	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00404	0.0215	1.55	04/02/2018 04:28	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 08:13

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000456	0.00215	1.55	04/02/2018 04:28	WG1092315
Naphthalene	U		0.00215	0.0108	1.55	04/02/2018 04:28	WG1092315
n-Propylbenzene	U		0.000443	0.00215	1.55	04/02/2018 04:28	WG1092315
Styrene	U		0.000504	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000567	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000785	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000785	0.00215	1.55	04/02/2018 04:28	WG1092315
Tetrachloroethene	0.0737		0.000594	0.00215	1.55	04/02/2018 04:28	WG1092315
Toluene	U		0.000934	0.0108	1.55	04/02/2018 04:28	WG1092315
1,2,3-Trichlorobenzene	U		0.000658	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2,4-Trichlorobenzene	U		0.000834	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,1-Trichloroethane	U		0.000615	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,2-Trichloroethane	U		0.000595	0.00215	1.55	04/02/2018 04:28	WG1092315
Trichloroethene	0.145		0.000599	0.00215	1.55	04/02/2018 04:28	WG1092315
Trichlorofluoromethane	U		0.000821	0.0108	1.55	04/02/2018 04:28	WG1092315
1,2,3-Trichloropropane	U		0.00160	0.00538	1.55	04/02/2018 04:28	WG1092315
1,2,4-Trimethylbenzene	U		0.000454	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2,3-Trimethylbenzene	U		0.000617	0.00215	1.55	04/02/2018 04:28	WG1092315
1,3,5-Trimethylbenzene	U		0.000572	0.00215	1.55	04/02/2018 04:28	WG1092315
Vinyl acetate	U		0.00513	0.0215	1.55	04/02/2018 04:28	WG1092315
Vinyl chloride	0.224	J	0.101	0.347	250	04/06/2018 06:22	WG1092315
Xylenes, Total	U		0.00150	0.00645	1.55	04/02/2018 04:28	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 04:28	WG1092315
(S) Toluene-d8	109			80.0-120		04/06/2018 06:22	WG1092315
(S) Dibromofluoromethane	106			74.0-131		04/02/2018 04:28	WG1092315
(S) Dibromofluoromethane	92.9			74.0-131		04/06/2018 06:22	WG1092315
(S) 4-Bromofluorobenzene	102			64.0-132		04/02/2018 04:28	WG1092315
(S) 4-Bromofluorobenzene	97.0			64.0-132		04/06/2018 06:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0113	0.0563	1	04/02/2018 05:22	WG1092315
Acrylonitrile	U		0.00201	0.0113	1	04/02/2018 05:22	WG1092315
Benzene	0.000419	J	0.000304	0.00113	1	04/02/2018 05:22	WG1092315
Bromobenzene	U		0.000320	0.00113	1	04/02/2018 05:22	WG1092315
Bromodichloromethane	U		0.000286	0.00113	1	04/02/2018 05:22	WG1092315
Bromochloromethane	U		0.000439	0.00563	1	04/02/2018 05:22	WG1092315
Bromoform	U		0.000477	0.00113	1	04/02/2018 05:22	WG1092315
Bromomethane	U		0.00151	0.00563	1	04/02/2018 05:22	WG1092315
n-Butylbenzene	U		0.000290	0.00113	1	04/02/2018 05:22	WG1092315
sec-Butylbenzene	U		0.000226	0.00113	1	04/02/2018 05:22	WG1092315
tert-Butylbenzene	U		0.000232	0.00113	1	04/02/2018 05:22	WG1092315
Carbon disulfide	0.000730	J	0.000249	0.00113	1	04/02/2018 05:22	WG1092315
Carbon tetrachloride	U		0.000369	0.00113	1	04/02/2018 05:22	WG1092315
Chlorobenzene	U		0.000239	0.00113	1	04/02/2018 05:22	WG1092315
Chlorodibromomethane	U		0.000420	0.00113	1	04/02/2018 05:22	WG1092315
Chloroethane	U		0.00106	0.00563	1	04/02/2018 05:22	WG1092315
Chloroform	U		0.000258	0.00563	1	04/02/2018 05:22	WG1092315
Chloromethane	U		0.000422	0.00281	1	04/02/2018 05:22	WG1092315
2-Chlorotoluene	U		0.000339	0.00113	1	04/02/2018 05:22	WG1092315
4-Chlorotoluene	U		0.000270	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00563	1	04/02/2018 05:22	WG1092315
1,2-Dibromoethane	U		0.000386	0.00113	1	04/02/2018 05:22	WG1092315
Dibromomethane	U		0.000430	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dichlorobenzene	U		0.000343	0.00113	1	04/02/2018 05:22	WG1092315
1,3-Dichlorobenzene	U		0.000269	0.00113	1	04/02/2018 05:22	WG1092315
1,4-Dichlorobenzene	U		0.000254	0.00113	1	04/02/2018 05:22	WG1092315
Dichlorodifluoromethane	U		0.000802	0.00563	1	04/02/2018 05:22	WG1092315
1,1-Dichloroethane	U		0.000224	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dichloroethane	U		0.000298	0.00113	1	04/02/2018 05:22	WG1092315
1,1-Dichloroethene	U		0.000341	0.00113	1	04/02/2018 05:22	WG1092315
cis-1,2-Dichloroethene	0.0564		0.000264	0.00113	1	04/02/2018 05:22	WG1092315
trans-1,2-Dichloroethene	U		0.000297	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dichloropropane	U		0.000403	0.00113	1	04/02/2018 05:22	WG1092315
1,1-Dichloropropene	U		0.000357	0.00113	1	04/02/2018 05:22	WG1092315
1,3-Dichloropropane	U		0.000233	0.00113	1	04/02/2018 05:22	WG1092315
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	04/02/2018 05:22	WG1092315
trans-1,3-Dichloropropene	U		0.000300	0.00113	1	04/02/2018 05:22	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000875	0.00281	1	04/02/2018 05:22	WG1092315
2,2-Dichloropropane	U		0.000314	0.00113	1	04/02/2018 05:22	WG1092315
Di-isopropyl ether	U		0.000279	0.00113	1	04/02/2018 05:22	WG1092315
Ethylbenzene	U		0.000334	0.00113	1	04/02/2018 05:22	WG1092315
Hexachloro-1,3-butadiene	U		0.000385	0.00113	1	04/02/2018 05:22	WG1092315
2-Hexanone	U		0.00154	0.0113	1	04/02/2018 05:22	WG1092315
n-Hexane	U		0.000326	0.0113	1	04/02/2018 05:22	WG1092315
Iodomethane	U		0.00285	0.0113	1	04/02/2018 05:22	WG1092315
Isopropylbenzene	U		0.000273	0.00113	1	04/02/2018 05:22	WG1092315
p-Isopropyltoluene	U		0.000230	0.00113	1	04/02/2018 05:22	WG1092315
2-Butanone (MEK)	U		0.00527	0.0113	1	04/02/2018 05:22	WG1092315
Methylene Chloride	U		0.00113	0.00563	1	04/02/2018 05:22	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	04/02/2018 05:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 08:37

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	04/02/2018 05:22	WG1092315
Naphthalene	U		0.00113	0.00563	1	04/02/2018 05:22	WG1092315
n-Propylbenzene	U		0.000232	0.00113	1	04/02/2018 05:22	WG1092315
Styrene	U		0.000263	0.00113	1	04/02/2018 05:22	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000297	0.00113	1	04/02/2018 05:22	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	04/02/2018 05:22	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00113	1	04/02/2018 05:22	WG1092315
Tetrachloroethene	0.00623		0.000311	0.00113	1	04/02/2018 05:22	WG1092315
Toluene	U		0.000488	0.00563	1	04/02/2018 05:22	WG1092315
1,2,3-Trichlorobenzene	U		0.000344	0.00113	1	04/02/2018 05:22	WG1092315
1,2,4-Trichlorobenzene	U		0.000437	0.00113	1	04/02/2018 05:22	WG1092315
1,1,1-Trichloroethane	U		0.000322	0.00113	1	04/02/2018 05:22	WG1092315
1,1,2-Trichloroethane	U		0.000312	0.00113	1	04/02/2018 05:22	WG1092315
Trichloroethene	0.00152		0.000314	0.00113	1	04/02/2018 05:22	WG1092315
Trichlorofluoromethane	U		0.000430	0.00563	1	04/02/2018 05:22	WG1092315
1,2,3-Trichloropropane	U		0.000834	0.00281	1	04/02/2018 05:22	WG1092315
1,2,4-Trimethylbenzene	U		0.000237	0.00113	1	04/02/2018 05:22	WG1092315
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	04/02/2018 05:22	WG1092315
1,3,5-Trimethylbenzene	U		0.000299	0.00113	1	04/02/2018 05:22	WG1092315
Vinyl acetate	U		0.00269	0.0113	1	04/02/2018 05:22	WG1092315
Vinyl chloride	0.0194		0.000327	0.00113	1	04/02/2018 05:22	WG1092315
Xylenes, Total	U		0.000785	0.00338	1	04/02/2018 05:22	WG1092315
(S) Toluene-d8	100			80.0-120		04/02/2018 05:22	WG1092315
(S) Dibromofluoromethane	98.7			74.0-131		04/02/2018 05:22	WG1092315
(S) 4-Bromofluorobenzene	106			64.0-132		04/02/2018 05:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.8		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0537	J	0.0111	0.0556	1	04/02/2018 05:43	WG1092315
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 05:43	WG1092315
Benzene	U		0.000301	0.00111	1	04/02/2018 05:43	WG1092315
Bromobenzene	U		0.000316	0.00111	1	04/02/2018 05:43	WG1092315
Bromodichloromethane	U		0.000283	0.00111	1	04/02/2018 05:43	WG1092315
Bromochloromethane	U		0.000434	0.00556	1	04/02/2018 05:43	WG1092315
Bromoform	U		0.000472	0.00111	1	04/02/2018 05:43	WG1092315
Bromomethane	U		0.00149	0.00556	1	04/02/2018 05:43	WG1092315
n-Butylbenzene	U		0.000287	0.00111	1	04/02/2018 05:43	WG1092315
sec-Butylbenzene	U		0.000224	0.00111	1	04/02/2018 05:43	WG1092315
tert-Butylbenzene	U		0.000229	0.00111	1	04/02/2018 05:43	WG1092315
Carbon disulfide	0.000820	J	0.000246	0.00111	1	04/02/2018 05:43	WG1092315
Carbon tetrachloride	U		0.000365	0.00111	1	04/02/2018 05:43	WG1092315
Chlorobenzene	U		0.000236	0.00111	1	04/02/2018 05:43	WG1092315
Chlorodibromomethane	U		0.000415	0.00111	1	04/02/2018 05:43	WG1092315
Chloroethane	U		0.00105	0.00556	1	04/02/2018 05:43	WG1092315
Chloroform	U		0.000255	0.00556	1	04/02/2018 05:43	WG1092315
Chloromethane	U		0.000417	0.00278	1	04/02/2018 05:43	WG1092315
2-Chlorotoluene	U		0.000335	0.00111	1	04/02/2018 05:43	WG1092315
4-Chlorotoluene	U		0.000267	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00556	1	04/02/2018 05:43	WG1092315
1,2-Dibromoethane	U		0.000382	0.00111	1	04/02/2018 05:43	WG1092315
Dibromomethane	U		0.000425	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dichlorobenzene	U		0.000339	0.00111	1	04/02/2018 05:43	WG1092315
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/02/2018 05:43	WG1092315
1,4-Dichlorobenzene	U		0.000252	0.00111	1	04/02/2018 05:43	WG1092315
Dichlorodifluoromethane	U		0.000794	0.00556	1	04/02/2018 05:43	WG1092315
1,1-Dichloroethane	U		0.000221	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dichloroethane	U		0.000295	0.00111	1	04/02/2018 05:43	WG1092315
1,1-Dichloroethene	U		0.000337	0.00111	1	04/02/2018 05:43	WG1092315
cis-1,2-Dichloroethene	0.107		0.000262	0.00111	1	04/02/2018 05:43	WG1092315
trans-1,2-Dichloroethene	U		0.000294	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dichloropropane	U		0.000398	0.00111	1	04/02/2018 05:43	WG1092315
1,1-Dichloropropene	U		0.000353	0.00111	1	04/02/2018 05:43	WG1092315
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 05:43	WG1092315
cis-1,3-Dichloropropene	U		0.000292	0.00111	1	04/02/2018 05:43	WG1092315
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/02/2018 05:43	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000866	0.00278	1	04/02/2018 05:43	WG1092315
2,2-Dichloropropane	U		0.000311	0.00111	1	04/02/2018 05:43	WG1092315
Di-isopropyl ether	U		0.000276	0.00111	1	04/02/2018 05:43	WG1092315
Ethylbenzene	U		0.000331	0.00111	1	04/02/2018 05:43	WG1092315
Hexachloro-1,3-butadiene	U		0.000381	0.00111	1	04/02/2018 05:43	WG1092315
2-Hexanone	U		0.00152	0.0111	1	04/02/2018 05:43	WG1092315
n-Hexane	U		0.000323	0.0111	1	04/02/2018 05:43	WG1092315
Iodomethane	U		0.00282	0.0111	1	04/02/2018 05:43	WG1092315
Isopropylbenzene	U		0.000270	0.00111	1	04/02/2018 05:43	WG1092315
p-Isopropyltoluene	U		0.000227	0.00111	1	04/02/2018 05:43	WG1092315
2-Butanone (MEK)	0.0178		0.00521	0.0111	1	04/02/2018 05:43	WG1092315
Methylene Chloride	U		0.00111	0.00556	1	04/02/2018 05:43	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 05:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 08:43

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/02/2018 05:43	WG1092315
Naphthalene	U		0.0011	0.00556	1	04/02/2018 05:43	WG1092315
n-Propylbenzene	U		0.000229	0.0011	1	04/02/2018 05:43	WG1092315
Styrene	U		0.000260	0.0011	1	04/02/2018 05:43	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000294	0.0011	1	04/02/2018 05:43	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/02/2018 05:43	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/02/2018 05:43	WG1092315
Tetrachloroethene	0.0149		0.000307	0.0011	1	04/02/2018 05:43	WG1092315
Toluene	U		0.000483	0.00556	1	04/02/2018 05:43	WG1092315
1,2,3-Trichlorobenzene	U		0.000341	0.0011	1	04/02/2018 05:43	WG1092315
1,2,4-Trichlorobenzene	U		0.000432	0.0011	1	04/02/2018 05:43	WG1092315
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/02/2018 05:43	WG1092315
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/02/2018 05:43	WG1092315
Trichloroethene	0.00287		0.000311	0.0011	1	04/02/2018 05:43	WG1092315
Trichlorofluoromethane	U		0.000425	0.00556	1	04/02/2018 05:43	WG1092315
1,2,3-Trichloropropane	U		0.000825	0.00278	1	04/02/2018 05:43	WG1092315
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/02/2018 05:43	WG1092315
1,2,3-Trimethylbenzene	U		0.000319	0.0011	1	04/02/2018 05:43	WG1092315
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/02/2018 05:43	WG1092315
Vinyl acetate	U		0.00266	0.011	1	04/02/2018 05:43	WG1092315
Vinyl chloride	0.0204		0.000324	0.0011	1	04/02/2018 05:43	WG1092315
Xylenes, Total	U		0.000777	0.00334	1	04/02/2018 05:43	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 05:43	WG1092315
(S) Dibromofluoromethane	98.9			74.0-131		04/02/2018 05:43	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 05:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0272	J	0.0111	0.0556	1	04/02/2018 06:05	WG1092315
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 06:05	WG1092315
Benzene	U		0.000300	0.00111	1	04/02/2018 06:05	WG1092315
Bromobenzene	U		0.000316	0.00111	1	04/02/2018 06:05	WG1092315
Bromodichloromethane	U		0.000282	0.00111	1	04/02/2018 06:05	WG1092315
Bromochloromethane	U		0.000434	0.00556	1	04/02/2018 06:05	WG1092315
Bromoform	U		0.000471	0.00111	1	04/02/2018 06:05	WG1092315
Bromomethane	U		0.00149	0.00556	1	04/02/2018 06:05	WG1092315
n-Butylbenzene	U		0.000287	0.00111	1	04/02/2018 06:05	WG1092315
sec-Butylbenzene	U		0.000223	0.00111	1	04/02/2018 06:05	WG1092315
tert-Butylbenzene	U		0.000229	0.00111	1	04/02/2018 06:05	WG1092315
Carbon disulfide	0.000447	J	0.000246	0.00111	1	04/02/2018 06:05	WG1092315
Carbon tetrachloride	U		0.000365	0.00111	1	04/02/2018 06:05	WG1092315
Chlorobenzene	U		0.000236	0.00111	1	04/02/2018 06:05	WG1092315
Chlorodibromomethane	U		0.000415	0.00111	1	04/02/2018 06:05	WG1092315
Chloroethane	U		0.00105	0.00556	1	04/02/2018 06:05	WG1092315
Chloroform	U		0.000255	0.00556	1	04/02/2018 06:05	WG1092315
Chloromethane	U		0.000417	0.00278	1	04/02/2018 06:05	WG1092315
2-Chlorotoluene	U		0.000335	0.00111	1	04/02/2018 06:05	WG1092315
4-Chlorotoluene	U		0.000267	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00556	1	04/02/2018 06:05	WG1092315
1,2-Dibromoethane	U		0.000381	0.00111	1	04/02/2018 06:05	WG1092315
Dibromomethane	U		0.000425	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dichlorobenzene	U		0.000339	0.00111	1	04/02/2018 06:05	WG1092315
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/02/2018 06:05	WG1092315
1,4-Dichlorobenzene	U		0.000251	0.00111	1	04/02/2018 06:05	WG1092315
Dichlorodifluoromethane	U		0.000793	0.00556	1	04/02/2018 06:05	WG1092315
1,1-Dichloroethane	U		0.000221	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dichloroethane	U		0.000295	0.00111	1	04/02/2018 06:05	WG1092315
1,1-Dichloroethene	U		0.000337	0.00111	1	04/02/2018 06:05	WG1092315
cis-1,2-Dichloroethene	0.00725		0.000261	0.00111	1	04/02/2018 06:05	WG1092315
trans-1,2-Dichloroethene	U		0.000293	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dichloropropane	U		0.000398	0.00111	1	04/02/2018 06:05	WG1092315
1,1-Dichloropropene	U		0.000352	0.00111	1	04/02/2018 06:05	WG1092315
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 06:05	WG1092315
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	04/02/2018 06:05	WG1092315
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/02/2018 06:05	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000865	0.00278	1	04/02/2018 06:05	WG1092315
2,2-Dichloropropane	U		0.000310	0.00111	1	04/02/2018 06:05	WG1092315
Di-isopropyl ether	U		0.000276	0.00111	1	04/02/2018 06:05	WG1092315
Ethylbenzene	U		0.000330	0.00111	1	04/02/2018 06:05	WG1092315
Hexachloro-1,3-butadiene	U		0.000380	0.00111	1	04/02/2018 06:05	WG1092315
2-Hexanone	U		0.00152	0.0111	1	04/02/2018 06:05	WG1092315
n-Hexane	U		0.000322	0.0111	1	04/02/2018 06:05	WG1092315
Iodomethane	U		0.00281	0.0111	1	04/02/2018 06:05	WG1092315
Isopropylbenzene	U		0.000270	0.00111	1	04/02/2018 06:05	WG1092315
p-Isopropyltoluene	U		0.000227	0.00111	1	04/02/2018 06:05	WG1092315
2-Butanone (MEK)	0.0126		0.00520	0.0111	1	04/02/2018 06:05	WG1092315
Methylene Chloride	U		0.00111	0.00556	1	04/02/2018 06:05	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 06:05	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 09:05

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/02/2018 06:05	WG1092315
Naphthalene	U		0.0011	0.00556	1	04/02/2018 06:05	WG1092315
n-Propylbenzene	U		0.000229	0.0011	1	04/02/2018 06:05	WG1092315
Styrene	U		0.000260	0.0011	1	04/02/2018 06:05	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000293	0.0011	1	04/02/2018 06:05	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/02/2018 06:05	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/02/2018 06:05	WG1092315
Tetrachloroethene	0.00112		0.000307	0.0011	1	04/02/2018 06:05	WG1092315
Toluene	U		0.000482	0.00556	1	04/02/2018 06:05	WG1092315
1,2,3-Trichlorobenzene	U		0.000340	0.0011	1	04/02/2018 06:05	WG1092315
1,2,4-Trichlorobenzene	U		0.000431	0.0011	1	04/02/2018 06:05	WG1092315
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/02/2018 06:05	WG1092315
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/02/2018 06:05	WG1092315
Trichloroethene	0.000720	U	0.000310	0.0011	1	04/02/2018 06:05	WG1092315
Trichlorofluoromethane	U		0.000425	0.00556	1	04/02/2018 06:05	WG1092315
1,2,3-Trichloropropane	U		0.000824	0.00278	1	04/02/2018 06:05	WG1092315
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/02/2018 06:05	WG1092315
1,2,3-Trimethylbenzene	U		0.000319	0.0011	1	04/02/2018 06:05	WG1092315
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/02/2018 06:05	WG1092315
Vinyl acetate	U		0.00266	0.011	1	04/02/2018 06:05	WG1092315
Vinyl chloride	0.00491		0.000323	0.0011	1	04/02/2018 06:05	WG1092315
Xylenes, Total	U		0.000776	0.00333	1	04/02/2018 06:05	WG1092315
(S) Toluene-d8	103			80.0-120		04/02/2018 06:05	WG1092315
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 06:05	WG1092315
(S) 4-Bromofluorobenzene	103			64.0-132		04/02/2018 06:05	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0191	J	0.0113	0.0567	1	04/06/2018 06:44	WG1092315
Acrylonitrile	U		0.00203	0.0113	1	04/06/2018 06:44	WG1092315
Benzene	U		0.000306	0.00113	1	04/06/2018 06:44	WG1092315
Bromobenzene	U		0.000322	0.00113	1	04/06/2018 06:44	WG1092315
Bromodichloromethane	U		0.000288	0.00113	1	04/06/2018 06:44	WG1092315
Bromochloromethane	U		0.000442	0.00567	1	04/06/2018 06:44	WG1092315
Bromoform	U		0.000481	0.00113	1	04/06/2018 06:44	WG1092315
Bromomethane	U		0.00152	0.00567	1	04/06/2018 06:44	WG1092315
n-Butylbenzene	U		0.000292	0.00113	1	04/06/2018 06:44	WG1092315
sec-Butylbenzene	U		0.000228	0.00113	1	04/06/2018 06:44	WG1092315
tert-Butylbenzene	U		0.000233	0.00113	1	04/06/2018 06:44	WG1092315
Carbon disulfide	0.000449	J	0.000250	0.00113	1	04/06/2018 06:44	WG1092315
Carbon tetrachloride	U		0.000372	0.00113	1	04/06/2018 06:44	WG1092315
Chlorobenzene	U		0.000240	0.00113	1	04/06/2018 06:44	WG1092315
Chlorodibromomethane	U		0.000423	0.00113	1	04/06/2018 06:44	WG1092315
Chloroethane	U		0.00107	0.00567	1	04/06/2018 06:44	WG1092315
Chloroform	U		0.000260	0.00567	1	04/06/2018 06:44	WG1092315
Chloromethane	U		0.000425	0.00283	1	04/06/2018 06:44	WG1092315
2-Chlorotoluene	U		0.000341	0.00113	1	04/06/2018 06:44	WG1092315
4-Chlorotoluene	U		0.000272	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00567	1	04/06/2018 06:44	WG1092315
1,2-Dibromoethane	U		0.000389	0.00113	1	04/06/2018 06:44	WG1092315
Dibromomethane	U		0.000433	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dichlorobenzene	U		0.000346	0.00113	1	04/06/2018 06:44	WG1092315
1,3-Dichlorobenzene	U		0.000271	0.00113	1	04/06/2018 06:44	WG1092315
1,4-Dichlorobenzene	U		0.000256	0.00113	1	04/06/2018 06:44	WG1092315
Dichlorodifluoromethane	U		0.000808	0.00567	1	04/06/2018 06:44	WG1092315
1,1-Dichloroethane	U		0.000226	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dichloroethane	U		0.000300	0.00113	1	04/06/2018 06:44	WG1092315
1,1-Dichloroethene	U		0.000343	0.00113	1	04/06/2018 06:44	WG1092315
cis-1,2-Dichloroethene	0.0159		0.000266	0.00113	1	04/06/2018 06:44	WG1092315
trans-1,2-Dichloroethene	U		0.000299	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dichloropropane	U		0.000406	0.00113	1	04/06/2018 06:44	WG1092315
1,1-Dichloropropene	U		0.000359	0.00113	1	04/06/2018 06:44	WG1092315
1,3-Dichloropropane	U		0.000235	0.00113	1	04/06/2018 06:44	WG1092315
cis-1,3-Dichloropropene	U		0.000297	0.00113	1	04/06/2018 06:44	WG1092315
trans-1,3-Dichloropropene	U		0.000303	0.00113	1	04/06/2018 06:44	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000882	0.00283	1	04/06/2018 06:44	WG1092315
2,2-Dichloropropane	U		0.000316	0.00113	1	04/06/2018 06:44	WG1092315
Di-isopropyl ether	U		0.000281	0.00113	1	04/06/2018 06:44	WG1092315
Ethylbenzene	U		0.000337	0.00113	1	04/06/2018 06:44	WG1092315
Hexachloro-1,3-butadiene	U		0.000388	0.00113	1	04/06/2018 06:44	WG1092315
2-Hexanone	U		0.00155	0.0113	1	04/06/2018 06:44	WG1092315
n-Hexane	U		0.000329	0.0113	1	04/06/2018 06:44	WG1092315
Iodomethane	U		0.00287	0.0113	1	04/06/2018 06:44	WG1092315
Isopropylbenzene	U		0.000275	0.00113	1	04/06/2018 06:44	WG1092315
p-Isopropyltoluene	U		0.000231	0.00113	1	04/06/2018 06:44	WG1092315
2-Butanone (MEK)	U		0.00530	0.0113	1	04/06/2018 06:44	WG1092315
Methylene Chloride	U		0.00113	0.00567	1	04/06/2018 06:44	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	04/06/2018 06:44	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 09:14

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/06/2018 06:44	WG1092315
Naphthalene	U		0.00113	0.00567	1	04/06/2018 06:44	WG1092315
n-Propylbenzene	U		0.000233	0.00113	1	04/06/2018 06:44	WG1092315
Styrene	U		0.000265	0.00113	1	04/06/2018 06:44	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/06/2018 06:44	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/06/2018 06:44	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	04/06/2018 06:44	WG1092315
Tetrachloroethene	0.00546		0.000313	0.00113	1	04/06/2018 06:44	WG1092315
Toluene	U		0.000492	0.00567	1	04/06/2018 06:44	WG1092315
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	04/06/2018 06:44	WG1092315
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	04/06/2018 06:44	WG1092315
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/06/2018 06:44	WG1092315
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/06/2018 06:44	WG1092315
Trichloroethene	0.00370		0.000316	0.00113	1	04/06/2018 06:44	WG1092315
Trichlorofluoromethane	U		0.000433	0.00567	1	04/06/2018 06:44	WG1092315
1,2,3-Trichloropropane	U		0.000840	0.00283	1	04/06/2018 06:44	WG1092315
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/06/2018 06:44	WG1092315
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/06/2018 06:44	WG1092315
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	04/06/2018 06:44	WG1092315
Vinyl acetate	U		0.00271	0.0113	1	04/06/2018 06:44	WG1092315
Vinyl chloride	0.0398		0.000330	0.00113	1	04/06/2018 06:44	WG1092315
Xylenes, Total	U		0.000791	0.00340	1	04/06/2018 06:44	WG1092315
<i>(S) Toluene-d8</i>	106			80.0-120		04/06/2018 06:44	WG1092315
<i>(S) Dibromofluoromethane</i>	103			74.0-131		04/06/2018 06:44	WG1092315
<i>(S) 4-Bromofluorobenzene</i>	98.3			64.0-132		04/06/2018 06:44	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.7		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0133	J	0.0113	0.0563	1	04/02/2018 06:47	WG1092315
Acrylonitrile	U		0.00202	0.0113	1	04/02/2018 06:47	WG1092315
Benzene	U		0.000304	0.00113	1	04/02/2018 06:47	WG1092315
Bromobenzene	U		0.000320	0.00113	1	04/02/2018 06:47	WG1092315
Bromodichloromethane	U		0.000286	0.00113	1	04/02/2018 06:47	WG1092315
Bromochloromethane	U		0.000440	0.00563	1	04/02/2018 06:47	WG1092315
Bromoform	U		0.000478	0.00113	1	04/02/2018 06:47	WG1092315
Bromomethane	U		0.00151	0.00563	1	04/02/2018 06:47	WG1092315
n-Butylbenzene	U		0.000291	0.00113	1	04/02/2018 06:47	WG1092315
sec-Butylbenzene	U		0.000227	0.00113	1	04/02/2018 06:47	WG1092315
tert-Butylbenzene	U		0.000232	0.00113	1	04/02/2018 06:47	WG1092315
Carbon disulfide	U		0.000249	0.00113	1	04/02/2018 06:47	WG1092315
Carbon tetrachloride	U		0.000370	0.00113	1	04/02/2018 06:47	WG1092315
Chlorobenzene	U		0.000239	0.00113	1	04/02/2018 06:47	WG1092315
Chlorodibromomethane	U		0.000420	0.00113	1	04/02/2018 06:47	WG1092315
Chloroethane	U		0.00107	0.00563	1	04/02/2018 06:47	WG1092315
Chloroform	U		0.000258	0.00563	1	04/02/2018 06:47	WG1092315
Chloromethane	U		0.000423	0.00282	1	04/02/2018 06:47	WG1092315
2-Chlorotoluene	U		0.000339	0.00113	1	04/02/2018 06:47	WG1092315
4-Chlorotoluene	U		0.000270	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00563	1	04/02/2018 06:47	WG1092315
1,2-Dibromoethane	U		0.000387	0.00113	1	04/02/2018 06:47	WG1092315
Dibromomethane	U		0.000431	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dichlorobenzene	U		0.000344	0.00113	1	04/02/2018 06:47	WG1092315
1,3-Dichlorobenzene	U		0.000269	0.00113	1	04/02/2018 06:47	WG1092315
1,4-Dichlorobenzene	U		0.000255	0.00113	1	04/02/2018 06:47	WG1092315
Dichlorodifluoromethane	U		0.000804	0.00563	1	04/02/2018 06:47	WG1092315
1,1-Dichloroethane	U		0.000224	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dichloroethane	U		0.000299	0.00113	1	04/02/2018 06:47	WG1092315
1,1-Dichloroethene	0.000632	J	0.000341	0.00113	1	04/02/2018 06:47	WG1092315
cis-1,2-Dichloroethene	0.0583		0.000265	0.00113	1	04/02/2018 06:47	WG1092315
trans-1,2-Dichloroethene	U		0.000298	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dichloropropane	U		0.000403	0.00113	1	04/02/2018 06:47	WG1092315
1,1-Dichloropropene	U		0.000357	0.00113	1	04/02/2018 06:47	WG1092315
1,3-Dichloropropane	U		0.000233	0.00113	1	04/02/2018 06:47	WG1092315
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	04/02/2018 06:47	WG1092315
trans-1,3-Dichloropropene	U		0.000301	0.00113	1	04/02/2018 06:47	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000877	0.00282	1	04/02/2018 06:47	WG1092315
2,2-Dichloropropane	U		0.000314	0.00113	1	04/02/2018 06:47	WG1092315
Di-isopropyl ether	U		0.000279	0.00113	1	04/02/2018 06:47	WG1092315
Ethylbenzene	U		0.000335	0.00113	1	04/02/2018 06:47	WG1092315
Hexachloro-1,3-butadiene	U		0.000385	0.00113	1	04/02/2018 06:47	WG1092315
2-Hexanone	U		0.00154	0.0113	1	04/02/2018 06:47	WG1092315
n-Hexane	U		0.000327	0.0113	1	04/02/2018 06:47	WG1092315
Iodomethane	U		0.00285	0.0113	1	04/02/2018 06:47	WG1092315
Isopropylbenzene	U		0.000274	0.00113	1	04/02/2018 06:47	WG1092315
p-Isopropyltoluene	U		0.000230	0.00113	1	04/02/2018 06:47	WG1092315
2-Butanone (MEK)	U		0.00527	0.0113	1	04/02/2018 06:47	WG1092315
Methylene Chloride	U		0.00113	0.00563	1	04/02/2018 06:47	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	04/02/2018 06:47	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 09:23

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	04/02/2018 06:47	WG1092315
Naphthalene	U		0.00113	0.00563	1	04/02/2018 06:47	WG1092315
n-Propylbenzene	U		0.000232	0.00113	1	04/02/2018 06:47	WG1092315
Styrene	U		0.000264	0.00113	1	04/02/2018 06:47	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000298	0.00113	1	04/02/2018 06:47	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	04/02/2018 06:47	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00113	1	04/02/2018 06:47	WG1092315
Tetrachloroethene	0.00226		0.000311	0.00113	1	04/02/2018 06:47	WG1092315
Toluene	U		0.000489	0.00563	1	04/02/2018 06:47	WG1092315
1,2,3-Trichlorobenzene	U		0.000345	0.00113	1	04/02/2018 06:47	WG1092315
1,2,4-Trichlorobenzene	U		0.000437	0.00113	1	04/02/2018 06:47	WG1092315
1,1,1-Trichloroethane	U		0.000322	0.00113	1	04/02/2018 06:47	WG1092315
1,1,2-Trichloroethane	U		0.000312	0.00113	1	04/02/2018 06:47	WG1092315
Trichloroethene	0.00313		0.000314	0.00113	1	04/02/2018 06:47	WG1092315
Trichlorofluoromethane	U		0.000431	0.00563	1	04/02/2018 06:47	WG1092315
1,2,3-Trichloropropane	U		0.000835	0.00282	1	04/02/2018 06:47	WG1092315
1,2,4-Trimethylbenzene	U		0.000238	0.00113	1	04/02/2018 06:47	WG1092315
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	04/02/2018 06:47	WG1092315
1,3,5-Trimethylbenzene	U		0.000300	0.00113	1	04/02/2018 06:47	WG1092315
Vinyl acetate	U		0.00269	0.0113	1	04/02/2018 06:47	WG1092315
Vinyl chloride	0.00776		0.000328	0.00113	1	04/02/2018 06:47	WG1092315
Xylenes, Total	U		0.000787	0.00338	1	04/02/2018 06:47	WG1092315
(S) Toluene-d8	99.5			80.0-120		04/02/2018 06:47	WG1092315
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 06:47	WG1092315
(S) 4-Bromofluorobenzene	103			64.0-132		04/02/2018 06:47	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0212	J	0.0107	0.0536	1	04/02/2018 07:08	WG1092315
Acrylonitrile	U		0.00192	0.0107	1	04/02/2018 07:08	WG1092315
Benzene	0.000503	J	0.000289	0.00107	1	04/02/2018 07:08	WG1092315
Bromobenzene	U		0.000304	0.00107	1	04/02/2018 07:08	WG1092315
Bromodichloromethane	U		0.000272	0.00107	1	04/02/2018 07:08	WG1092315
Bromochloromethane	U		0.000418	0.00536	1	04/02/2018 07:08	WG1092315
Bromoform	U		0.000454	0.00107	1	04/02/2018 07:08	WG1092315
Bromomethane	U		0.00144	0.00536	1	04/02/2018 07:08	WG1092315
n-Butylbenzene	U		0.000276	0.00107	1	04/02/2018 07:08	WG1092315
sec-Butylbenzene	U		0.000215	0.00107	1	04/02/2018 07:08	WG1092315
tert-Butylbenzene	U		0.000221	0.00107	1	04/02/2018 07:08	WG1092315
Carbon disulfide	0.000626	J	0.000237	0.00107	1	04/02/2018 07:08	WG1092315
Carbon tetrachloride	U		0.000351	0.00107	1	04/02/2018 07:08	WG1092315
Chlorobenzene	U		0.000227	0.00107	1	04/02/2018 07:08	WG1092315
Chlorodibromomethane	U		0.000400	0.00107	1	04/02/2018 07:08	WG1092315
Chloroethane	U		0.00101	0.00536	1	04/02/2018 07:08	WG1092315
Chloroform	U		0.000245	0.00536	1	04/02/2018 07:08	WG1092315
Chloromethane	U		0.000402	0.00268	1	04/02/2018 07:08	WG1092315
2-Chlorotoluene	U		0.000322	0.00107	1	04/02/2018 07:08	WG1092315
4-Chlorotoluene	U		0.000257	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00536	1	04/02/2018 07:08	WG1092315
1,2-Dibromoethane	U		0.000367	0.00107	1	04/02/2018 07:08	WG1092315
Dibromomethane	U		0.000409	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dichlorobenzene	U		0.000327	0.00107	1	04/02/2018 07:08	WG1092315
1,3-Dichlorobenzene	U		0.000256	0.00107	1	04/02/2018 07:08	WG1092315
1,4-Dichlorobenzene	U		0.000242	0.00107	1	04/02/2018 07:08	WG1092315
Dichlorodifluoromethane	U		0.000764	0.00536	1	04/02/2018 07:08	WG1092315
1,1-Dichloroethane	U		0.000213	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dichloroethane	U		0.000284	0.00107	1	04/02/2018 07:08	WG1092315
1,1-Dichloroethene	U		0.000325	0.00107	1	04/02/2018 07:08	WG1092315
cis-1,2-Dichloroethene	0.0180		0.000252	0.00107	1	04/02/2018 07:08	WG1092315
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dichloropropane	U		0.000383	0.00107	1	04/02/2018 07:08	WG1092315
1,1-Dichloropropene	U		0.000340	0.00107	1	04/02/2018 07:08	WG1092315
1,3-Dichloropropane	U		0.000222	0.00107	1	04/02/2018 07:08	WG1092315
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	04/02/2018 07:08	WG1092315
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	04/02/2018 07:08	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000833	0.00268	1	04/02/2018 07:08	WG1092315
2,2-Dichloropropane	U		0.000299	0.00107	1	04/02/2018 07:08	WG1092315
Di-isopropyl ether	U		0.000266	0.00107	1	04/02/2018 07:08	WG1092315
Ethylbenzene	U		0.000318	0.00107	1	04/02/2018 07:08	WG1092315
Hexachloro-1,3-butadiene	U		0.000366	0.00107	1	04/02/2018 07:08	WG1092315
2-Hexanone	U		0.00147	0.0107	1	04/02/2018 07:08	WG1092315
n-Hexane	U		0.000311	0.0107	1	04/02/2018 07:08	WG1092315
Iodomethane	U		0.00271	0.0107	1	04/02/2018 07:08	WG1092315
Isopropylbenzene	U		0.000260	0.00107	1	04/02/2018 07:08	WG1092315
p-Isopropyltoluene	U		0.000219	0.00107	1	04/02/2018 07:08	WG1092315
2-Butanone (MEK)	0.00503	J	0.00501	0.0107	1	04/02/2018 07:08	WG1092315
Methylene Chloride	U		0.00107	0.00536	1	04/02/2018 07:08	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	04/02/2018 07:08	WG1092315

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 03/29/18 09:34

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	04/02/2018 07:08	WG1092315
Naphthalene	U		0.00107	0.00536	1	04/02/2018 07:08	WG1092315
n-Propylbenzene	U		0.000221	0.00107	1	04/02/2018 07:08	WG1092315
Styrene	U		0.000251	0.00107	1	04/02/2018 07:08	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	04/02/2018 07:08	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	04/02/2018 07:08	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	04/02/2018 07:08	WG1092315
Tetrachloroethene	0.00176		0.000296	0.00107	1	04/02/2018 07:08	WG1092315
Toluene	U		0.000465	0.00536	1	04/02/2018 07:08	WG1092315
1,2,3-Trichlorobenzene	U		0.000328	0.00107	1	04/02/2018 07:08	WG1092315
1,2,4-Trichlorobenzene	U		0.000416	0.00107	1	04/02/2018 07:08	WG1092315
1,1,1-Trichloroethane	U		0.000306	0.00107	1	04/02/2018 07:08	WG1092315
1,1,2-Trichloroethane	U		0.000297	0.00107	1	04/02/2018 07:08	WG1092315
Trichloroethene	0.00181		0.000299	0.00107	1	04/02/2018 07:08	WG1092315
Trichlorofluoromethane	U		0.000409	0.00536	1	04/02/2018 07:08	WG1092315
1,2,3-Trichloropropane	U		0.000794	0.00268	1	04/02/2018 07:08	WG1092315
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	04/02/2018 07:08	WG1092315
1,2,3-Trimethylbenzene	U		0.000307	0.00107	1	04/02/2018 07:08	WG1092315
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	04/02/2018 07:08	WG1092315
Vinyl acetate	U		0.00256	0.0107	1	04/02/2018 07:08	WG1092315
Vinyl chloride	0.00999		0.000312	0.00107	1	04/02/2018 07:08	WG1092315
Xylenes, Total	U		0.000748	0.00321	1	04/02/2018 07:08	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 07:08	WG1092315
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 07:08	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 07:08	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.4		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0207	J	0.0114	0.0572	1	04/02/2018 07:29	WG1092315
Acrylonitrile	U		0.00205	0.0114	1	04/02/2018 07:29	WG1092315
Benzene	U		0.000309	0.00114	1	04/02/2018 07:29	WG1092315
Bromobenzene	U		0.000325	0.00114	1	04/02/2018 07:29	WG1092315
Bromodichloromethane	U		0.000291	0.00114	1	04/02/2018 07:29	WG1092315
Bromochloromethane	U		0.000446	0.00572	1	04/02/2018 07:29	WG1092315
Bromoform	U		0.000485	0.00114	1	04/02/2018 07:29	WG1092315
Bromomethane	U		0.00153	0.00572	1	04/02/2018 07:29	WG1092315
n-Butylbenzene	U		0.000295	0.00114	1	04/02/2018 07:29	WG1092315
sec-Butylbenzene	U		0.000230	0.00114	1	04/02/2018 07:29	WG1092315
tert-Butylbenzene	U		0.000236	0.00114	1	04/02/2018 07:29	WG1092315
Carbon disulfide	0.000633	J	0.000253	0.00114	1	04/02/2018 07:29	WG1092315
Carbon tetrachloride	U		0.000375	0.00114	1	04/02/2018 07:29	WG1092315
Chlorobenzene	U		0.000243	0.00114	1	04/02/2018 07:29	WG1092315
Chlorodibromomethane	U		0.000427	0.00114	1	04/02/2018 07:29	WG1092315
Chloroethane	U		0.00108	0.00572	1	04/02/2018 07:29	WG1092315
Chloroform	U		0.000262	0.00572	1	04/02/2018 07:29	WG1092315
Chloromethane	U		0.000429	0.00286	1	04/02/2018 07:29	WG1092315
2-Chlorotoluene	U		0.000344	0.00114	1	04/02/2018 07:29	WG1092315
4-Chlorotoluene	U		0.000275	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00572	1	04/02/2018 07:29	WG1092315
1,2-Dibromoethane	U		0.000392	0.00114	1	04/02/2018 07:29	WG1092315
Dibromomethane	U		0.000437	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dichlorobenzene	U		0.000349	0.00114	1	04/02/2018 07:29	WG1092315
1,3-Dichlorobenzene	U		0.000273	0.00114	1	04/02/2018 07:29	WG1092315
1,4-Dichlorobenzene	U		0.000259	0.00114	1	04/02/2018 07:29	WG1092315
Dichlorodifluoromethane	U		0.000816	0.00572	1	04/02/2018 07:29	WG1092315
1,1-Dichloroethane	U		0.000228	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dichloroethane	U		0.000303	0.00114	1	04/02/2018 07:29	WG1092315
1,1-Dichloroethene	U		0.000347	0.00114	1	04/02/2018 07:29	WG1092315
cis-1,2-Dichloroethene	0.0101		0.000269	0.00114	1	04/02/2018 07:29	WG1092315
trans-1,2-Dichloroethene	U		0.000302	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dichloropropane	U		0.000410	0.00114	1	04/02/2018 07:29	WG1092315
1,1-Dichloropropene	U		0.000363	0.00114	1	04/02/2018 07:29	WG1092315
1,3-Dichloropropane	U		0.000237	0.00114	1	04/02/2018 07:29	WG1092315
cis-1,3-Dichloropropene	U		0.000300	0.00114	1	04/02/2018 07:29	WG1092315
trans-1,3-Dichloropropene	U		0.000305	0.00114	1	04/02/2018 07:29	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000890	0.00286	1	04/02/2018 07:29	WG1092315
2,2-Dichloropropane	U		0.000319	0.00114	1	04/02/2018 07:29	WG1092315
Di-isopropyl ether	U		0.000284	0.00114	1	04/02/2018 07:29	WG1092315
Ethylbenzene	U		0.000340	0.00114	1	04/02/2018 07:29	WG1092315
Hexachloro-1,3-butadiene	U		0.000391	0.00114	1	04/02/2018 07:29	WG1092315
2-Hexanone	U		0.00157	0.0114	1	04/02/2018 07:29	WG1092315
n-Hexane	U		0.000332	0.0114	1	04/02/2018 07:29	WG1092315
Iodomethane	U		0.00289	0.0114	1	04/02/2018 07:29	WG1092315
Isopropylbenzene	U		0.000278	0.00114	1	04/02/2018 07:29	WG1092315
p-Isopropyltoluene	U		0.000233	0.00114	1	04/02/2018 07:29	WG1092315
2-Butanone (MEK)	0.00572	J	0.00535	0.0114	1	04/02/2018 07:29	WG1092315
Methylene Chloride	U		0.00114	0.00572	1	04/02/2018 07:29	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00215	0.0114	1	04/02/2018 07:29	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 09:42

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00114	1	04/02/2018 07:29	WG1092315
Naphthalene	U		0.00114	0.00572	1	04/02/2018 07:29	WG1092315
n-Propylbenzene	U		0.000236	0.00114	1	04/02/2018 07:29	WG1092315
Styrene	U		0.000268	0.00114	1	04/02/2018 07:29	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000302	0.00114	1	04/02/2018 07:29	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000418	0.00114	1	04/02/2018 07:29	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000418	0.00114	1	04/02/2018 07:29	WG1092315
Tetrachloroethene	0.000656	U	0.000316	0.00114	1	04/02/2018 07:29	WG1092315
Toluene	U		0.000497	0.00572	1	04/02/2018 07:29	WG1092315
1,2,3-Trichlorobenzene	U		0.000350	0.00114	1	04/02/2018 07:29	WG1092315
1,2,4-Trichlorobenzene	U		0.000444	0.00114	1	04/02/2018 07:29	WG1092315
1,1,1-Trichloroethane	U		0.000327	0.00114	1	04/02/2018 07:29	WG1092315
1,1,2-Trichloroethane	U		0.000317	0.00114	1	04/02/2018 07:29	WG1092315
Trichloroethene	0.000449	U	0.000319	0.00114	1	04/02/2018 07:29	WG1092315
Trichlorofluoromethane	U		0.000437	0.00572	1	04/02/2018 07:29	WG1092315
1,2,3-Trichloropropane	U		0.000848	0.00286	1	04/02/2018 07:29	WG1092315
1,2,4-Trimethylbenzene	U		0.000241	0.00114	1	04/02/2018 07:29	WG1092315
1,2,3-Trimethylbenzene	U		0.000328	0.00114	1	04/02/2018 07:29	WG1092315
1,3,5-Trimethylbenzene	U		0.000304	0.00114	1	04/02/2018 07:29	WG1092315
Vinyl acetate	U		0.00273	0.0114	1	04/02/2018 07:29	WG1092315
Vinyl chloride	0.00929		0.000333	0.00114	1	04/02/2018 07:29	WG1092315
Xylenes, Total	U		0.000799	0.00343	1	04/02/2018 07:29	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 07:29	WG1092315
(S) Dibromofluoromethane	105			74.0-131		04/02/2018 07:29	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 07:29	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.0		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>JO</u>	0.0118	0.0588	1	04/01/2018 23:39	WG1092317
Acrylonitrile	U		0.00211	0.0118	1	04/01/2018 23:39	WG1092317
Benzene	U		0.000318	0.00118	1	04/01/2018 23:39	WG1092317
Bromobenzene	U		0.000334	0.00118	1	04/01/2018 23:39	WG1092317
Bromodichloromethane	U		0.000299	0.00118	1	04/01/2018 23:39	WG1092317
Bromochloromethane	U		0.000459	0.00588	1	04/01/2018 23:39	WG1092317
Bromoform	U	<u>JO</u>	0.000499	0.00118	1	04/01/2018 23:39	WG1092317
Bromomethane	U		0.00158	0.00588	1	04/01/2018 23:39	WG1092317
n-Butylbenzene	U		0.000303	0.00118	1	04/01/2018 23:39	WG1092317
sec-Butylbenzene	U		0.000236	0.00118	1	04/01/2018 23:39	WG1092317
tert-Butylbenzene	U		0.000242	0.00118	1	04/01/2018 23:39	WG1092317
Carbon disulfide	U		0.000260	0.00118	1	04/01/2018 23:39	WG1092317
Carbon tetrachloride	U		0.000386	0.00118	1	04/01/2018 23:39	WG1092317
Chlorobenzene	U		0.000249	0.00118	1	04/01/2018 23:39	WG1092317
Chlorodibromomethane	U		0.000439	0.00118	1	04/01/2018 23:39	WG1092317
Chloroethane	U		0.00111	0.00588	1	04/01/2018 23:39	WG1092317
Chloroform	U		0.000269	0.00588	1	04/01/2018 23:39	WG1092317
Chloromethane	U		0.000441	0.00294	1	04/01/2018 23:39	WG1092317
2-Chlorotoluene	U		0.000354	0.00118	1	04/01/2018 23:39	WG1092317
4-Chlorotoluene	U		0.000282	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00588	1	04/01/2018 23:39	WG1092317
1,2-Dibromoethane	U		0.000403	0.00118	1	04/01/2018 23:39	WG1092317
Dibromomethane	U		0.000449	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dichlorobenzene	U		0.000359	0.00118	1	04/01/2018 23:39	WG1092317
1,3-Dichlorobenzene	U		0.000281	0.00118	1	04/01/2018 23:39	WG1092317
1,4-Dichlorobenzene	U		0.000266	0.00118	1	04/01/2018 23:39	WG1092317
Dichlorodifluoromethane	U		0.000839	0.00588	1	04/01/2018 23:39	WG1092317
1,1-Dichloroethane	U		0.000234	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dichloroethane	U		0.000312	0.00118	1	04/01/2018 23:39	WG1092317
1,1-Dichloroethene	U		0.000356	0.00118	1	04/01/2018 23:39	WG1092317
cis-1,2-Dichloroethene	0.000656	<u>J</u>	0.000276	0.00118	1	04/01/2018 23:39	WG1092317
trans-1,2-Dichloroethene	U		0.000311	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dichloropropane	U		0.000421	0.00118	1	04/01/2018 23:39	WG1092317
1,1-Dichloropropene	U		0.000373	0.00118	1	04/01/2018 23:39	WG1092317
1,3-Dichloropropane	U		0.000244	0.00118	1	04/01/2018 23:39	WG1092317
cis-1,3-Dichloropropene	U		0.000308	0.00118	1	04/01/2018 23:39	WG1092317
trans-1,3-Dichloropropene	U		0.000314	0.00118	1	04/01/2018 23:39	WG1092317
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000915	0.00294	1	04/01/2018 23:39	WG1092317
2,2-Dichloropropane	U		0.000328	0.00118	1	04/01/2018 23:39	WG1092317
Di-isopropyl ether	U	<u>JO</u>	0.000292	0.00118	1	04/01/2018 23:39	WG1092317
Ethylbenzene	U		0.000349	0.00118	1	04/01/2018 23:39	WG1092317
Hexachloro-1,3-butadiene	U		0.000402	0.00118	1	04/01/2018 23:39	WG1092317
2-Hexanone	U		0.00161	0.0118	1	04/01/2018 23:39	WG1092317
n-Hexane	U		0.000341	0.0118	1	04/01/2018 23:39	WG1092317
Iodomethane	U		0.00298	0.0118	1	04/01/2018 23:39	WG1092317
Isopropylbenzene	U		0.000286	0.00118	1	04/01/2018 23:39	WG1092317
p-Isopropyltoluene	U		0.000240	0.00118	1	04/01/2018 23:39	WG1092317
2-Butanone (MEK)	U	<u>JO</u>	0.00551	0.0118	1	04/01/2018 23:39	WG1092317
Methylene Chloride	U		0.00118	0.00588	1	04/01/2018 23:39	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0118	1	04/01/2018 23:39	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 10:08

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000249	0.00118	1	04/01/2018 23:39	WG1092317
Naphthalene	U		0.00118	0.00588	1	04/01/2018 23:39	WG1092317
n-Propylbenzene	U		0.000242	0.00118	1	04/01/2018 23:39	WG1092317
Styrene	U		0.000275	0.00118	1	04/01/2018 23:39	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000311	0.00118	1	04/01/2018 23:39	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000429	0.00118	1	04/01/2018 23:39	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000429	0.00118	1	04/01/2018 23:39	WG1092317
Tetrachloroethene	U		0.000325	0.00118	1	04/01/2018 23:39	WG1092317
Toluene	U		0.000511	0.00588	1	04/01/2018 23:39	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000360	0.00118	1	04/01/2018 23:39	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000456	0.00118	1	04/01/2018 23:39	WG1092317
1,1,1-Trichloroethane	U		0.000336	0.00118	1	04/01/2018 23:39	WG1092317
1,1,2-Trichloroethane	U		0.000326	0.00118	1	04/01/2018 23:39	WG1092317
Trichloroethene	U		0.000328	0.00118	1	04/01/2018 23:39	WG1092317
Trichlorofluoromethane	U		0.000449	0.00588	1	04/01/2018 23:39	WG1092317
1,2,3-Trichloropropane	U		0.000872	0.00294	1	04/01/2018 23:39	WG1092317
1,2,4-Trimethylbenzene	U		0.000248	0.00118	1	04/01/2018 23:39	WG1092317
1,2,3-Trimethylbenzene	U		0.000338	0.00118	1	04/01/2018 23:39	WG1092317
1,3,5-Trimethylbenzene	U		0.000313	0.00118	1	04/01/2018 23:39	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00281	0.0118	1	04/01/2018 23:39	WG1092317
Vinyl chloride	0.00151		0.000342	0.00118	1	04/01/2018 23:39	WG1092317
Xylenes, Total	U		0.000821	0.00353	1	04/01/2018 23:39	WG1092317
(S) Toluene-d8	103			80.0-120		04/01/2018 23:39	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/01/2018 23:39	WG1092317
(S) 4-Bromofluorobenzene	92.9			64.0-132		04/01/2018 23:39	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.7		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0113	0.0564	1	04/01/2018 23:59	WG1092317
Acrylonitrile	U		0.00202	0.0113	1	04/01/2018 23:59	WG1092317
Benzene	U		0.000304	0.00113	1	04/01/2018 23:59	WG1092317
Bromobenzene	U		0.000320	0.00113	1	04/01/2018 23:59	WG1092317
Bromodichloromethane	U		0.000286	0.00113	1	04/01/2018 23:59	WG1092317
Bromochloromethane	U		0.000440	0.00564	1	04/01/2018 23:59	WG1092317
Bromoform	U	JO	0.000478	0.00113	1	04/01/2018 23:59	WG1092317
Bromomethane	U		0.00151	0.00564	1	04/01/2018 23:59	WG1092317
n-Butylbenzene	U		0.000291	0.00113	1	04/01/2018 23:59	WG1092317
sec-Butylbenzene	U		0.000227	0.00113	1	04/01/2018 23:59	WG1092317
tert-Butylbenzene	U		0.000232	0.00113	1	04/01/2018 23:59	WG1092317
Carbon disulfide	0.000440	J	0.000249	0.00113	1	04/01/2018 23:59	WG1092317
Carbon tetrachloride	U		0.000370	0.00113	1	04/01/2018 23:59	WG1092317
Chlorobenzene	U		0.000239	0.00113	1	04/01/2018 23:59	WG1092317
Chlorodibromomethane	U		0.000420	0.00113	1	04/01/2018 23:59	WG1092317
Chloroethane	U		0.00107	0.00564	1	04/01/2018 23:59	WG1092317
Chloroform	U		0.000258	0.00564	1	04/01/2018 23:59	WG1092317
Chloromethane	U		0.000423	0.00282	1	04/01/2018 23:59	WG1092317
2-Chlorotoluene	U		0.000339	0.00113	1	04/01/2018 23:59	WG1092317
4-Chlorotoluene	U		0.000270	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00564	1	04/01/2018 23:59	WG1092317
1,2-Dibromoethane	U		0.000387	0.00113	1	04/01/2018 23:59	WG1092317
Dibromomethane	U		0.000431	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dichlorobenzene	U		0.000344	0.00113	1	04/01/2018 23:59	WG1092317
1,3-Dichlorobenzene	U		0.000269	0.00113	1	04/01/2018 23:59	WG1092317
1,4-Dichlorobenzene	U		0.000255	0.00113	1	04/01/2018 23:59	WG1092317
Dichlorodifluoromethane	U		0.000804	0.00564	1	04/01/2018 23:59	WG1092317
1,1-Dichloroethane	U		0.000224	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dichloroethane	U		0.000299	0.00113	1	04/01/2018 23:59	WG1092317
1,1-Dichloroethene	U		0.000341	0.00113	1	04/01/2018 23:59	WG1092317
cis-1,2-Dichloroethene	0.000841	J	0.000265	0.00113	1	04/01/2018 23:59	WG1092317
trans-1,2-Dichloroethene	U		0.000298	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dichloropropane	U		0.000403	0.00113	1	04/01/2018 23:59	WG1092317
1,1-Dichloropropene	U		0.000357	0.00113	1	04/01/2018 23:59	WG1092317
1,3-Dichloropropane	U		0.000233	0.00113	1	04/01/2018 23:59	WG1092317
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	04/01/2018 23:59	WG1092317
trans-1,3-Dichloropropene	U		0.000301	0.00113	1	04/01/2018 23:59	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000877	0.00282	1	04/01/2018 23:59	WG1092317
2,2-Dichloropropane	U		0.000314	0.00113	1	04/01/2018 23:59	WG1092317
Di-isopropyl ether	U	JO	0.000280	0.00113	1	04/01/2018 23:59	WG1092317
Ethylbenzene	U		0.000335	0.00113	1	04/01/2018 23:59	WG1092317
Hexachloro-1,3-butadiene	U		0.000385	0.00113	1	04/01/2018 23:59	WG1092317
2-Hexanone	U		0.00154	0.0113	1	04/01/2018 23:59	WG1092317
n-Hexane	U		0.000327	0.0113	1	04/01/2018 23:59	WG1092317
Iodomethane	U		0.00285	0.0113	1	04/01/2018 23:59	WG1092317
Isopropylbenzene	U		0.000274	0.00113	1	04/01/2018 23:59	WG1092317
p-Isopropyltoluene	U		0.000230	0.00113	1	04/01/2018 23:59	WG1092317
2-Butanone (MEK)	U	JO	0.00527	0.0113	1	04/01/2018 23:59	WG1092317
Methylene Chloride	U		0.00113	0.00564	1	04/01/2018 23:59	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	04/01/2018 23:59	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 10:15

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	04/01/2018 23:59	WG1092317
Naphthalene	U		0.00113	0.00564	1	04/01/2018 23:59	WG1092317
n-Propylbenzene	U		0.000232	0.00113	1	04/01/2018 23:59	WG1092317
Styrene	U		0.000264	0.00113	1	04/01/2018 23:59	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000298	0.00113	1	04/01/2018 23:59	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	04/01/2018 23:59	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00113	1	04/01/2018 23:59	WG1092317
Tetrachloroethene	U		0.000311	0.00113	1	04/01/2018 23:59	WG1092317
Toluene	U		0.000489	0.00564	1	04/01/2018 23:59	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000345	0.00113	1	04/01/2018 23:59	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000437	0.00113	1	04/01/2018 23:59	WG1092317
1,1,1-Trichloroethane	U		0.000322	0.00113	1	04/01/2018 23:59	WG1092317
1,1,2-Trichloroethane	U		0.000312	0.00113	1	04/01/2018 23:59	WG1092317
Trichloroethene	U		0.000314	0.00113	1	04/01/2018 23:59	WG1092317
Trichlorofluoromethane	U		0.000431	0.00564	1	04/01/2018 23:59	WG1092317
1,2,3-Trichloropropane	U		0.000835	0.00282	1	04/01/2018 23:59	WG1092317
1,2,4-Trimethylbenzene	U		0.000238	0.00113	1	04/01/2018 23:59	WG1092317
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	04/01/2018 23:59	WG1092317
1,3,5-Trimethylbenzene	U		0.000300	0.00113	1	04/01/2018 23:59	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00269	0.0113	1	04/01/2018 23:59	WG1092317
Vinyl chloride	0.000623	<u>J</u>	0.000328	0.00113	1	04/01/2018 23:59	WG1092317
Xylenes, Total	U		0.000787	0.00338	1	04/01/2018 23:59	WG1092317
<i>(S) Toluene-d8</i>	108			80.0-120		04/01/2018 23:59	WG1092317
<i>(S) Dibromofluoromethane</i>	98.9			74.0-131		04/01/2018 23:59	WG1092317
<i>(S) 4-Bromofluorobenzene</i>	91.7			64.0-132		04/01/2018 23:59	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.3		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>JO</u>	0.0116	0.0579	1	04/02/2018 00:18	WG1092317
Acrylonitrile	U		0.00207	0.0116	1	04/02/2018 00:18	WG1092317
Benzene	U		0.000313	0.00116	1	04/02/2018 00:18	WG1092317
Bromobenzene	U		0.000329	0.00116	1	04/02/2018 00:18	WG1092317
Bromodichloromethane	U		0.000294	0.00116	1	04/02/2018 00:18	WG1092317
Bromochloromethane	U		0.000452	0.00579	1	04/02/2018 00:18	WG1092317
Bromoform	U	<u>JO</u>	0.000491	0.00116	1	04/02/2018 00:18	WG1092317
Bromomethane	U		0.00155	0.00579	1	04/02/2018 00:18	WG1092317
n-Butylbenzene	U		0.000299	0.00116	1	04/02/2018 00:18	WG1092317
sec-Butylbenzene	U		0.000233	0.00116	1	04/02/2018 00:18	WG1092317
tert-Butylbenzene	U		0.000239	0.00116	1	04/02/2018 00:18	WG1092317
Carbon disulfide	U		0.000256	0.00116	1	04/02/2018 00:18	WG1092317
Carbon tetrachloride	U		0.000380	0.00116	1	04/02/2018 00:18	WG1092317
Chlorobenzene	U		0.000246	0.00116	1	04/02/2018 00:18	WG1092317
Chlorodibromomethane	U		0.000432	0.00116	1	04/02/2018 00:18	WG1092317
Chloroethane	U		0.00110	0.00579	1	04/02/2018 00:18	WG1092317
Chloroform	U		0.000265	0.00579	1	04/02/2018 00:18	WG1092317
Chloromethane	U		0.000434	0.00290	1	04/02/2018 00:18	WG1092317
2-Chlorotoluene	U		0.000349	0.00116	1	04/02/2018 00:18	WG1092317
4-Chlorotoluene	U		0.000278	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00579	1	04/02/2018 00:18	WG1092317
1,2-Dibromoethane	U		0.000397	0.00116	1	04/02/2018 00:18	WG1092317
Dibromomethane	U		0.000443	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dichlorobenzene	U		0.000353	0.00116	1	04/02/2018 00:18	WG1092317
1,3-Dichlorobenzene	U		0.000277	0.00116	1	04/02/2018 00:18	WG1092317
1,4-Dichlorobenzene	U		0.000262	0.00116	1	04/02/2018 00:18	WG1092317
Dichlorodifluoromethane	U		0.000826	0.00579	1	04/02/2018 00:18	WG1092317
1,1-Dichloroethane	U		0.000231	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dichloroethane	U		0.000307	0.00116	1	04/02/2018 00:18	WG1092317
1,1-Dichloroethene	U		0.000351	0.00116	1	04/02/2018 00:18	WG1092317
cis-1,2-Dichloroethene	0.000946	<u>J</u>	0.000272	0.00116	1	04/02/2018 00:18	WG1092317
trans-1,2-Dichloroethene	U		0.000306	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dichloropropane	U		0.000415	0.00116	1	04/02/2018 00:18	WG1092317
1,1-Dichloropropene	U		0.000367	0.00116	1	04/02/2018 00:18	WG1092317
1,3-Dichloropropane	U		0.000240	0.00116	1	04/02/2018 00:18	WG1092317
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	04/02/2018 00:18	WG1092317
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	04/02/2018 00:18	WG1092317
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000901	0.00290	1	04/02/2018 00:18	WG1092317
2,2-Dichloropropane	U		0.000323	0.00116	1	04/02/2018 00:18	WG1092317
Di-isopropyl ether	U	<u>JO</u>	0.000287	0.00116	1	04/02/2018 00:18	WG1092317
Ethylbenzene	U		0.000344	0.00116	1	04/02/2018 00:18	WG1092317
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	04/02/2018 00:18	WG1092317
2-Hexanone	U		0.00159	0.0116	1	04/02/2018 00:18	WG1092317
n-Hexane	0.000873	<u>J</u>	0.000336	0.0116	1	04/02/2018 00:18	WG1092317
Iodomethane	U		0.00293	0.0116	1	04/02/2018 00:18	WG1092317
Isopropylbenzene	U		0.000282	0.00116	1	04/02/2018 00:18	WG1092317
p-Isopropyltoluene	U		0.000236	0.00116	1	04/02/2018 00:18	WG1092317
2-Butanone (MEK)	U	<u>JO</u>	0.00542	0.0116	1	04/02/2018 00:18	WG1092317
Methylene Chloride	U		0.00116	0.00579	1	04/02/2018 00:18	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	04/02/2018 00:18	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 10:27

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/02/2018 00:18	WG1092317
Naphthalene	U		0.00116	0.00579	1	04/02/2018 00:18	WG1092317
n-Propylbenzene	U		0.000239	0.00116	1	04/02/2018 00:18	WG1092317
Styrene	U		0.000271	0.00116	1	04/02/2018 00:18	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	04/02/2018 00:18	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000423	0.00116	1	04/02/2018 00:18	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000423	0.00116	1	04/02/2018 00:18	WG1092317
Tetrachloroethene	U		0.000320	0.00116	1	04/02/2018 00:18	WG1092317
Toluene	U		0.000503	0.00579	1	04/02/2018 00:18	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000355	0.00116	1	04/02/2018 00:18	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000450	0.00116	1	04/02/2018 00:18	WG1092317
1,1,1-Trichloroethane	U		0.000331	0.00116	1	04/02/2018 00:18	WG1092317
1,1,2-Trichloroethane	U		0.000321	0.00116	1	04/02/2018 00:18	WG1092317
Trichloroethene	U		0.000323	0.00116	1	04/02/2018 00:18	WG1092317
Trichlorofluoromethane	U		0.000443	0.00579	1	04/02/2018 00:18	WG1092317
1,2,3-Trichloropropane	U		0.000858	0.00290	1	04/02/2018 00:18	WG1092317
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	04/02/2018 00:18	WG1092317
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	04/02/2018 00:18	WG1092317
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	04/02/2018 00:18	WG1092317
Vinyl acetate	U	JO	0.00277	0.0116	1	04/02/2018 00:18	WG1092317
Vinyl chloride	0.000863	J	0.000337	0.00116	1	04/02/2018 00:18	WG1092317
Xylenes, Total	U		0.000809	0.00348	1	04/02/2018 00:18	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 00:18	WG1092317
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 00:18	WG1092317
(S) 4-Bromofluorobenzene	87.2			64.0-132		04/02/2018 00:18	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0113	0.0567	1	04/02/2018 00:38	WG1092317
Acrylonitrile	U		0.00203	0.0113	1	04/02/2018 00:38	WG1092317
Benzene	U		0.000306	0.00113	1	04/02/2018 00:38	WG1092317
Bromobenzene	U		0.000322	0.00113	1	04/02/2018 00:38	WG1092317
Bromodichloromethane	U		0.000288	0.00113	1	04/02/2018 00:38	WG1092317
Bromochloromethane	U		0.000442	0.00567	1	04/02/2018 00:38	WG1092317
Bromoform	U	JO	0.000481	0.00113	1	04/02/2018 00:38	WG1092317
Bromomethane	U		0.00152	0.00567	1	04/02/2018 00:38	WG1092317
n-Butylbenzene	U		0.000293	0.00113	1	04/02/2018 00:38	WG1092317
sec-Butylbenzene	U		0.000228	0.00113	1	04/02/2018 00:38	WG1092317
tert-Butylbenzene	U		0.000234	0.00113	1	04/02/2018 00:38	WG1092317
Carbon disulfide	U		0.000251	0.00113	1	04/02/2018 00:38	WG1092317
Carbon tetrachloride	U		0.000372	0.00113	1	04/02/2018 00:38	WG1092317
Chlorobenzene	U		0.000240	0.00113	1	04/02/2018 00:38	WG1092317
Chlorodibromomethane	U		0.000423	0.00113	1	04/02/2018 00:38	WG1092317
Chloroethane	U		0.00107	0.00567	1	04/02/2018 00:38	WG1092317
Chloroform	U		0.000260	0.00567	1	04/02/2018 00:38	WG1092317
Chloromethane	U		0.000425	0.00284	1	04/02/2018 00:38	WG1092317
2-Chlorotoluene	U		0.000341	0.00113	1	04/02/2018 00:38	WG1092317
4-Chlorotoluene	U		0.000272	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00567	1	04/02/2018 00:38	WG1092317
1,2-Dibromoethane	U		0.000389	0.00113	1	04/02/2018 00:38	WG1092317
Dibromomethane	U		0.000433	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dichlorobenzene	U		0.000346	0.00113	1	04/02/2018 00:38	WG1092317
1,3-Dichlorobenzene	U		0.000271	0.00113	1	04/02/2018 00:38	WG1092317
1,4-Dichlorobenzene	U		0.000256	0.00113	1	04/02/2018 00:38	WG1092317
Dichlorodifluoromethane	U		0.000809	0.00567	1	04/02/2018 00:38	WG1092317
1,1-Dichloroethane	U		0.000226	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dichloroethane	U		0.000301	0.00113	1	04/02/2018 00:38	WG1092317
1,1-Dichloroethene	U		0.000344	0.00113	1	04/02/2018 00:38	WG1092317
cis-1,2-Dichloroethene	U		0.000266	0.00113	1	04/02/2018 00:38	WG1092317
trans-1,2-Dichloroethene	U		0.000299	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dichloropropane	U		0.000406	0.00113	1	04/02/2018 00:38	WG1092317
1,1-Dichloropropene	U		0.000359	0.00113	1	04/02/2018 00:38	WG1092317
1,3-Dichloropropane	U		0.000235	0.00113	1	04/02/2018 00:38	WG1092317
cis-1,3-Dichloropropene	U		0.000297	0.00113	1	04/02/2018 00:38	WG1092317
trans-1,3-Dichloropropene	U		0.000303	0.00113	1	04/02/2018 00:38	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000882	0.00284	1	04/02/2018 00:38	WG1092317
2,2-Dichloropropane	U		0.000316	0.00113	1	04/02/2018 00:38	WG1092317
Di-isopropyl ether	U	JO	0.000281	0.00113	1	04/02/2018 00:38	WG1092317
Ethylbenzene	U		0.000337	0.00113	1	04/02/2018 00:38	WG1092317
Hexachloro-1,3-butadiene	U		0.000388	0.00113	1	04/02/2018 00:38	WG1092317
2-Hexanone	U		0.00155	0.0113	1	04/02/2018 00:38	WG1092317
n-Hexane	U		0.000329	0.0113	1	04/02/2018 00:38	WG1092317
Iodomethane	U		0.00287	0.0113	1	04/02/2018 00:38	WG1092317
Isopropylbenzene	U		0.000276	0.00113	1	04/02/2018 00:38	WG1092317
p-Isopropyltoluene	U		0.000231	0.00113	1	04/02/2018 00:38	WG1092317
2-Butanone (MEK)	U	JO	0.00531	0.0113	1	04/02/2018 00:38	WG1092317
Methylene Chloride	U		0.00113	0.00567	1	04/02/2018 00:38	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	04/02/2018 00:38	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 10:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/02/2018 00:38	WG1092317
Naphthalene	U		0.00113	0.00567	1	04/02/2018 00:38	WG1092317
n-Propylbenzene	U		0.000234	0.00113	1	04/02/2018 00:38	WG1092317
Styrene	U		0.000265	0.00113	1	04/02/2018 00:38	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/02/2018 00:38	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/02/2018 00:38	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	04/02/2018 00:38	WG1092317
Tetrachloroethene	U		0.000313	0.00113	1	04/02/2018 00:38	WG1092317
Toluene	U		0.000492	0.00567	1	04/02/2018 00:38	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000347	0.00113	1	04/02/2018 00:38	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000440	0.00113	1	04/02/2018 00:38	WG1092317
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/02/2018 00:38	WG1092317
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/02/2018 00:38	WG1092317
Trichloroethene	U		0.000316	0.00113	1	04/02/2018 00:38	WG1092317
Trichlorofluoromethane	U		0.000433	0.00567	1	04/02/2018 00:38	WG1092317
1,2,3-Trichloropropane	U		0.000840	0.00284	1	04/02/2018 00:38	WG1092317
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/02/2018 00:38	WG1092317
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/02/2018 00:38	WG1092317
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	04/02/2018 00:38	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00271	0.0113	1	04/02/2018 00:38	WG1092317
Vinyl chloride	U		0.000330	0.00113	1	04/02/2018 00:38	WG1092317
Xylenes, Total	U		0.000792	0.00340	1	04/02/2018 00:38	WG1092317
(S) Toluene-d8	105			80.0-120		04/02/2018 00:38	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 00:38	WG1092317
(S) 4-Bromofluorobenzene	89.1			64.0-132		04/02/2018 00:38	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.4		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0109	0.0547	1	04/02/2018 00:58	WG1092317
Acrylonitrile	U		0.00196	0.0109	1	04/02/2018 00:58	WG1092317
Benzene	U		0.000296	0.00109	1	04/02/2018 00:58	WG1092317
Bromobenzene	U		0.000311	0.00109	1	04/02/2018 00:58	WG1092317
Bromodichloromethane	U		0.000278	0.00109	1	04/02/2018 00:58	WG1092317
Bromochloromethane	U		0.000427	0.00547	1	04/02/2018 00:58	WG1092317
Bromoform	U	JO	0.000464	0.00109	1	04/02/2018 00:58	WG1092317
Bromomethane	U		0.00147	0.00547	1	04/02/2018 00:58	WG1092317
n-Butylbenzene	U		0.000282	0.00109	1	04/02/2018 00:58	WG1092317
sec-Butylbenzene	U		0.000220	0.00109	1	04/02/2018 00:58	WG1092317
tert-Butylbenzene	U		0.000225	0.00109	1	04/02/2018 00:58	WG1092317
Carbon disulfide	U		0.000242	0.00109	1	04/02/2018 00:58	WG1092317
Carbon tetrachloride	U		0.000359	0.00109	1	04/02/2018 00:58	WG1092317
Chlorobenzene	U		0.000232	0.00109	1	04/02/2018 00:58	WG1092317
Chlorodibromomethane	U		0.000408	0.00109	1	04/02/2018 00:58	WG1092317
Chloroethane	U		0.00104	0.00547	1	04/02/2018 00:58	WG1092317
Chloroform	U		0.000251	0.00547	1	04/02/2018 00:58	WG1092317
Chloromethane	U		0.000410	0.00274	1	04/02/2018 00:58	WG1092317
2-Chlorotoluene	U		0.000329	0.00109	1	04/02/2018 00:58	WG1092317
4-Chlorotoluene	U		0.000263	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00547	1	04/02/2018 00:58	WG1092317
1,2-Dibromoethane	U		0.000375	0.00109	1	04/02/2018 00:58	WG1092317
Dibromomethane	U		0.000418	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dichlorobenzene	U		0.000334	0.00109	1	04/02/2018 00:58	WG1092317
1,3-Dichlorobenzene	U		0.000262	0.00109	1	04/02/2018 00:58	WG1092317
1,4-Dichlorobenzene	U		0.000247	0.00109	1	04/02/2018 00:58	WG1092317
Dichlorodifluoromethane	U		0.000780	0.00547	1	04/02/2018 00:58	WG1092317
1,1-Dichloroethane	U		0.000218	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dichloroethane	U		0.000290	0.00109	1	04/02/2018 00:58	WG1092317
1,1-Dichloroethene	U		0.000332	0.00109	1	04/02/2018 00:58	WG1092317
cis-1,2-Dichloroethene	U		0.000257	0.00109	1	04/02/2018 00:58	WG1092317
trans-1,2-Dichloroethene	U		0.000289	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dichloropropane	U		0.000392	0.00109	1	04/02/2018 00:58	WG1092317
1,1-Dichloropropene	U		0.000347	0.00109	1	04/02/2018 00:58	WG1092317
1,3-Dichloropropane	U		0.000227	0.00109	1	04/02/2018 00:58	WG1092317
cis-1,3-Dichloropropene	U		0.000287	0.00109	1	04/02/2018 00:58	WG1092317
trans-1,3-Dichloropropene	U		0.000292	0.00109	1	04/02/2018 00:58	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000852	0.00274	1	04/02/2018 00:58	WG1092317
2,2-Dichloropropane	U		0.000305	0.00109	1	04/02/2018 00:58	WG1092317
Di-isopropyl ether	U	JO	0.000271	0.00109	1	04/02/2018 00:58	WG1092317
Ethylbenzene	U		0.000325	0.00109	1	04/02/2018 00:58	WG1092317
Hexachloro-1,3-butadiene	U		0.000374	0.00109	1	04/02/2018 00:58	WG1092317
2-Hexanone	U		0.00150	0.0109	1	04/02/2018 00:58	WG1092317
n-Hexane	U		0.000317	0.0109	1	04/02/2018 00:58	WG1092317
Iodomethane	U		0.00277	0.0109	1	04/02/2018 00:58	WG1092317
Isopropylbenzene	U		0.000266	0.00109	1	04/02/2018 00:58	WG1092317
p-Isopropyltoluene	U		0.000223	0.00109	1	04/02/2018 00:58	WG1092317
2-Butanone (MEK)	U	JO	0.00512	0.0109	1	04/02/2018 00:58	WG1092317
Methylene Chloride	U		0.00109	0.00547	1	04/02/2018 00:58	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00206	0.0109	1	04/02/2018 00:58	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 11:20

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000232	0.00109	1	04/02/2018 00:58	WG1092317
Naphthalene	U		0.00109	0.00547	1	04/02/2018 00:58	WG1092317
n-Propylbenzene	U		0.000225	0.00109	1	04/02/2018 00:58	WG1092317
Styrene	U		0.000256	0.00109	1	04/02/2018 00:58	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000289	0.00109	1	04/02/2018 00:58	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000399	0.00109	1	04/02/2018 00:58	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000399	0.00109	1	04/02/2018 00:58	WG1092317
Tetrachloroethene	0.000561	<u>J</u>	0.000302	0.00109	1	04/02/2018 00:58	WG1092317
Toluene	U		0.000475	0.00547	1	04/02/2018 00:58	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000335	0.00109	1	04/02/2018 00:58	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000425	0.00109	1	04/02/2018 00:58	WG1092317
1,1,1-Trichloroethane	U		0.000313	0.00109	1	04/02/2018 00:58	WG1092317
1,1,2-Trichloroethane	U		0.000303	0.00109	1	04/02/2018 00:58	WG1092317
Trichloroethene	U		0.000305	0.00109	1	04/02/2018 00:58	WG1092317
Trichlorofluoromethane	U		0.000418	0.00547	1	04/02/2018 00:58	WG1092317
1,2,3-Trichloropropane	U		0.000811	0.00274	1	04/02/2018 00:58	WG1092317
1,2,4-Trimethylbenzene	U		0.000231	0.00109	1	04/02/2018 00:58	WG1092317
1,2,3-Trimethylbenzene	U		0.000314	0.00109	1	04/02/2018 00:58	WG1092317
1,3,5-Trimethylbenzene	U		0.000291	0.00109	1	04/02/2018 00:58	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00262	0.0109	1	04/02/2018 00:58	WG1092317
Vinyl chloride	U		0.000318	0.00109	1	04/02/2018 00:58	WG1092317
Xylenes, Total	U		0.000764	0.00328	1	04/02/2018 00:58	WG1092317
(S) Toluene-d8	105			80.0-120		04/02/2018 00:58	WG1092317
(S) Dibromofluoromethane	101			74.0-131		04/02/2018 00:58	WG1092317
(S) 4-Bromofluorobenzene	87.2			64.0-132		04/02/2018 00:58	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0107	0.0536	1	04/02/2018 01:17	WG1092317
Acrylonitrile	U		0.00192	0.0107	1	04/02/2018 01:17	WG1092317
Benzene	U		0.000290	0.00107	1	04/02/2018 01:17	WG1092317
Bromobenzene	U		0.000305	0.00107	1	04/02/2018 01:17	WG1092317
Bromodichloromethane	U		0.000272	0.00107	1	04/02/2018 01:17	WG1092317
Bromochloromethane	U		0.000418	0.00536	1	04/02/2018 01:17	WG1092317
Bromoform	U	JO	0.000455	0.00107	1	04/02/2018 01:17	WG1092317
Bromomethane	U		0.00144	0.00536	1	04/02/2018 01:17	WG1092317
n-Butylbenzene	U		0.000277	0.00107	1	04/02/2018 01:17	WG1092317
sec-Butylbenzene	U		0.000216	0.00107	1	04/02/2018 01:17	WG1092317
tert-Butylbenzene	U		0.000221	0.00107	1	04/02/2018 01:17	WG1092317
Carbon disulfide	U		0.000237	0.00107	1	04/02/2018 01:17	WG1092317
Carbon tetrachloride	U		0.000352	0.00107	1	04/02/2018 01:17	WG1092317
Chlorobenzene	U		0.000227	0.00107	1	04/02/2018 01:17	WG1092317
Chlorodibromomethane	U		0.000400	0.00107	1	04/02/2018 01:17	WG1092317
Chloroethane	U		0.00101	0.00536	1	04/02/2018 01:17	WG1092317
Chloroform	U		0.000246	0.00536	1	04/02/2018 01:17	WG1092317
Chloromethane	U		0.000402	0.00268	1	04/02/2018 01:17	WG1092317
2-Chlorotoluene	U		0.000323	0.00107	1	04/02/2018 01:17	WG1092317
4-Chlorotoluene	U		0.000257	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00536	1	04/02/2018 01:17	WG1092317
1,2-Dibromoethane	U		0.000368	0.00107	1	04/02/2018 01:17	WG1092317
Dibromomethane	U		0.000410	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dichlorobenzene	U		0.000327	0.00107	1	04/02/2018 01:17	WG1092317
1,3-Dichlorobenzene	U		0.000256	0.00107	1	04/02/2018 01:17	WG1092317
1,4-Dichlorobenzene	U		0.000242	0.00107	1	04/02/2018 01:17	WG1092317
Dichlorodifluoromethane	U		0.000765	0.00536	1	04/02/2018 01:17	WG1092317
1,1-Dichloroethane	U		0.000213	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dichloroethane	U		0.000284	0.00107	1	04/02/2018 01:17	WG1092317
1,1-Dichloroethene	U		0.000325	0.00107	1	04/02/2018 01:17	WG1092317
cis-1,2-Dichloroethene	U		0.000252	0.00107	1	04/02/2018 01:17	WG1092317
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dichloropropane	U		0.000384	0.00107	1	04/02/2018 01:17	WG1092317
1,1-Dichloropropene	U		0.000340	0.00107	1	04/02/2018 01:17	WG1092317
1,3-Dichloropropane	U		0.000222	0.00107	1	04/02/2018 01:17	WG1092317
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	04/02/2018 01:17	WG1092317
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	04/02/2018 01:17	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000835	0.00268	1	04/02/2018 01:17	WG1092317
2,2-Dichloropropane	U		0.000299	0.00107	1	04/02/2018 01:17	WG1092317
Di-isopropyl ether	U	JO	0.000266	0.00107	1	04/02/2018 01:17	WG1092317
Ethylbenzene	U		0.000319	0.00107	1	04/02/2018 01:17	WG1092317
Hexachloro-1,3-butadiene	U		0.000367	0.00107	1	04/02/2018 01:17	WG1092317
2-Hexanone	U		0.00147	0.0107	1	04/02/2018 01:17	WG1092317
n-Hexane	U		0.000311	0.0107	1	04/02/2018 01:17	WG1092317
Iodomethane	U		0.00271	0.0107	1	04/02/2018 01:17	WG1092317
Isopropylbenzene	U		0.000261	0.00107	1	04/02/2018 01:17	WG1092317
p-Isopropyltoluene	U		0.000219	0.00107	1	04/02/2018 01:17	WG1092317
2-Butanone (MEK)	U	JO	0.00502	0.0107	1	04/02/2018 01:17	WG1092317
Methylene Chloride	U		0.00107	0.00536	1	04/02/2018 01:17	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0107	1	04/02/2018 01:17	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 11:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	04/02/2018 01:17	WG1092317
Naphthalene	U		0.00107	0.00536	1	04/02/2018 01:17	WG1092317
n-Propylbenzene	U		0.000221	0.00107	1	04/02/2018 01:17	WG1092317
Styrene	U		0.000251	0.00107	1	04/02/2018 01:17	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	04/02/2018 01:17	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000392	0.00107	1	04/02/2018 01:17	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00107	1	04/02/2018 01:17	WG1092317
Tetrachloroethene	U		0.000296	0.00107	1	04/02/2018 01:17	WG1092317
Toluene	U		0.000466	0.00536	1	04/02/2018 01:17	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000328	0.00107	1	04/02/2018 01:17	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000416	0.00107	1	04/02/2018 01:17	WG1092317
1,1,1-Trichloroethane	U		0.000307	0.00107	1	04/02/2018 01:17	WG1092317
1,1,2-Trichloroethane	U		0.000297	0.00107	1	04/02/2018 01:17	WG1092317
Trichloroethene	U		0.000299	0.00107	1	04/02/2018 01:17	WG1092317
Trichlorofluoromethane	U		0.000410	0.00536	1	04/02/2018 01:17	WG1092317
1,2,3-Trichloropropane	U		0.000795	0.00268	1	04/02/2018 01:17	WG1092317
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	04/02/2018 01:17	WG1092317
1,2,3-Trimethylbenzene	U		0.000308	0.00107	1	04/02/2018 01:17	WG1092317
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	04/02/2018 01:17	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00256	0.0107	1	04/02/2018 01:17	WG1092317
Vinyl chloride	U		0.000312	0.00107	1	04/02/2018 01:17	WG1092317
Xylenes, Total	U		0.000749	0.00322	1	04/02/2018 01:17	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 01:17	WG1092317
(S) Dibromofluoromethane	101			74.0-131		04/02/2018 01:17	WG1092317
(S) 4-Bromofluorobenzene	90.4			64.0-132		04/02/2018 01:17	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 12:05

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.3		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>JO</u>	0.0113	0.0566	1	04/02/2018 01:37	WG1092317
Acrylonitrile	U		0.00203	0.0113	1	04/02/2018 01:37	WG1092317
Benzene	U		0.000306	0.00113	1	04/02/2018 01:37	WG1092317
Bromobenzene	U		0.000322	0.00113	1	04/02/2018 01:37	WG1092317
Bromodichloromethane	U		0.000288	0.00113	1	04/02/2018 01:37	WG1092317
Bromochloromethane	U		0.000442	0.00566	1	04/02/2018 01:37	WG1092317
Bromoform	U	<u>JO</u>	0.000480	0.00113	1	04/02/2018 01:37	WG1092317
Bromomethane	U		0.00152	0.00566	1	04/02/2018 01:37	WG1092317
n-Butylbenzene	U		0.000292	0.00113	1	04/02/2018 01:37	WG1092317
sec-Butylbenzene	U		0.000228	0.00113	1	04/02/2018 01:37	WG1092317
tert-Butylbenzene	U		0.000233	0.00113	1	04/02/2018 01:37	WG1092317
Carbon disulfide	0.000332	<u>J</u>	0.000250	0.00113	1	04/02/2018 01:37	WG1092317
Carbon tetrachloride	U		0.000372	0.00113	1	04/02/2018 01:37	WG1092317
Chlorobenzene	U		0.000240	0.00113	1	04/02/2018 01:37	WG1092317
Chlorodibromomethane	U		0.000423	0.00113	1	04/02/2018 01:37	WG1092317
Chloroethane	U		0.00107	0.00566	1	04/02/2018 01:37	WG1092317
Chloroform	U		0.000259	0.00566	1	04/02/2018 01:37	WG1092317
Chloromethane	U		0.000425	0.00283	1	04/02/2018 01:37	WG1092317
2-Chlorotoluene	U		0.000341	0.00113	1	04/02/2018 01:37	WG1092317
4-Chlorotoluene	U		0.000272	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00566	1	04/02/2018 01:37	WG1092317
1,2-Dibromoethane	U		0.000389	0.00113	1	04/02/2018 01:37	WG1092317
Dibromomethane	U		0.000433	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dichlorobenzene	U		0.000346	0.00113	1	04/02/2018 01:37	WG1092317
1,3-Dichlorobenzene	U		0.000271	0.00113	1	04/02/2018 01:37	WG1092317
1,4-Dichlorobenzene	U		0.000256	0.00113	1	04/02/2018 01:37	WG1092317
Dichlorodifluoromethane	U		0.000808	0.00566	1	04/02/2018 01:37	WG1092317
1,1-Dichloroethane	U		0.000225	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dichloroethane	U		0.000300	0.00113	1	04/02/2018 01:37	WG1092317
1,1-Dichloroethene	U		0.000343	0.00113	1	04/02/2018 01:37	WG1092317
cis-1,2-Dichloroethene	0.00421		0.000266	0.00113	1	04/02/2018 01:37	WG1092317
trans-1,2-Dichloroethene	U		0.000299	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dichloropropane	U		0.000406	0.00113	1	04/02/2018 01:37	WG1092317
1,1-Dichloropropene	U		0.000359	0.00113	1	04/02/2018 01:37	WG1092317
1,3-Dichloropropane	U		0.000235	0.00113	1	04/02/2018 01:37	WG1092317
cis-1,3-Dichloropropene	U		0.000297	0.00113	1	04/02/2018 01:37	WG1092317
trans-1,3-Dichloropropene	U		0.000302	0.00113	1	04/02/2018 01:37	WG1092317
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000881	0.00283	1	04/02/2018 01:37	WG1092317
2,2-Dichloropropane	U		0.000316	0.00113	1	04/02/2018 01:37	WG1092317
Di-isopropyl ether	U	<u>JO</u>	0.000281	0.00113	1	04/02/2018 01:37	WG1092317
Ethylbenzene	U		0.000336	0.00113	1	04/02/2018 01:37	WG1092317
Hexachloro-1,3-butadiene	U		0.000387	0.00113	1	04/02/2018 01:37	WG1092317
2-Hexanone	U		0.00155	0.0113	1	04/02/2018 01:37	WG1092317
n-Hexane	U		0.000329	0.0113	1	04/02/2018 01:37	WG1092317
Iodomethane	U		0.00287	0.0113	1	04/02/2018 01:37	WG1092317
Isopropylbenzene	U		0.000275	0.00113	1	04/02/2018 01:37	WG1092317
p-Isopropyltoluene	U		0.000231	0.00113	1	04/02/2018 01:37	WG1092317
2-Butanone (MEK)	U	<u>JO</u>	0.00530	0.0113	1	04/02/2018 01:37	WG1092317
Methylene Chloride	U		0.00113	0.00566	1	04/02/2018 01:37	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	04/02/2018 01:37	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 12:05

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/02/2018 01:37	WG1092317
Naphthalene	U		0.00113	0.00566	1	04/02/2018 01:37	WG1092317
n-Propylbenzene	U		0.000233	0.00113	1	04/02/2018 01:37	WG1092317
Styrene	U		0.000265	0.00113	1	04/02/2018 01:37	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/02/2018 01:37	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/02/2018 01:37	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	04/02/2018 01:37	WG1092317
Tetrachloroethene	U		0.000313	0.00113	1	04/02/2018 01:37	WG1092317
Toluene	U		0.000492	0.00566	1	04/02/2018 01:37	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000347	0.00113	1	04/02/2018 01:37	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000440	0.00113	1	04/02/2018 01:37	WG1092317
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/02/2018 01:37	WG1092317
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/02/2018 01:37	WG1092317
Trichloroethene	0.000486	<u>J</u>	0.000316	0.00113	1	04/02/2018 01:37	WG1092317
Trichlorofluoromethane	U		0.000433	0.00566	1	04/02/2018 01:37	WG1092317
1,2,3-Trichloropropane	U		0.000839	0.00283	1	04/02/2018 01:37	WG1092317
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/02/2018 01:37	WG1092317
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/02/2018 01:37	WG1092317
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	04/02/2018 01:37	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00271	0.0113	1	04/02/2018 01:37	WG1092317
Vinyl chloride	U		0.000330	0.00113	1	04/02/2018 01:37	WG1092317
Xylenes, Total	U		0.000791	0.00340	1	04/02/2018 01:37	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 01:37	WG1092317
(S) Dibromofluoromethane	101			74.0-131		04/02/2018 01:37	WG1092317
(S) 4-Bromofluorobenzene	89.1			64.0-132		04/02/2018 01:37	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.2		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0111	0.0555	1	04/02/2018 01:57	WG1092317
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 01:57	WG1092317
Benzene	U		0.000299	0.00111	1	04/02/2018 01:57	WG1092317
Bromobenzene	U		0.000315	0.00111	1	04/02/2018 01:57	WG1092317
Bromodichloromethane	U		0.000282	0.00111	1	04/02/2018 01:57	WG1092317
Bromochloromethane	U		0.000433	0.00555	1	04/02/2018 01:57	WG1092317
Bromoform	U	JO	0.000470	0.00111	1	04/02/2018 01:57	WG1092317
Bromomethane	U		0.00149	0.00555	1	04/02/2018 01:57	WG1092317
n-Butylbenzene	U		0.000286	0.00111	1	04/02/2018 01:57	WG1092317
sec-Butylbenzene	U		0.000223	0.00111	1	04/02/2018 01:57	WG1092317
tert-Butylbenzene	U		0.000228	0.00111	1	04/02/2018 01:57	WG1092317
Carbon disulfide	U		0.000245	0.00111	1	04/02/2018 01:57	WG1092317
Carbon tetrachloride	U		0.000364	0.00111	1	04/02/2018 01:57	WG1092317
Chlorobenzene	U		0.000235	0.00111	1	04/02/2018 01:57	WG1092317
Chlorodibromomethane	U		0.000414	0.00111	1	04/02/2018 01:57	WG1092317
Chloroethane	U		0.00105	0.00555	1	04/02/2018 01:57	WG1092317
Chloroform	U		0.000254	0.00555	1	04/02/2018 01:57	WG1092317
Chloromethane	U		0.000416	0.00277	1	04/02/2018 01:57	WG1092317
2-Chlorotoluene	U		0.000334	0.00111	1	04/02/2018 01:57	WG1092317
4-Chlorotoluene	U		0.000266	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00555	1	04/02/2018 01:57	WG1092317
1,2-Dibromoethane	U		0.000380	0.00111	1	04/02/2018 01:57	WG1092317
Dibromomethane	U		0.000424	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dichlorobenzene	U		0.000338	0.00111	1	04/02/2018 01:57	WG1092317
1,3-Dichlorobenzene	U		0.000265	0.00111	1	04/02/2018 01:57	WG1092317
1,4-Dichlorobenzene	U		0.000251	0.00111	1	04/02/2018 01:57	WG1092317
Dichlorodifluoromethane	U		0.000791	0.00555	1	04/02/2018 01:57	WG1092317
1,1-Dichloroethane	U		0.000221	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dichloroethane	U		0.000294	0.00111	1	04/02/2018 01:57	WG1092317
1,1-Dichloroethene	U		0.000336	0.00111	1	04/02/2018 01:57	WG1092317
cis-1,2-Dichloroethene	U		0.000261	0.00111	1	04/02/2018 01:57	WG1092317
trans-1,2-Dichloroethene	U		0.000293	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dichloropropane	U		0.000397	0.00111	1	04/02/2018 01:57	WG1092317
1,1-Dichloropropene	U		0.000352	0.00111	1	04/02/2018 01:57	WG1092317
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 01:57	WG1092317
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	04/02/2018 01:57	WG1092317
trans-1,3-Dichloropropene	U		0.000296	0.00111	1	04/02/2018 01:57	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000863	0.00277	1	04/02/2018 01:57	WG1092317
2,2-Dichloropropane	U		0.000309	0.00111	1	04/02/2018 01:57	WG1092317
Di-isopropyl ether	U	JO	0.000275	0.00111	1	04/02/2018 01:57	WG1092317
Ethylbenzene	U		0.000329	0.00111	1	04/02/2018 01:57	WG1092317
Hexachloro-1,3-butadiene	U		0.000379	0.00111	1	04/02/2018 01:57	WG1092317
2-Hexanone	U		0.00152	0.0111	1	04/02/2018 01:57	WG1092317
n-Hexane	U		0.000322	0.0111	1	04/02/2018 01:57	WG1092317
Iodomethane	U		0.00281	0.0111	1	04/02/2018 01:57	WG1092317
Isopropylbenzene	U		0.000270	0.00111	1	04/02/2018 01:57	WG1092317
p-Isopropyltoluene	U		0.000226	0.00111	1	04/02/2018 01:57	WG1092317
2-Butanone (MEK)	U	JO	0.00519	0.0111	1	04/02/2018 01:57	WG1092317
Methylene Chloride	U		0.00111	0.00555	1	04/02/2018 01:57	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 01:57	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 12:35

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000235	0.0011	1	04/02/2018 01:57	WG1092317
Naphthalene	U		0.0011	0.00555	1	04/02/2018 01:57	WG1092317
n-Propylbenzene	U		0.000228	0.0011	1	04/02/2018 01:57	WG1092317
Styrene	U		0.000260	0.0011	1	04/02/2018 01:57	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000293	0.0011	1	04/02/2018 01:57	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000405	0.0011	1	04/02/2018 01:57	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000405	0.0011	1	04/02/2018 01:57	WG1092317
Tetrachloroethene	U		0.000306	0.0011	1	04/02/2018 01:57	WG1092317
Toluene	U		0.000481	0.00555	1	04/02/2018 01:57	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000339	0.0011	1	04/02/2018 01:57	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000430	0.0011	1	04/02/2018 01:57	WG1092317
1,1,1-Trichloroethane	U		0.000317	0.0011	1	04/02/2018 01:57	WG1092317
1,1,2-Trichloroethane	U		0.000307	0.0011	1	04/02/2018 01:57	WG1092317
Trichloroethene	U		0.000309	0.0011	1	04/02/2018 01:57	WG1092317
Trichlorofluoromethane	U		0.000424	0.00555	1	04/02/2018 01:57	WG1092317
1,2,3-Trichloropropane	U		0.000822	0.00277	1	04/02/2018 01:57	WG1092317
1,2,4-Trimethylbenzene	U		0.000234	0.0011	1	04/02/2018 01:57	WG1092317
1,2,3-Trimethylbenzene	U		0.000318	0.0011	1	04/02/2018 01:57	WG1092317
1,3,5-Trimethylbenzene	U		0.000295	0.0011	1	04/02/2018 01:57	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00265	0.011	1	04/02/2018 01:57	WG1092317
Vinyl chloride	0.00767		0.000323	0.0011	1	04/02/2018 01:57	WG1092317
Xylenes, Total	U		0.000774	0.00333	1	04/02/2018 01:57	WG1092317
<i>(S) Toluene-d8</i>	104			80.0-120		04/02/2018 01:57	WG1092317
<i>(S) Dibromofluoromethane</i>	101			74.0-131		04/02/2018 01:57	WG1092317
<i>(S) 4-Bromofluorobenzene</i>	92.8			64.0-132		04/02/2018 01:57	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	<u>JO</u>	0.0114	0.0568	1	04/02/2018 02:16	WG1092317
Acrylonitrile	U		0.00203	0.0114	1	04/02/2018 02:16	WG1092317
Benzene	U		0.000307	0.00114	1	04/02/2018 02:16	WG1092317
Bromobenzene	U		0.000323	0.00114	1	04/02/2018 02:16	WG1092317
Bromodichloromethane	U		0.000289	0.00114	1	04/02/2018 02:16	WG1092317
Bromochloromethane	U		0.000443	0.00568	1	04/02/2018 02:16	WG1092317
Bromoform	U	<u>JO</u>	0.000482	0.00114	1	04/02/2018 02:16	WG1092317
Bromomethane	U		0.00152	0.00568	1	04/02/2018 02:16	WG1092317
n-Butylbenzene	U		0.000293	0.00114	1	04/02/2018 02:16	WG1092317
sec-Butylbenzene	U		0.000228	0.00114	1	04/02/2018 02:16	WG1092317
tert-Butylbenzene	U		0.000234	0.00114	1	04/02/2018 02:16	WG1092317
Carbon disulfide	U		0.000251	0.00114	1	04/02/2018 02:16	WG1092317
Carbon tetrachloride	U		0.000373	0.00114	1	04/02/2018 02:16	WG1092317
Chlorobenzene	U		0.000241	0.00114	1	04/02/2018 02:16	WG1092317
Chlorodibromomethane	U		0.000424	0.00114	1	04/02/2018 02:16	WG1092317
Chloroethane	U		0.00108	0.00568	1	04/02/2018 02:16	WG1092317
Chloroform	U		0.000260	0.00568	1	04/02/2018 02:16	WG1092317
Chloromethane	U		0.000426	0.00284	1	04/02/2018 02:16	WG1092317
2-Chlorotoluene	U		0.000342	0.00114	1	04/02/2018 02:16	WG1092317
4-Chlorotoluene	U		0.000273	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00568	1	04/02/2018 02:16	WG1092317
1,2-Dibromoethane	U		0.000390	0.00114	1	04/02/2018 02:16	WG1092317
Dibromomethane	U		0.000434	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dichlorobenzene	U		0.000347	0.00114	1	04/02/2018 02:16	WG1092317
1,3-Dichlorobenzene	U		0.000272	0.00114	1	04/02/2018 02:16	WG1092317
1,4-Dichlorobenzene	U		0.000257	0.00114	1	04/02/2018 02:16	WG1092317
Dichlorodifluoromethane	U		0.000810	0.00568	1	04/02/2018 02:16	WG1092317
1,1-Dichloroethane	U		0.000226	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dichloroethane	U		0.000301	0.00114	1	04/02/2018 02:16	WG1092317
1,1-Dichloroethene	U		0.000344	0.00114	1	04/02/2018 02:16	WG1092317
cis-1,2-Dichloroethene	U		0.000267	0.00114	1	04/02/2018 02:16	WG1092317
trans-1,2-Dichloroethene	U		0.000300	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dichloropropane	U		0.000407	0.00114	1	04/02/2018 02:16	WG1092317
1,1-Dichloropropene	U		0.000360	0.00114	1	04/02/2018 02:16	WG1092317
1,3-Dichloropropane	U		0.000235	0.00114	1	04/02/2018 02:16	WG1092317
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	04/02/2018 02:16	WG1092317
trans-1,3-Dichloropropene	U		0.000303	0.00114	1	04/02/2018 02:16	WG1092317
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.000884	0.00284	1	04/02/2018 02:16	WG1092317
2,2-Dichloropropane	U		0.000317	0.00114	1	04/02/2018 02:16	WG1092317
Di-isopropyl ether	U	<u>JO</u>	0.000282	0.00114	1	04/02/2018 02:16	WG1092317
Ethylbenzene	U		0.000338	0.00114	1	04/02/2018 02:16	WG1092317
Hexachloro-1,3-butadiene	U		0.000389	0.00114	1	04/02/2018 02:16	WG1092317
2-Hexanone	U		0.00156	0.0114	1	04/02/2018 02:16	WG1092317
n-Hexane	U		0.000330	0.0114	1	04/02/2018 02:16	WG1092317
Iodomethane	U		0.00288	0.0114	1	04/02/2018 02:16	WG1092317
Isopropylbenzene	U		0.000276	0.00114	1	04/02/2018 02:16	WG1092317
p-Isopropyltoluene	U		0.000232	0.00114	1	04/02/2018 02:16	WG1092317
2-Butanone (MEK)	U	<u>JO</u>	0.00532	0.0114	1	04/02/2018 02:16	WG1092317
Methylene Chloride	U		0.00114	0.00568	1	04/02/2018 02:16	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	04/02/2018 02:16	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 13:15

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	04/02/2018 02:16	WG1092317
Naphthalene	U		0.00114	0.00568	1	04/02/2018 02:16	WG1092317
n-Propylbenzene	U		0.000234	0.00114	1	04/02/2018 02:16	WG1092317
Styrene	U		0.000266	0.00114	1	04/02/2018 02:16	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000300	0.00114	1	04/02/2018 02:16	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000415	0.00114	1	04/02/2018 02:16	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000415	0.00114	1	04/02/2018 02:16	WG1092317
Tetrachloroethene	U		0.000314	0.00114	1	04/02/2018 02:16	WG1092317
Toluene	U		0.000493	0.00568	1	04/02/2018 02:16	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000348	0.00114	1	04/02/2018 02:16	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000441	0.00114	1	04/02/2018 02:16	WG1092317
1,1,1-Trichloroethane	U		0.000325	0.00114	1	04/02/2018 02:16	WG1092317
1,1,2-Trichloroethane	U		0.000315	0.00114	1	04/02/2018 02:16	WG1092317
Trichloroethene	U		0.000317	0.00114	1	04/02/2018 02:16	WG1092317
Trichlorofluoromethane	U		0.000434	0.00568	1	04/02/2018 02:16	WG1092317
1,2,3-Trichloropropane	U		0.000842	0.00284	1	04/02/2018 02:16	WG1092317
1,2,4-Trimethylbenzene	U		0.000240	0.00114	1	04/02/2018 02:16	WG1092317
1,2,3-Trimethylbenzene	U		0.000326	0.00114	1	04/02/2018 02:16	WG1092317
1,3,5-Trimethylbenzene	U		0.000302	0.00114	1	04/02/2018 02:16	WG1092317
Vinyl acetate	U	JO	0.00272	0.0114	1	04/02/2018 02:16	WG1092317
Vinyl chloride	0.000344	J	0.000331	0.00114	1	04/02/2018 02:16	WG1092317
Xylenes, Total	U		0.000793	0.00341	1	04/02/2018 02:16	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 02:16	WG1092317
(S) Dibromofluoromethane	99.8			74.0-131		04/02/2018 02:16	WG1092317
(S) 4-Bromofluorobenzene	90.4			64.0-132		04/02/2018 02:16	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.8		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0111	0.0557	1	04/02/2018 02:36	WG1092317
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 02:36	WG1092317
Benzene	U		0.000301	0.00111	1	04/02/2018 02:36	WG1092317
Bromobenzene	U		0.000316	0.00111	1	04/02/2018 02:36	WG1092317
Bromodichloromethane	U		0.000283	0.00111	1	04/02/2018 02:36	WG1092317
Bromochloromethane	U		0.000434	0.00557	1	04/02/2018 02:36	WG1092317
Bromoform	U	JO	0.000472	0.00111	1	04/02/2018 02:36	WG1092317
Bromomethane	U		0.00149	0.00557	1	04/02/2018 02:36	WG1092317
n-Butylbenzene	U		0.000287	0.00111	1	04/02/2018 02:36	WG1092317
sec-Butylbenzene	U		0.000224	0.00111	1	04/02/2018 02:36	WG1092317
tert-Butylbenzene	U		0.000229	0.00111	1	04/02/2018 02:36	WG1092317
Carbon disulfide	U		0.000246	0.00111	1	04/02/2018 02:36	WG1092317
Carbon tetrachloride	U		0.000365	0.00111	1	04/02/2018 02:36	WG1092317
Chlorobenzene	U		0.000236	0.00111	1	04/02/2018 02:36	WG1092317
Chlorodibromomethane	U		0.000415	0.00111	1	04/02/2018 02:36	WG1092317
Chloroethane	U		0.00105	0.00557	1	04/02/2018 02:36	WG1092317
Chloroform	U		0.000255	0.00557	1	04/02/2018 02:36	WG1092317
Chloromethane	U		0.000418	0.00278	1	04/02/2018 02:36	WG1092317
2-Chlorotoluene	U		0.000335	0.00111	1	04/02/2018 02:36	WG1092317
4-Chlorotoluene	U		0.000267	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00557	1	04/02/2018 02:36	WG1092317
1,2-Dibromoethane	U		0.000382	0.00111	1	04/02/2018 02:36	WG1092317
Dibromomethane	U		0.000425	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dichlorobenzene	U		0.000340	0.00111	1	04/02/2018 02:36	WG1092317
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/02/2018 02:36	WG1092317
1,4-Dichlorobenzene	U		0.000252	0.00111	1	04/02/2018 02:36	WG1092317
Dichlorodifluoromethane	U		0.000794	0.00557	1	04/02/2018 02:36	WG1092317
1,1-Dichloroethane	U		0.000222	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dichloroethane	U		0.000295	0.00111	1	04/02/2018 02:36	WG1092317
1,1-Dichloroethene	U		0.000337	0.00111	1	04/02/2018 02:36	WG1092317
cis-1,2-Dichloroethene	U		0.000262	0.00111	1	04/02/2018 02:36	WG1092317
trans-1,2-Dichloroethene	U		0.000294	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dichloropropane	U		0.000399	0.00111	1	04/02/2018 02:36	WG1092317
1,1-Dichloropropene	U		0.000353	0.00111	1	04/02/2018 02:36	WG1092317
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 02:36	WG1092317
cis-1,3-Dichloropropene	U		0.000292	0.00111	1	04/02/2018 02:36	WG1092317
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/02/2018 02:36	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000866	0.00278	1	04/02/2018 02:36	WG1092317
2,2-Dichloropropane	U		0.000311	0.00111	1	04/02/2018 02:36	WG1092317
Di-isopropyl ether	U	JO	0.000276	0.00111	1	04/02/2018 02:36	WG1092317
Ethylbenzene	U		0.000331	0.00111	1	04/02/2018 02:36	WG1092317
Hexachloro-1,3-butadiene	U		0.000381	0.00111	1	04/02/2018 02:36	WG1092317
2-Hexanone	U		0.00153	0.0111	1	04/02/2018 02:36	WG1092317
n-Hexane	U		0.000323	0.0111	1	04/02/2018 02:36	WG1092317
Iodomethane	U		0.00282	0.0111	1	04/02/2018 02:36	WG1092317
Isopropylbenzene	U		0.000271	0.00111	1	04/02/2018 02:36	WG1092317
p-Isopropyltoluene	U		0.000227	0.00111	1	04/02/2018 02:36	WG1092317
2-Butanone (MEK)	U	JO	0.00521	0.0111	1	04/02/2018 02:36	WG1092317
Methylene Chloride	U		0.00111	0.00557	1	04/02/2018 02:36	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 02:36	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 13:40

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/02/2018 02:36	WG1092317
Naphthalene	U		0.0011	0.00557	1	04/02/2018 02:36	WG1092317
n-Propylbenzene	U		0.000229	0.0011	1	04/02/2018 02:36	WG1092317
Styrene	U		0.000261	0.0011	1	04/02/2018 02:36	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000294	0.0011	1	04/02/2018 02:36	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/02/2018 02:36	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/02/2018 02:36	WG1092317
Tetrachloroethene	U		0.000307	0.0011	1	04/02/2018 02:36	WG1092317
Toluene	U		0.000483	0.00557	1	04/02/2018 02:36	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000341	0.0011	1	04/02/2018 02:36	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000432	0.0011	1	04/02/2018 02:36	WG1092317
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/02/2018 02:36	WG1092317
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/02/2018 02:36	WG1092317
Trichloroethene	U		0.000311	0.0011	1	04/02/2018 02:36	WG1092317
Trichlorofluoromethane	U		0.000425	0.00557	1	04/02/2018 02:36	WG1092317
1,2,3-Trichloropropane	U		0.000825	0.00278	1	04/02/2018 02:36	WG1092317
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/02/2018 02:36	WG1092317
1,2,3-Trimethylbenzene	U		0.000320	0.0011	1	04/02/2018 02:36	WG1092317
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/02/2018 02:36	WG1092317
Vinyl acetate	U	JO	0.00266	0.011	1	04/02/2018 02:36	WG1092317
Vinyl chloride	0.000902	J	0.000324	0.0011	1	04/02/2018 02:36	WG1092317
Xylenes, Total	U		0.000777	0.00334	1	04/02/2018 02:36	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 02:36	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 02:36	WG1092317
(S) 4-Bromofluorobenzene	91.7			64.0-132		04/02/2018 02:36	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:10

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0110	0.0552	1	04/02/2018 02:55	WG1092317
Acrylonitrile	U		0.00197	0.0110	1	04/02/2018 02:55	WG1092317
Benzene	U		0.000298	0.00110	1	04/02/2018 02:55	WG1092317
Bromobenzene	U		0.000313	0.00110	1	04/02/2018 02:55	WG1092317
Bromodichloromethane	U		0.000280	0.00110	1	04/02/2018 02:55	WG1092317
Bromochloromethane	U		0.000430	0.00552	1	04/02/2018 02:55	WG1092317
Bromoform	U	JO	0.000468	0.00110	1	04/02/2018 02:55	WG1092317
Bromomethane	U		0.00148	0.00552	1	04/02/2018 02:55	WG1092317
n-Butylbenzene	U		0.000285	0.00110	1	04/02/2018 02:55	WG1092317
sec-Butylbenzene	U		0.000222	0.00110	1	04/02/2018 02:55	WG1092317
tert-Butylbenzene	U		0.000227	0.00110	1	04/02/2018 02:55	WG1092317
Carbon disulfide	0.000314	J	0.000244	0.00110	1	04/02/2018 02:55	WG1092317
Carbon tetrachloride	U		0.000362	0.00110	1	04/02/2018 02:55	WG1092317
Chlorobenzene	U		0.000234	0.00110	1	04/02/2018 02:55	WG1092317
Chlorodibromomethane	U		0.000412	0.00110	1	04/02/2018 02:55	WG1092317
Chloroethane	U		0.00104	0.00552	1	04/02/2018 02:55	WG1092317
Chloroform	U		0.000253	0.00552	1	04/02/2018 02:55	WG1092317
Chloromethane	U		0.000414	0.00276	1	04/02/2018 02:55	WG1092317
2-Chlorotoluene	U		0.000332	0.00110	1	04/02/2018 02:55	WG1092317
4-Chlorotoluene	U		0.000265	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00552	1	04/02/2018 02:55	WG1092317
1,2-Dibromoethane	U		0.000378	0.00110	1	04/02/2018 02:55	WG1092317
Dibromomethane	U		0.000421	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dichlorobenzene	U		0.000337	0.00110	1	04/02/2018 02:55	WG1092317
1,3-Dichlorobenzene	U		0.000264	0.00110	1	04/02/2018 02:55	WG1092317
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/02/2018 02:55	WG1092317
Dichlorodifluoromethane	U		0.000787	0.00552	1	04/02/2018 02:55	WG1092317
1,1-Dichloroethane	U		0.000220	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dichloroethane	U		0.000292	0.00110	1	04/02/2018 02:55	WG1092317
1,1-Dichloroethene	U		0.000334	0.00110	1	04/02/2018 02:55	WG1092317
cis-1,2-Dichloroethene	0.000353	J	0.000259	0.00110	1	04/02/2018 02:55	WG1092317
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dichloropropane	U		0.000395	0.00110	1	04/02/2018 02:55	WG1092317
1,1-Dichloropropene	U		0.000350	0.00110	1	04/02/2018 02:55	WG1092317
1,3-Dichloropropane	U		0.000228	0.00110	1	04/02/2018 02:55	WG1092317
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	04/02/2018 02:55	WG1092317
trans-1,3-Dichloropropene	U		0.000295	0.00110	1	04/02/2018 02:55	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000858	0.00276	1	04/02/2018 02:55	WG1092317
2,2-Dichloropropane	U		0.000308	0.00110	1	04/02/2018 02:55	WG1092317
Di-isopropyl ether	U	JO	0.000274	0.00110	1	04/02/2018 02:55	WG1092317
Ethylbenzene	U		0.000328	0.00110	1	04/02/2018 02:55	WG1092317
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	04/02/2018 02:55	WG1092317
2-Hexanone	U		0.00151	0.0110	1	04/02/2018 02:55	WG1092317
n-Hexane	U		0.000320	0.0110	1	04/02/2018 02:55	WG1092317
Iodomethane	U		0.00279	0.0110	1	04/02/2018 02:55	WG1092317
Isopropylbenzene	U		0.000268	0.00110	1	04/02/2018 02:55	WG1092317
p-Isopropyltoluene	U		0.000225	0.00110	1	04/02/2018 02:55	WG1092317
2-Butanone (MEK)	U	JO	0.00516	0.0110	1	04/02/2018 02:55	WG1092317
Methylene Chloride	U		0.00110	0.00552	1	04/02/2018 02:55	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/02/2018 02:55	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:10

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	04/02/2018 02:55	WG1092317
Naphthalene	U		0.00110	0.00552	1	04/02/2018 02:55	WG1092317
n-Propylbenzene	U		0.000227	0.00110	1	04/02/2018 02:55	WG1092317
Styrene	U		0.000258	0.00110	1	04/02/2018 02:55	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	04/02/2018 02:55	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	04/02/2018 02:55	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	04/02/2018 02:55	WG1092317
Tetrachloroethene	U		0.000305	0.00110	1	04/02/2018 02:55	WG1092317
Toluene	U		0.000479	0.00552	1	04/02/2018 02:55	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000338	0.00110	1	04/02/2018 02:55	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000428	0.00110	1	04/02/2018 02:55	WG1092317
1,1,1-Trichloroethane	U		0.000316	0.00110	1	04/02/2018 02:55	WG1092317
1,1,2-Trichloroethane	U		0.000306	0.00110	1	04/02/2018 02:55	WG1092317
Trichloroethene	U		0.000308	0.00110	1	04/02/2018 02:55	WG1092317
Trichlorofluoromethane	U		0.000421	0.00552	1	04/02/2018 02:55	WG1092317
1,2,3-Trichloropropane	U		0.000818	0.00276	1	04/02/2018 02:55	WG1092317
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	04/02/2018 02:55	WG1092317
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	04/02/2018 02:55	WG1092317
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/02/2018 02:55	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00264	0.0110	1	04/02/2018 02:55	WG1092317
Vinyl chloride	0.00148		0.000321	0.00110	1	04/02/2018 02:55	WG1092317
Xylenes, Total	U		0.000770	0.00331	1	04/02/2018 02:55	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 02:55	WG1092317
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 02:55	WG1092317
(S) 4-Bromofluorobenzene	89.1			64.0-132		04/02/2018 02:55	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0120	0.0602	1	04/02/2018 03:15	WG1092317
Acrylonitrile	U		0.00216	0.0120	1	04/02/2018 03:15	WG1092317
Benzene	U		0.000325	0.00120	1	04/02/2018 03:15	WG1092317
Bromobenzene	U		0.000342	0.00120	1	04/02/2018 03:15	WG1092317
Bromodichloromethane	U		0.000306	0.00120	1	04/02/2018 03:15	WG1092317
Bromochloromethane	U		0.000470	0.00602	1	04/02/2018 03:15	WG1092317
Bromoform	U	JO	0.000511	0.00120	1	04/02/2018 03:15	WG1092317
Bromomethane	U		0.00161	0.00602	1	04/02/2018 03:15	WG1092317
n-Butylbenzene	U		0.000311	0.00120	1	04/02/2018 03:15	WG1092317
sec-Butylbenzene	U		0.000242	0.00120	1	04/02/2018 03:15	WG1092317
tert-Butylbenzene	U		0.000248	0.00120	1	04/02/2018 03:15	WG1092317
Carbon disulfide	0.000436	J	0.000266	0.00120	1	04/02/2018 03:15	WG1092317
Carbon tetrachloride	U		0.000395	0.00120	1	04/02/2018 03:15	WG1092317
Chlorobenzene	U		0.000255	0.00120	1	04/02/2018 03:15	WG1092317
Chlorodibromomethane	U		0.000449	0.00120	1	04/02/2018 03:15	WG1092317
Chloroethane	U		0.00114	0.00602	1	04/02/2018 03:15	WG1092317
Chloroform	U		0.000276	0.00602	1	04/02/2018 03:15	WG1092317
Chloromethane	U		0.000452	0.00301	1	04/02/2018 03:15	WG1092317
2-Chlorotoluene	U		0.000362	0.00120	1	04/02/2018 03:15	WG1092317
4-Chlorotoluene	U		0.000289	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00602	1	04/02/2018 03:15	WG1092317
1,2-Dibromoethane	U		0.000413	0.00120	1	04/02/2018 03:15	WG1092317
Dibromomethane	U		0.000460	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dichlorobenzene	U		0.000367	0.00120	1	04/02/2018 03:15	WG1092317
1,3-Dichlorobenzene	U		0.000288	0.00120	1	04/02/2018 03:15	WG1092317
1,4-Dichlorobenzene	U		0.000272	0.00120	1	04/02/2018 03:15	WG1092317
Dichlorodifluoromethane	U		0.000859	0.00602	1	04/02/2018 03:15	WG1092317
1,1-Dichloroethane	U		0.000240	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dichloroethane	U		0.000319	0.00120	1	04/02/2018 03:15	WG1092317
1,1-Dichloroethene	U		0.000365	0.00120	1	04/02/2018 03:15	WG1092317
cis-1,2-Dichloroethene	0.000596	J	0.000283	0.00120	1	04/02/2018 03:15	WG1092317
trans-1,2-Dichloroethene	U		0.000318	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dichloropropane	U		0.000431	0.00120	1	04/02/2018 03:15	WG1092317
1,1-Dichloropropene	U		0.000382	0.00120	1	04/02/2018 03:15	WG1092317
1,3-Dichloropropane	U		0.000249	0.00120	1	04/02/2018 03:15	WG1092317
cis-1,3-Dichloropropene	U		0.000316	0.00120	1	04/02/2018 03:15	WG1092317
trans-1,3-Dichloropropene	U		0.000322	0.00120	1	04/02/2018 03:15	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000937	0.00301	1	04/02/2018 03:15	WG1092317
2,2-Dichloropropane	U		0.000336	0.00120	1	04/02/2018 03:15	WG1092317
Di-isopropyl ether	U	JO	0.000299	0.00120	1	04/02/2018 03:15	WG1092317
Ethylbenzene	U		0.000358	0.00120	1	04/02/2018 03:15	WG1092317
Hexachloro-1,3-butadiene	U		0.000412	0.00120	1	04/02/2018 03:15	WG1092317
2-Hexanone	U		0.00165	0.0120	1	04/02/2018 03:15	WG1092317
n-Hexane	U		0.000349	0.0120	1	04/02/2018 03:15	WG1092317
Iodomethane	U		0.00305	0.0120	1	04/02/2018 03:15	WG1092317
Isopropylbenzene	U		0.000293	0.00120	1	04/02/2018 03:15	WG1092317
p-Isopropyltoluene	U		0.000246	0.00120	1	04/02/2018 03:15	WG1092317
2-Butanone (MEK)	U	JO	0.00564	0.0120	1	04/02/2018 03:15	WG1092317
Methylene Chloride	U		0.00120	0.00602	1	04/02/2018 03:15	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00226	0.0120	1	04/02/2018 03:15	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 11:35

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000255	0.00120	1	04/02/2018 03:15	WG1092317
Naphthalene	U		0.00120	0.00602	1	04/02/2018 03:15	WG1092317
n-Propylbenzene	U		0.000248	0.00120	1	04/02/2018 03:15	WG1092317
Styrene	U		0.000282	0.00120	1	04/02/2018 03:15	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000318	0.00120	1	04/02/2018 03:15	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000440	0.00120	1	04/02/2018 03:15	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000440	0.00120	1	04/02/2018 03:15	WG1092317
Tetrachloroethene	0.000799	<u>J</u>	0.000332	0.00120	1	04/02/2018 03:15	WG1092317
Toluene	U		0.000523	0.00602	1	04/02/2018 03:15	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000369	0.00120	1	04/02/2018 03:15	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000467	0.00120	1	04/02/2018 03:15	WG1092317
1,1,1-Trichloroethane	U		0.000344	0.00120	1	04/02/2018 03:15	WG1092317
1,1,2-Trichloroethane	U		0.000334	0.00120	1	04/02/2018 03:15	WG1092317
Trichloroethene	U		0.000336	0.00120	1	04/02/2018 03:15	WG1092317
Trichlorofluoromethane	U		0.000460	0.00602	1	04/02/2018 03:15	WG1092317
1,2,3-Trichloropropane	U		0.000892	0.00301	1	04/02/2018 03:15	WG1092317
1,2,4-Trimethylbenzene	U		0.000254	0.00120	1	04/02/2018 03:15	WG1092317
1,2,3-Trimethylbenzene	U		0.000346	0.00120	1	04/02/2018 03:15	WG1092317
1,3,5-Trimethylbenzene	U		0.000320	0.00120	1	04/02/2018 03:15	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00288	0.0120	1	04/02/2018 03:15	WG1092317
Vinyl chloride	0.00176		0.000350	0.00120	1	04/02/2018 03:15	WG1092317
Xylenes, Total	U		0.000841	0.00361	1	04/02/2018 03:15	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 03:15	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 03:15	WG1092317
(S) 4-Bromofluorobenzene	87.4			64.0-132		04/02/2018 03:15	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 12:57

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0118	0.0588	1	04/02/2018 03:34	WG1092317
Acrylonitrile	U		0.00211	0.0118	1	04/02/2018 03:34	WG1092317
Benzene	U		0.000318	0.00118	1	04/02/2018 03:34	WG1092317
Bromobenzene	U		0.000334	0.00118	1	04/02/2018 03:34	WG1092317
Bromodichloromethane	U		0.000299	0.00118	1	04/02/2018 03:34	WG1092317
Bromochloromethane	U		0.000459	0.00588	1	04/02/2018 03:34	WG1092317
Bromoform	U	JO	0.000499	0.00118	1	04/02/2018 03:34	WG1092317
Bromomethane	U		0.00158	0.00588	1	04/02/2018 03:34	WG1092317
n-Butylbenzene	U		0.000304	0.00118	1	04/02/2018 03:34	WG1092317
sec-Butylbenzene	U		0.000237	0.00118	1	04/02/2018 03:34	WG1092317
tert-Butylbenzene	U		0.000242	0.00118	1	04/02/2018 03:34	WG1092317
Carbon disulfide	0.000319	J	0.000260	0.00118	1	04/02/2018 03:34	WG1092317
Carbon tetrachloride	U		0.000386	0.00118	1	04/02/2018 03:34	WG1092317
Chlorobenzene	U		0.000249	0.00118	1	04/02/2018 03:34	WG1092317
Chlorodibromomethane	U		0.000439	0.00118	1	04/02/2018 03:34	WG1092317
Chloroethane	U		0.00111	0.00588	1	04/02/2018 03:34	WG1092317
Chloroform	U		0.000269	0.00588	1	04/02/2018 03:34	WG1092317
Chloromethane	U		0.000441	0.00294	1	04/02/2018 03:34	WG1092317
2-Chlorotoluene	U		0.000354	0.00118	1	04/02/2018 03:34	WG1092317
4-Chlorotoluene	U		0.000282	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00588	1	04/02/2018 03:34	WG1092317
1,2-Dibromoethane	U		0.000404	0.00118	1	04/02/2018 03:34	WG1092317
Dibromomethane	U		0.000450	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dichlorobenzene	U		0.000359	0.00118	1	04/02/2018 03:34	WG1092317
1,3-Dichlorobenzene	U		0.000281	0.00118	1	04/02/2018 03:34	WG1092317
1,4-Dichlorobenzene	U		0.000266	0.00118	1	04/02/2018 03:34	WG1092317
Dichlorodifluoromethane	U		0.000839	0.00588	1	04/02/2018 03:34	WG1092317
1,1-Dichloroethane	U		0.000234	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dichloroethane	U		0.000312	0.00118	1	04/02/2018 03:34	WG1092317
1,1-Dichloroethene	U		0.000357	0.00118	1	04/02/2018 03:34	WG1092317
cis-1,2-Dichloroethene	0.000773	J	0.000277	0.00118	1	04/02/2018 03:34	WG1092317
trans-1,2-Dichloroethene	U		0.000311	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dichloropropane	U		0.000421	0.00118	1	04/02/2018 03:34	WG1092317
1,1-Dichloropropene	U		0.000373	0.00118	1	04/02/2018 03:34	WG1092317
1,3-Dichloropropane	U		0.000244	0.00118	1	04/02/2018 03:34	WG1092317
cis-1,3-Dichloropropene	U		0.000308	0.00118	1	04/02/2018 03:34	WG1092317
trans-1,3-Dichloropropene	U		0.000314	0.00118	1	04/02/2018 03:34	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000916	0.00294	1	04/02/2018 03:34	WG1092317
2,2-Dichloropropane	U		0.000328	0.00118	1	04/02/2018 03:34	WG1092317
Di-isopropyl ether	U	JO	0.000292	0.00118	1	04/02/2018 03:34	WG1092317
Ethylbenzene	U		0.000350	0.00118	1	04/02/2018 03:34	WG1092317
Hexachloro-1,3-butadiene	U		0.000402	0.00118	1	04/02/2018 03:34	WG1092317
2-Hexanone	U		0.00161	0.0118	1	04/02/2018 03:34	WG1092317
n-Hexane	U		0.000341	0.0118	1	04/02/2018 03:34	WG1092317
Iodomethane	U		0.00298	0.0118	1	04/02/2018 03:34	WG1092317
Isopropylbenzene	U		0.000286	0.00118	1	04/02/2018 03:34	WG1092317
p-Isopropyltoluene	U		0.000240	0.00118	1	04/02/2018 03:34	WG1092317
2-Butanone (MEK)	U	JO	0.00551	0.0118	1	04/02/2018 03:34	WG1092317
Methylene Chloride	U		0.00118	0.00588	1	04/02/2018 03:34	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0118	1	04/02/2018 03:34	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 12:57

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000249	0.00118	1	04/02/2018 03:34	WG1092317
Naphthalene	U		0.00118	0.00588	1	04/02/2018 03:34	WG1092317
n-Propylbenzene	U		0.000242	0.00118	1	04/02/2018 03:34	WG1092317
Styrene	U		0.000275	0.00118	1	04/02/2018 03:34	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000311	0.00118	1	04/02/2018 03:34	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000430	0.00118	1	04/02/2018 03:34	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000430	0.00118	1	04/02/2018 03:34	WG1092317
Tetrachloroethene	0.00254		0.000325	0.00118	1	04/02/2018 03:34	WG1092317
Toluene	U		0.000511	0.00588	1	04/02/2018 03:34	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000360	0.00118	1	04/02/2018 03:34	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000457	0.00118	1	04/02/2018 03:34	WG1092317
1,1,1-Trichloroethane	U		0.000337	0.00118	1	04/02/2018 03:34	WG1092317
1,1,2-Trichloroethane	U		0.000326	0.00118	1	04/02/2018 03:34	WG1092317
Trichloroethene	U		0.000328	0.00118	1	04/02/2018 03:34	WG1092317
Trichlorofluoromethane	U		0.000450	0.00588	1	04/02/2018 03:34	WG1092317
1,2,3-Trichloropropane	U		0.000872	0.00294	1	04/02/2018 03:34	WG1092317
1,2,4-Trimethylbenzene	U		0.000248	0.00118	1	04/02/2018 03:34	WG1092317
1,2,3-Trimethylbenzene	U		0.000338	0.00118	1	04/02/2018 03:34	WG1092317
1,3,5-Trimethylbenzene	U		0.000313	0.00118	1	04/02/2018 03:34	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00281	0.0118	1	04/02/2018 03:34	WG1092317
Vinyl chloride	0.00311		0.000342	0.00118	1	04/02/2018 03:34	WG1092317
Xylenes, Total	U		0.000821	0.00353	1	04/02/2018 03:34	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 03:34	WG1092317
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 03:34	WG1092317
(S) 4-Bromofluorobenzene	88.6			64.0-132		04/02/2018 03:34	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	JO	0.0115	0.0574	1	04/02/2018 03:54	WG1092317
Acrylonitrile	U		0.00206	0.0115	1	04/02/2018 03:54	WG1092317
Benzene	U		0.000310	0.00115	1	04/02/2018 03:54	WG1092317
Bromobenzene	U		0.000326	0.00115	1	04/02/2018 03:54	WG1092317
Bromodichloromethane	U		0.000292	0.00115	1	04/02/2018 03:54	WG1092317
Bromochloromethane	U		0.000448	0.00574	1	04/02/2018 03:54	WG1092317
Bromoform	U	JO	0.000487	0.00115	1	04/02/2018 03:54	WG1092317
Bromomethane	U		0.00154	0.00574	1	04/02/2018 03:54	WG1092317
n-Butylbenzene	U		0.000296	0.00115	1	04/02/2018 03:54	WG1092317
sec-Butylbenzene	U		0.000231	0.00115	1	04/02/2018 03:54	WG1092317
tert-Butylbenzene	U		0.000237	0.00115	1	04/02/2018 03:54	WG1092317
Carbon disulfide	U		0.000254	0.00115	1	04/02/2018 03:54	WG1092317
Carbon tetrachloride	U		0.000377	0.00115	1	04/02/2018 03:54	WG1092317
Chlorobenzene	U		0.000244	0.00115	1	04/02/2018 03:54	WG1092317
Chlorodibromomethane	U		0.000428	0.00115	1	04/02/2018 03:54	WG1092317
Chloroethane	U		0.00109	0.00574	1	04/02/2018 03:54	WG1092317
Chloroform	U		0.000263	0.00574	1	04/02/2018 03:54	WG1092317
Chloromethane	U		0.000431	0.00287	1	04/02/2018 03:54	WG1092317
2-Chlorotoluene	U		0.000346	0.00115	1	04/02/2018 03:54	WG1092317
4-Chlorotoluene	U		0.000276	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00574	1	04/02/2018 03:54	WG1092317
1,2-Dibromoethane	U		0.000394	0.00115	1	04/02/2018 03:54	WG1092317
Dibromomethane	U		0.000439	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dichlorobenzene	U		0.000350	0.00115	1	04/02/2018 03:54	WG1092317
1,3-Dichlorobenzene	U		0.000275	0.00115	1	04/02/2018 03:54	WG1092317
1,4-Dichlorobenzene	U		0.000260	0.00115	1	04/02/2018 03:54	WG1092317
Dichlorodifluoromethane	U		0.000819	0.00574	1	04/02/2018 03:54	WG1092317
1,1-Dichloroethane	U		0.000229	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dichloroethane	U		0.000304	0.00115	1	04/02/2018 03:54	WG1092317
1,1-Dichloroethene	U		0.000348	0.00115	1	04/02/2018 03:54	WG1092317
cis-1,2-Dichloroethene	U		0.000270	0.00115	1	04/02/2018 03:54	WG1092317
trans-1,2-Dichloroethene	U		0.000303	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dichloropropane	U		0.000411	0.00115	1	04/02/2018 03:54	WG1092317
1,1-Dichloropropene	U		0.000364	0.00115	1	04/02/2018 03:54	WG1092317
1,3-Dichloropropane	U		0.000238	0.00115	1	04/02/2018 03:54	WG1092317
cis-1,3-Dichloropropene	U		0.000301	0.00115	1	04/02/2018 03:54	WG1092317
trans-1,3-Dichloropropene	U		0.000307	0.00115	1	04/02/2018 03:54	WG1092317
trans-1,4-Dichloro-2-butene	U	JO	0.000894	0.00287	1	04/02/2018 03:54	WG1092317
2,2-Dichloropropane	U		0.000321	0.00115	1	04/02/2018 03:54	WG1092317
Di-isopropyl ether	U	JO	0.000285	0.00115	1	04/02/2018 03:54	WG1092317
Ethylbenzene	U		0.000341	0.00115	1	04/02/2018 03:54	WG1092317
Hexachloro-1,3-butadiene	U		0.000393	0.00115	1	04/02/2018 03:54	WG1092317
2-Hexanone	U		0.00157	0.0115	1	04/02/2018 03:54	WG1092317
n-Hexane	U		0.000333	0.0115	1	04/02/2018 03:54	WG1092317
Iodomethane	U		0.00291	0.0115	1	04/02/2018 03:54	WG1092317
Isopropylbenzene	U		0.000279	0.00115	1	04/02/2018 03:54	WG1092317
p-Isopropyltoluene	U		0.000234	0.00115	1	04/02/2018 03:54	WG1092317
2-Butanone (MEK)	U	JO	0.00538	0.0115	1	04/02/2018 03:54	WG1092317
Methylene Chloride	U		0.00115	0.00574	1	04/02/2018 03:54	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	04/02/2018 03:54	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 10:19

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000244	0.00115	1	04/02/2018 03:54	WG1092317
Naphthalene	U		0.00115	0.00574	1	04/02/2018 03:54	WG1092317
n-Propylbenzene	U		0.000237	0.00115	1	04/02/2018 03:54	WG1092317
Styrene	U		0.000269	0.00115	1	04/02/2018 03:54	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000303	0.00115	1	04/02/2018 03:54	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	04/02/2018 03:54	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000419	0.00115	1	04/02/2018 03:54	WG1092317
Tetrachloroethene	0.000648	<u>J</u>	0.000317	0.00115	1	04/02/2018 03:54	WG1092317
Toluene	U		0.000499	0.00574	1	04/02/2018 03:54	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000352	0.00115	1	04/02/2018 03:54	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000446	0.00115	1	04/02/2018 03:54	WG1092317
1,1,1-Trichloroethane	U		0.000329	0.00115	1	04/02/2018 03:54	WG1092317
1,1,2-Trichloroethane	U		0.000318	0.00115	1	04/02/2018 03:54	WG1092317
Trichloroethene	U		0.000321	0.00115	1	04/02/2018 03:54	WG1092317
Trichlorofluoromethane	U		0.000439	0.00574	1	04/02/2018 03:54	WG1092317
1,2,3-Trichloropropane	U		0.000851	0.00287	1	04/02/2018 03:54	WG1092317
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/02/2018 03:54	WG1092317
1,2,3-Trimethylbenzene	U		0.000330	0.00115	1	04/02/2018 03:54	WG1092317
1,3,5-Trimethylbenzene	U		0.000306	0.00115	1	04/02/2018 03:54	WG1092317
Vinyl acetate	U	<u>JO</u>	0.00275	0.0115	1	04/02/2018 03:54	WG1092317
Vinyl chloride	U		0.000334	0.00115	1	04/02/2018 03:54	WG1092317
Xylenes, Total	U		0.000802	0.00345	1	04/02/2018 03:54	WG1092317
(S) Toluene-d8	105			80.0-120		04/02/2018 03:54	WG1092317
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 03:54	WG1092317
(S) 4-Bromofluorobenzene	88.3			64.0-132		04/02/2018 03:54	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	03/31/2018 18:45	WG1092115
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	03/31/2018 18:45	WG1092115
Benzene	U		0.0896	0.500	1	03/31/2018 18:45	WG1092115
Bromobenzene	U		0.133	0.500	1	03/31/2018 18:45	WG1092115
Bromodichloromethane	U		0.0800	0.500	1	03/31/2018 18:45	WG1092115
Bromochloromethane	U		0.145	0.500	1	03/31/2018 18:45	WG1092115
Bromoform	U		0.186	0.500	1	03/31/2018 18:45	WG1092115
Bromomethane	U		0.157	2.50	1	03/31/2018 18:45	WG1092115
n-Butylbenzene	U		0.143	0.500	1	03/31/2018 18:45	WG1092115
sec-Butylbenzene	U		0.134	0.500	1	03/31/2018 18:45	WG1092115
tert-Butylbenzene	U		0.183	0.500	1	03/31/2018 18:45	WG1092115
Carbon disulfide	U		0.101	0.500	1	03/31/2018 18:45	WG1092115
Carbon tetrachloride	U		0.159	0.500	1	03/31/2018 18:45	WG1092115
Chlorobenzene	U		0.140	0.500	1	03/31/2018 18:45	WG1092115
Chlorodibromomethane	U		0.128	0.500	1	03/31/2018 18:45	WG1092115
Chloroethane	U		0.141	2.50	1	03/31/2018 18:45	WG1092115
Chloroform	U		0.0860	0.500	1	03/31/2018 18:45	WG1092115
Chloromethane	U		0.153	1.25	1	03/31/2018 18:45	WG1092115
2-Chlorotoluene	U		0.111	0.500	1	03/31/2018 18:45	WG1092115
4-Chlorotoluene	U		0.0972	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	03/31/2018 18:45	WG1092115
1,2-Dibromoethane	U		0.193	0.500	1	03/31/2018 18:45	WG1092115
Dibromomethane	U		0.117	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dichlorobenzene	U		0.101	0.500	1	03/31/2018 18:45	WG1092115
1,3-Dichlorobenzene	U		0.130	0.500	1	03/31/2018 18:45	WG1092115
1,4-Dichlorobenzene	U		0.121	0.500	1	03/31/2018 18:45	WG1092115
Dichlorodifluoromethane	U		0.127	2.50	1	03/31/2018 18:45	WG1092115
1,1-Dichloroethane	U		0.114	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dichloroethane	U		0.108	0.500	1	03/31/2018 18:45	WG1092115
1,1-Dichloroethene	U		0.188	0.500	1	03/31/2018 18:45	WG1092115
cis-1,2-Dichloroethene	U	<u>JO</u>	0.0933	0.500	1	03/31/2018 18:45	WG1092115
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dichloropropane	U		0.190	0.500	1	03/31/2018 18:45	WG1092115
1,1-Dichloropropene	U		0.128	0.500	1	03/31/2018 18:45	WG1092115
1,3-Dichloropropane	U		0.147	1.00	1	03/31/2018 18:45	WG1092115
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/31/2018 18:45	WG1092115
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/31/2018 18:45	WG1092115
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/31/2018 18:45	WG1092115
2,2-Dichloropropane	U		0.0929	0.500	1	03/31/2018 18:45	WG1092115
Di-isopropyl ether	U		0.0924	0.500	1	03/31/2018 18:45	WG1092115
Ethylbenzene	U		0.158	0.500	1	03/31/2018 18:45	WG1092115
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/31/2018 18:45	WG1092115
2-Hexanone	U		0.757	5.00	1	03/31/2018 18:45	WG1092115
n-Hexane	U		0.305	5.00	1	03/31/2018 18:45	WG1092115
Iodomethane	U		0.377	10.0	1	03/31/2018 18:45	WG1092115
Isopropylbenzene	U		0.126	0.500	1	03/31/2018 18:45	WG1092115
p-Isopropyltoluene	U		0.138	0.500	1	03/31/2018 18:45	WG1092115
2-Butanone (MEK)	U		1.28	5.00	1	03/31/2018 18:45	WG1092115
Methylene Chloride	U		1.07	2.50	1	03/31/2018 18:45	WG1092115
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	03/31/2018 18:45	WG1092115
Methyl tert-butyl ether	U		0.102	0.500	1	03/31/2018 18:45	WG1092115
Naphthalene	U		0.174	2.50	1	03/31/2018 18:45	WG1092115
n-Propylbenzene	U		0.162	0.500	1	03/31/2018 18:45	WG1092115
Styrene	U		0.117	0.500	1	03/31/2018 18:45	WG1092115
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/31/2018 18:45	WG1092115
1,1,2,2-Tetrachloroethane	U	<u>JO</u>	0.130	0.500	1	03/31/2018 18:45	WG1092115

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 03/29/18 00:00

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/31/2018 18:45	WG1092115
Tetrachloroethene	U		0.199	0.500	1	03/31/2018 18:45	WG1092115
Toluene	U		0.412	0.500	1	03/31/2018 18:45	WG1092115
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/31/2018 18:45	WG1092115
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/31/2018 18:45	WG1092115
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/31/2018 18:45	WG1092115
1,1,2-Trichloroethane	U		0.186	0.500	1	03/31/2018 18:45	WG1092115
Trichloroethene	U		0.153	0.500	1	03/31/2018 18:45	WG1092115
Trichlorofluoromethane	U	J4	0.130	2.50	1	03/31/2018 18:45	WG1092115
1,2,3-Trichloropropane	U		0.247	2.50	1	03/31/2018 18:45	WG1092115
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/31/2018 18:45	WG1092115
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/31/2018 18:45	WG1092115
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/31/2018 18:45	WG1092115
Vinyl acetate	U		0.645	5.00	1	03/31/2018 18:45	WG1092115
Vinyl chloride	U		0.118	0.500	1	03/31/2018 18:45	WG1092115
Xylenes, Total	U		0.316	1.50	1	03/31/2018 18:45	WG1092115
(S) Toluene-d8	98.4			80.0-120		03/31/2018 18:45	WG1092115
(S) Dibromofluoromethane	102			76.0-123		03/31/2018 18:45	WG1092115
(S) 4-Bromofluorobenzene	95.7			80.0-120		03/31/2018 18:45	WG1092115

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

[L981889-01.02.03.04.05.06.07.08](#)

Method Blank (MB)

(MB) R3299246-1 04/04/18 14:42

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Total Solids 0.00100

L981889-08 Original Sample (OS) • Duplicate (DUP)

(OS) L981889-08 04/04/18 14:42 • (DUP) R3299246-3 04/04/18 14:42

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Total Solids 90.7 92.0 1 1.49 5

Laboratory Control Sample (LCS)

(LCS) R3299246-2 04/04/18 14:42

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	

Total Solids 50.0 50.0 100 85.0-115

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Total Solids by Method 2540 G-2011

[L981889-09,10,11,12,13,14,15,16,17,18](#)

Method Blank (MB)

(MB) R3299245-1 04/04/18 14:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000	%	%	%

L981889-14 Original Sample (OS) • Duplicate (DUP)

(OS) L981889-14 04/04/18 14:27 • (DUP) R3299245-3 04/04/18 14:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	88.2	88.4	1	0.205	%	5

Laboratory Control Sample (LCS)

(LCS) R3299245-2 04/04/18 14:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3299243-1	04/04/18 14:15						
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL				
Analyte	%	%	%				
Total Solids	0.00200						

L981889-21 Original Sample (OS) • Duplicate (DUP)

(OS) L981889-21	04/04/18 14:15	• (DUP) R3299243-3	04/04/18 14:15				
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits		
Analyte	%	%	%		%		
Total Solids	87.2	86.8	1	0.372	5		

Laboratory Control Sample (LCS)

(LCS) R3299243-2	04/04/18 14:15						
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>			
Analyte	%	%	%				
Total Solids	50.0	50.0	100	85.0-115			

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3299240-1 04/04/18 13:45

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Analyte

0.000

Total Solids

L981889-36 Original Sample (OS) • Duplicate (DUP)

(OS) L981889-36 04/04/18 13:45 • (DUP) R3299240-3 04/04/18 13:45

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Analyte

Total Solids

88.2

89.4

1

1.38

5

Laboratory Control Sample (LCS)

(LCS) R3299240-2 04/04/18 13:45

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	%

Analyte

Total Solids

50.0

50.0

100

85.0-115

Public Review Draft

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

Method Blank (MB)

(MB) R3299237-1	04/04/18 13:30						
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL				
Analyte	%	%	%				
Total Solids	0.00100						

L981889-41 Original Sample (OS) • Duplicate (DUP)

(OS) L981889-41	04/04/18 13:30	• (DUP) R3299237-3	04/04/18 13:30				
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD	DUP RPD	DUP RPD
Analyte	%	%	%	%	%	Limits	Limits
Total Solids	88.0	88.8	1	0.970		5	

Laboratory Control Sample (LCS)

(LCS) R3299237-2	04/04/18 13:30						
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>			
Analyte	%	%	%	%			
Total Solids	50.0	50.0	100	85.0-115			

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R32399001-3 03/31/18 15:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Bromobenzene	U		0.133	0.500
Benzene	U		0.0896	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Method Blank (MB)

(MB) R32399001-3 03/31/18 15:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Ethylbenzene	U		0.158	0.500
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	U		0.199	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
Naphthalene	U		0.174	2.50
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	100			80.0-120
(S) Dibromofluoromethane	103			76.0-123
(S) 4-Bromofluorobenzene	95.1			80.0-120

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299001-1 03/31/18 14:51 • (LCSD) R3299001-2 03/31/18 15:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	134	129	107	103	10.0-160			3.57	23
Acrylonitrile	125	97.6	94.8	78.1	75.9	60.0-142			2.87	20
Bromobenzene	25.0	22.5	21.0	89.9	83.8	79.0-120			6.98	20
Bromodichloromethane	25.0	23.7	21.8	94.7	87.0	76.0-120			8.43	20
Bromochloromethane	25.0	23.6	22.8	94.5	91.1	76.0-122			3.74	20
Bromoform	25.0	20.3	19.9	81.2	79.8	67.0-132			1.77	20
Bromomethane	25.0	24.8	21.9	99.2	87.8	18.0-160			12.3	20
n-Butylbenzene	25.0	24.3	22.6	97.2	90.6	72.0-126			7.11	20
sec-Butylbenzene	25.0	25.1	23.3	100	93.4	74.0-121			7.17	20
tert-Butylbenzene	25.0	24.3	22.1	97.2	88.4	75.0-122			9.51	20
Carbon disulfide	25.0	20.9	18.8	83.8	75.3	55.0-127			10.7	20
Carbon tetrachloride	25.0	28.7	25.2	115	101	63.0-122			13.1	20
Chlorobenzene	25.0	25.9	23.5	104	94.0	79.0-121			9.81	20
Chlorodibromomethane	25.0	26.7	25.5	107	102	75.0-125			4.51	20
Chloroethane	25.0	23.4	21.7	93.5	86.8	47.0-152			7.46	20
Chloroform	25.0	23.6	21.6	94.3	86.4	72.0-121			8.77	20
Chloromethane	25.0	23.2	21.1	92.8	84.5	48.0-139			9.26	20
2-Chlorotoluene	25.0	22.1	20.6	88.2	82.6	74.0-122			6.63	20
4-Chlorotoluene	25.0	22.1	20.3	88.3	81.3	79.0-120			8.35	20
1,2-Dibromo-3-Chloropropane	25.0	23.0	23.6	92.1	94.2	64.0-127			2.31	20
1,2-Dibromoethane	25.0	25.8	24.2	103	96.9	77.0-123			6.13	20
Dibromomethane	25.0	22.4	20.9	89.5	83.4	78.0-120			7.01	20
1,2-Dichlorobenzene	25.0	25.1	25.1	101	100	80.0-120			0.172	20
1,3-Dichlorobenzene	25.0	25.7	24.2	103	96.7	72.0-123			6.11	20
1,4-Dichlorobenzene	25.0	25.8	24.8	103	99.2	77.0-120			3.93	20
Dichlorodifluoromethane	25.0	32.5	29.2	130	117	49.0-155			10.7	20
1,1-Dichloroethane	25.0	22.6	21.4	90.3	85.7	70.0-126			5.20	20
1,2-Dichloroethane	25.0	26.5	25.2	106	101	67.0-126			5.08	20
1,1-Dichloroethene	25.0	21.2	18.9	84.8	75.7	64.0-129			11.2	20
cis-1,2-Dichloroethene	25.0	19.9	18.5	79.5	73.9	73.0-120			7.34	20
trans-1,2-Dichloroethene	25.0	20.0	18.2	80.1	72.7	71.0-121			9.70	20
1,2-Dichloropropane	25.0	22.3	21.1	89.3	84.4	75.0-125			5.70	20
1,1-Dichloropropene	25.0	25.1	21.8	100	87.3	71.0-129			13.8	20
1,3-Dichloropropane	25.0	24.2	22.7	96.7	90.9	80.0-121			6.23	20
cis-1,3-Dichloropropene	25.0	24.0	22.3	96.0	89.2	79.0-123			7.33	20
trans-1,3-Dichloropropene	25.0	24.9	23.7	99.5	94.8	74.0-127			4.86	20
trans-1,4-Dichloro-2-butene	25.0	20.0	19.6	80.0	78.4	55.0-134			2.06	20
2,2-Dichloropropane	25.0	25.2	22.8	101	91.4	60.0-125			9.77	20
Diisopropyl ether	25.0	20.0	19.0	80.0	76.0	59.0-133			5.08	20
Hexachloro-1,3-butadiene	25.0	25.0	23.2	100	92.9	64.0-131			7.38	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299001-1 03/31/18 14:51 • (LCSD) R3299001-2 03/31/18 15:10

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
2-Hexanone	125	116	109	92.5	87.0	58.0-147			6.07	20
n-Hexane	25.0	22.3	20.5	89.4	82.1	56.0-124			8.55	20
Iodomethane	125	117	106	94.0	85.0	57.0-140			10.0	20
Isopropylbenzene	25.0	23.5	21.2	94.0	84.7	75.0-120			10.4	20
p-Isopropyltoluene	25.0	24.8	23.4	99.3	93.4	74.0-126			6.12	20
2-Butanone (MEK)	125	106	106	84.6	84.6	37.0-158			0.0219	20
Methylene Chloride	25.0	20.5	18.7	81.9	74.8	66.0-121			9.08	20
4-Methyl-2-pentanone (MIBK)	125	111	106	89.0	84.8	59.0-143			4.76	20
Benzene	25.0	21.2	19.4	84.8	77.5	69.0-123			9.00	20
Methyl tert-butyl ether	25.0	22.5	22.0	89.9	87.9	64.0-123			2.25	20
n-Propylbenzene	25.0	22.1	20.1	88.5	80.4	79.0-120			9.53	20
Styrene	25.0	22.3	20.5	89.4	81.9	78.0-124			8.69	20
1,1,1,2-Tetrachloroethane	25.0	28.3	25.8	113	103	75.0-122			9.18	20
1,1,2,2-Tetrachloroethane	25.0	19.9	19.9	79.5	79.5	71.0-122			0.0543	20
1,1,2-Trichlorotrifluoroethane	25.0	25.0	21.9	100	87.4	61.0-136			13.4	20
Tetrachloroethene	25.0	26.8	24.0	107	96.0	70.0-127			11.2	20
1,2,3-Trichlorobenzene	25.0	24.6	24.9	98.3	99.5	61.0-133			1.12	20
1,2,4-Trichlorobenzene	25.0	24.4	23.8	97.6	95.1	69.0-129			2.62	20
1,1,1-Trichloroethane	25.0	26.1	22.2	104	88.9	68.0-122			16.1	20
1,1,2-Trichloroethane	25.0	22.4	21.1	89.7	84.5	78.0-120			6.03	20
Trichloroethene	25.0	25.3	22.1	101	88.6	78.0-120			13.5	20
Trichlorofluoromethane	25.0	34.5	30.6	138	123	56.0-137	J4		11.9	20
1,2,3-Trichloropropane	25.0	23.0	22.3	92.1	89.3	72.0-124			3.10	20
1,2,4-Trimethylbenzene	25.0	22.7	21.4	90.7	85.4	75.0-120			6.00	20
1,2,3-Trimethylbenzene	25.0	25.0	23.0	100	92.1	75.0-120			8.23	20
1,3,5-Trimethylbenzene	25.0	24.1	22.2	96.5	88.7	75.0-120			8.42	20
Vinyl acetate	125	114	107	91.2	85.6	46.0-160			6.32	20
Vinyl chloride	25.0	29.2	25.9	117	103	64.0-133			12.0	20
Ethylbenzene	25.0	25.4	22.7	102	90.9	77.0-120			11.1	20
Naphthalene	25.0	24.8	24.4	99.4	97.7	62.0-128			1.73	20
Toluene	25.0	22.3	20.2	89.4	80.7	77.0-120			10.1	20
Xylenes, Total	75.0	74.7	68.9	99.6	91.9	77.0-120			8.08	20
(S) Toluene-d8				102	102	80.0-120				
(S) Dibromofluoromethane				104	106	76.0-123				
(S) 4-Bromofluorobenzene				92.9	95.1	80.0-120				

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Method Blank (MB)

(MB) R3239415-3 03/31/18 17:16

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R3239415-3 03/31/18 17:16

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	106			80.0-120
(S) Dibromofluoromethane	100			74.0-131
(S) 4-Bromofluorobenzene	101			64.0-132

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299415-1 03/31/18 16:14 • (LCSD) R3299415-2 03/31/18 16:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Acetone	0.125	0.178	0.139	142	112	11.0-160	<u>3</u>		24.1	23
Acrylonitrile	0.125	0.175	0.148	140	118	61.0-143			16.9	20
Benzene	0.0250	0.0254	0.0289	101	116	71.0-124			13.0	20
Bromobenzene	0.0250	0.0243	0.0263	97.1	105	78.0-120			8.19	20
Bromodichloromethane	0.0250	0.0267	0.0282	107	113	75.0-120			5.56	20
Bromochloromethane	0.0250	0.0271	0.0296	109	118	80.0-121			8.61	20
Bromoform	0.0250	0.0290	0.0264	116	106	65.0-133	<u>3</u>		9.24	20
Bromomethane	0.0250	0.0245	0.0300	98.0	120	26.0-160	<u>3</u>		20.1	20
n-Butylbenzene	0.0250	0.0231	0.0287	92.4	115	73.0-126	<u>3</u>		21.7	20
sec-Butylbenzene	0.0250	0.0226	0.0288	90.4	115	75.0-121	<u>3</u>		24.1	20
tert-Butylbenzene	0.0250	0.0234	0.0292	93.8	117	74.0-122	<u>3</u>		21.8	20
Carbon disulfide	0.0250	0.0225	0.0296	90.2	118	53.0-130	<u>3</u>		27.0	20
Carbon tetrachloride	0.0250	0.0222	0.0285	88.8	114	66.0-123	<u>3</u>		24.9	20
Chlorobenzene	0.0250	0.0255	0.0292	102	117	79.0-121	<u>3</u>		13.5	20
Chlorodibromomethane	0.0250	0.0284	0.0287	114	115	74.0-128			1.08	20
Chloroethane	0.0250	0.0234	0.0297	93.5	119	51.0-147	<u>3</u>		24.0	20
Chloroform	0.0250	0.0255	0.0289	102	116	73.0-123	<u>3</u>		12.3	20
Chloromethane	0.0250	0.0232	0.0298	92.8	119	51.0-138	<u>3</u>		25.0	20
2-Chlorotoluene	0.0250	0.0240	0.0282	95.9	113	72.0-124			16.2	20
4-Chlorotoluene	0.0250	0.0238	0.0270	95.1	108	78.0-120			12.6	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0312	0.0263	125	105	65.0-126			17.0	20
1,2-Dibromoethane	0.0250	0.0297	0.0280	119	112	78.0-122			5.82	20
Dibromomethane	0.0250	0.0286	0.0277	114	111	79.0-120			3.18	20
1,2-Dichlorobenzene	0.0250	0.0262	0.0280	105	112	80.0-120			6.86	20
1,3-Dichlorobenzene	0.0250	0.0247	0.0279	98.9	111	72.0-123			11.9	20
1,4-Dichlorobenzene	0.0250	0.0241	0.0267	96.5	107	77.0-120			10.2	20
trans-1,4-Dichloro-2-butene	0.0250	0.0315	0.0274	126	110	68.0-126			13.7	20
Dichlorodifluoromethane	0.0250	0.0230	0.0316	91.8	126	49.0-155	<u>3</u>		31.7	20
1,1-Dichloroethane	0.0250	0.0255	0.0301	102	120	70.0-128			16.3	20
1,2-Dichloroethane	0.0250	0.0288	0.0282	115	113	69.0-128			1.87	20
1,1-Dichloroethene	0.0250	0.0224	0.0302	89.7	121	63.0-131	<u>3</u>		29.7	20
cis-1,2-Dichloroethene	0.0250	0.0254	0.0293	102	117	74.0-123			14.4	20
trans-1,2-Dichloroethene	0.0250	0.0245	0.0305	98.0	122	72.0-122	<u>3</u>		21.9	20
1,2-Dichloropropane	0.0250	0.0273	0.0292	109	117	75.0-126			6.72	20
1,1-Dichloropropene	0.0250	0.0239	0.0291	95.4	117	72.0-130			19.9	20
1,3-Dichloropropene	0.0250	0.0283	0.0276	113	110	80.0-121			2.74	20
cis-1,3-Dichloropropene	0.0250	0.0273	0.0286	109	115	80.0-125			4.84	20
trans-1,3-Dichloropropene	0.0250	0.0286	0.0287	114	115	75.0-129			0.237	20
2,2-Dichloropropane	0.0250	0.0233	0.0301	93.1	120	60.0-129	<u>3</u>		25.4	20
Diisopropyl ether	0.0250	0.0281	0.0302	112	121	62.0-133			7.04	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299415-1 03/31/18 16:14 • (LCSD) R3299415-2 03/31/18 16:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0241	0.0299	96.5	119	77.0-120	<u>J3</u>		21.2	20
Hexachloro-1,3-butadiene	0.0250	0.0229	0.0295	91.6	118	68.0-128	<u>J3</u>		25.1	20
2-Hexanone	0.125	0.177	0.147	141	117	61.0-143			18.5	20
n-Hexane	0.0250	0.0235	0.0289	93.8	116	57.0-125	<u>J3</u>		20.8	20
Iodomethane	0.125	0.122	0.149	97.2	119	67.0-132	<u>J3</u>		20.1	20
Isopropylbenzene	0.0250	0.0231	0.0282	92.6	113	75.0-120			19.8	20
p-Isopropyltoluene	0.0250	0.0242	0.0298	96.6	119	74.0-125	<u>J3</u>		20.9	20
2-Butanone (MEK)	0.125	0.194	0.143	155	115	37.0-159	<u>J3</u>		30.3	20
Methylene Chloride	0.0250	0.0254	0.0290	101	116	67.0-123			13.3	20
4-Methyl-2-pentanone (MIBK)	0.125	0.173	0.145	138	116	60.0-144			17.6	20
Methyl tert-butyl ether	0.0250	0.0297	0.0292	119	117	66.0-125			1.91	20
Naphthalene	0.0250	0.0293	0.0280	117	112	64.0-125			4.63	20
n-Propylbenzene	0.0250	0.0232	0.0281	92.7	112	78.0-120			19.2	20
Styrene	0.0250	0.0253	0.0280	101	112	78.0-124			9.97	20
1,1,1,2-Tetrachloroethane	0.0250	0.0258	0.0300	103	120	74.0-124			14.9	20
1,1,2,2-Tetrachloroethane	0.0250	0.0293	0.0258	117	103	73.0-120	<u>J3</u>		12.7	20
Tetrachloroethene	0.0250	0.0234	0.0292	93.6	117	70.0-127	<u>J3</u>		22.2	20
Toluene	0.0250	0.0238	0.0279	95.2	112	77.0-120			15.9	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0231	0.0312	92.5	125	64.0-135	<u>J3</u>		29.8	20
1,2,3-Trichlorobenzene	0.0250	0.0268	0.0283	107	113	68.0-126			5.49	20
1,2,4-Trichlorobenzene	0.0250	0.0246	0.0266	98.2	106	70.0-127			7.88	20
1,1,1-Trichloroethane	0.0250	0.0243	0.0303	97.1	121	69.0-125	<u>J3</u>		22.2	20
1,1,2-Trichloroethane	0.0250	0.0282	0.0276	113	110	78.0-120			2.27	20
Trichloroethene	0.0250	0.0255	0.0308	102	123	79.0-120	<u>J4</u>		18.6	20
Trichlorofluoromethane	0.0250	0.0246	0.0333	98.5	133	59.0-136	<u>J3</u>		30.0	20
1,2,3-Trichloropropane	0.0250	0.0300	0.0265	120	106	73.0-124			12.6	20
1,2,3-Trimethylbenzene	0.0250	0.0250	0.0281	99.8	112	76.0-120			11.8	20
1,2,4-Trimethylbenzene	0.0250	0.0241	0.0282	96.4	113	75.0-120			15.9	20
1,3,5-Trimethylbenzene	0.0250	0.0238	0.0286	95.3	114	75.0-120			18.2	20
Vinyl acetate	0.125	0.159	0.127	127	101	58.0-156	<u>J3</u>		22.4	20
Vinyl chloride	0.0250	0.0243	0.0330	97.0	132	63.0-134	<u>J3</u>		30.6	20
Xylenes, Total	0.0750	0.0743	0.0902	99.1	120	77.0-120	<u>J3</u>		19.3	20
<i>(S) Toluene-d8</i>										
				105	107	80.0-120				
<i>(S) Dibromofluoromethane</i>										
				96.4	96.1	74.0-131				
<i>(S) 4-Bromofluorobenzene</i>										
				94.0	93.7	64.0-132				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



(OS) L981889-09 04/01/18 01:19 - (MS) R3299415-4 04/01/18 01:40 - (MSD) R3299415-5 04/01/18 02:02

L981889-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.141	U	2.06	3.34	58.5	95.1	25	10.0-160	J3	J3	47.7	36
Acrylonitrile	0.141	U	3.21	5.51	91.3	157	25	14.0-160	J3	J3	52.8	33
Benzene	0.0281	U	0.557	1.00	79.2	143	25	13.0-146	J3	J3	57.3	27
Bromobenzene	0.0281	U	0.495	0.903	70.4	128	25	10.0-149	J3	J3	58.3	33
Bromodichloromethane	0.0281	U	0.554	1.02	78.7	145	25	15.0-142	J3 J5	J3 J5	59.1	28
Bromochloromethane	0.0281	U	0.567	1.05	80.7	149	25	24.0-146	J3 J5	J3 J5	59.5	27
Bromoform	0.0281	U	0.513	0.977	72.9	139	25	10.0-147	J3	J3	62.3	31
Bromomethane	0.0281	U	0.376	0.690	53.4	98.2	25	10.0-160	J3	J3	59.0	32
n-Butylbenzene	0.0281	U	0.519	0.960	73.8	136	25	10.0-154	J3	J3	59.6	37
sec-Butylbenzene	0.0281	U	0.520	0.955	73.9	136	25	10.0-151	J3	J3	59.0	36
tert-Butylbenzene	0.0281	U	0.532	0.981	75.7	139	25	10.0-152	J3	J3	59.3	35
Carbon disulfide	0.0281	U	0.589	1.05	83.8	150	25	10.0-141	J3 J5	J3 J5	56.4	30
Carbon tetrachloride	0.0281	U	0.513	0.939	73.0	134	25	13.0-140	J3	J3	58.6	30
Chlorobenzene	0.0281	U	0.469	0.916	66.7	130	25	10.0-149	J3	J3	64.5	31
Chlorodibromomethane	0.0281	U	0.490	0.953	69.7	136	25	12.0-147	J3	J3	64.2	29
Chloroethane	0.0281	U	0.156	0.302	22.2	43.0	25	10.0-159	J3	J3	63.8	33
Chloroform	0.0281	U	0.550	1.00	78.2	143	25	18.0-148	J3	J3	58.5	28
Chloromethane	0.0281	U	0.497	0.900	70.8	128	25	10.0-146	J3	J3	57.6	29
2-Chlorotoluene	0.0281	U	0.505	0.939	71.8	134	25	10.0-151	J3	J3	60.1	35
4-Chlorotoluene	0.0281	U	0.495	0.908	70.4	129	25	10.0-150	J3	J3	58.8	35
1,2-Dibromo-3-Chloropropane	0.0281	U	0.543	1.00	77.2	143	25	10.0-149	J3	J3	59.4	34
1,2-Dibromoethane	0.0281	U	0.490	0.927	69.6	132	25	14.0-145	J3	J3	61.7	28
Dibromomethane	0.0281	U	0.566	1.03	80.6	146	25	18.0-144	J3 J5	J3 J5	57.8	27
1,2-Dichlorobenzene	0.0281	U	0.527	0.962	74.9	137	25	10.0-153	J3	J3	58.5	34
1,3-Dichlorobenzene	0.0281	U	0.509	0.944	72.4	134	25	10.0-150	J3	J3	59.9	35
1,4-Dichlorobenzene	0.0281	U	0.489	0.903	69.5	128	25	10.0-148	J3	J3	59.6	34
trans-1,4-Dichloro-2-butene	0.0281	U	0.603	1.11	85.7	158	25	10.0-160	J3	J3	59.6	40
Dichlorodifluoromethane	0.0281	U	0.423	0.759	60.1	109	25	10.0-160	J3	J3	58.2	30
1,1-Dichloroethane	0.0281	U	0.563	1.01	80.1	144	25	19.0-148	J3	J3	56.9	28
1,2-Dichloroethane	0.0281	U	0.559	0.999	79.5	142	25	17.0-147	J3	J3	56.6	27
1,1-Dichloroethene	0.0281	U	0.571	1.01	81.2	144	25	10.0-150	J3	J3	55.8	31
cis-1,2-Dichloroethene	0.0281	0.886	1.37	1.78	69.4	127	25	16.0-145	J3	J3	25.6	28
trans-1,2-Dichloroethene	0.0281	0.0882	0.651	1.10	80.0	144	25	11.0-142	J3 J5	J3 J5	51.6	29
1,2-Dichloropropane	0.0281	U	0.561	1.03	79.8	147	25	17.0-148	J3	J3	59.3	28
1,1-Dichloropropene	0.0281	U	0.546	0.997	77.6	142	25	10.0-150	J3	J3	58.6	30
1,3-Dichloropropene	0.0281	U	0.486	0.914	69.1	130	25	16.0-148	J3	J3	61.1	27
cis-1,3-Dichloropropene	0.0281	U	0.472	0.911	67.1	130	25	13.0-150	J3	J3	63.5	28
trans-1,3-Dichloropropene	0.0281	U	0.481	0.924	68.4	131	25	10.0-152	J3	J3	63.0	29
2,2-Dichloropropene	0.0281	U	0.488	0.888	69.4	126	25	16.0-143	J3	J3	58.2	30

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.05.601

SDG:

L981889

DATE/TIME:

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L981889-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L981889-09 04/01/18 01:19 • (MS) R3299415-4 04/01/18 01:40 • (MSD) R3299415-5 04/01/18 02:02

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0281	U	0.575	1.03	81.8	146	25	16.0-149	J3	J3	56.3	28
Ethylbenzene	0.0281	U	0.483	0.945	68.7	134	25	10.0-147	J3	J3	64.7	31
Hexachloro-1,3-butadiene	0.0281	U	0.546	1.05	77.7	150	25	10.0-154	J3	J3	63.3	40
2-Hexanone	0.141	U	2.70	4.87	76.8	138	25	12.0-158	J3	J3	57.3	30
n-Hexane	0.0281	U	0.611	1.07	86.9	152	25	10.0-140	J3 J5	J3 J5	54.3	34
Iodomethane	0.141	U	2.87	5.30	81.7	151	25	10.0-157	J3	J3	59.4	34
Isopropylbenzene	0.0281	U	0.515	0.931	73.3	132	25	10.0-147	J3	J3	57.5	33
p-Isopropyltoluene	0.0281	U	0.529	0.976	75.2	139	25	10.0-156	J3	J3	59.4	37
2-Butanone (MEK)	0.141	U	3.01	4.97	85.7	141	25	10.0-160	J3	J3	49.0	33
Methylene Chloride	0.0281	U	0.552	0.988	78.4	141	25	16.0-139	J3 J5	J3 J5	56.7	29
4-Methyl-2-pentanone (MIBK)	0.141	U	2.79	5.01	79.3	142	25	12.0-160	J3	J3	56.9	32
Methyl tert-butyl ether	0.0281	U	0.610	1.08	86.7	153	25	21.0-145	J3 J5	J3 J5	55.6	29
Naphthalene	0.0281	U	0.528	1.01	75.0	144	25	10.0-153	J3	J3	63.1	36
n-Propylbenzene	0.0281	U	0.502	0.919	71.4	131	25	10.0-151	J3	J3	58.6	34
Styrene	0.0281	U	0.551	1.03	78.4	146	25	10.0-155	J3	J3	60.2	34
1,1,1,2-Tetrachloroethane	0.0281	U	0.483	0.950	68.7	135	25	10.0-147	J3	J3	65.1	30
1,1,2,2-Tetrachloroethane	0.0281	U	0.517	0.893	73.6	127	25	10.0-155	J3	J3	53.2	31
Tetrachloroethene	0.0281	0.237	0.693	1.14	64.8	129	25	10.0-144	J3	J3	48.9	32
Toluene	0.0281	U	0.466	0.883	66.3	126	25	10.0-144	J3	J3	61.8	28
1,1,2-Trichlorotrifluoroethane	0.0281	U	0.576	1.03	81.9	147	25	10.0-153	J3	J3	56.6	33
1,2,3-Trichlorobenzene	0.0281	U	0.527	1.04	75.0	147	25	10.0-153	J3	J3	65.1	40
1,2,4-Trichlorobenzene	0.0281	U	0.500	0.973	71.1	138	25	10.0-156	J3	J3	64.2	40
1,1,1-Trichloroethane	0.0281	U	0.552	0.996	78.5	142	25	18.0-145	J3	J3	57.3	29
1,1,2-Trichloroethane	0.0281	U	0.473	0.907	67.3	129	25	12.0-151	J3	J3	62.9	28
Trichloroethene	0.0281	0.0208	0.578	1.08	79.3	150	25	11.0-148	J3 J5	J3 J5	60.1	29
Trichlorofluoromethane	0.0281	U	0.242	0.440	34.4	62.6	25	10.0-157	J3	J3	58.1	34
1,2,3-Trichloropropene	0.0281	U	0.532	0.911	75.6	130	25	10.0-154	J3	J3	52.6	32
1,2,3-Trimethylbenzene	0.0281	U	0.530	0.969	75.3	138	25	10.0-150	J3	J3	58.7	33
1,2,4-Trimethylbenzene	0.0281	U	0.520	0.958	73.9	136	25	10.0-151	J3	J3	59.3	34
1,3,5-Trimethylbenzene	0.0281	U	0.525	0.963	74.7	137	25	10.0-150	J3	J3	58.9	33
Vinyl acetate	0.141	U	2.31	3.83	65.8	109	25	10.0-160	J3	J3	49.4	40
Vinyl chloride	0.0281	0.256	0.755	1.19	71.0	132	25	10.0-150	J3	J3	44.4	29
Xylenes, Total	0.0844	U	1.48	2.88	70.0	136	25	10.0-150	J3	J3	64.4	31
(S) Toluene-d8					93.4	96.7		80.0-120				
(S) Dibromofluoromethane					97.9	97.0		74.0-131				
(S) 4-Bromofluorobenzene					91.6	89.8		64.0-132				

Sample Narrative:

OS: Cannot be analyzed at a lower dilution due to high levels of target analytes.

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R32399462-3 04/01/18 23:54

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

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Method Blank (MB)

(MB) R32399462-3 04/01/18 23:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	0.000369	J	0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	110			80.0-120
(S) Dibromofluoromethane	100			74.0-131
(S) 4-Bromofluorobenzene	101			64.0-132

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299462-1 04/01/18 22:50 • (LCSD) R3299462-2 04/01/18 23:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.118	0.113	94.6	90.7	11.0-160			4.26	23
Acrylonitrile	0.125	0.124	0.124	98.8	98.9	61.0-143			0.118	20
Benzene	0.0250	0.0241	0.0246	96.4	98.3	71.0-124			1.93	20
Bromobenzene	0.0250	0.0238	0.0242	95.1	97.0	78.0-120			1.99	20
Bromodichloromethane	0.0250	0.0241	0.0248	96.4	99.1	75.0-120			2.83	20
Bromochloromethane	0.0250	0.0244	0.0254	97.7	101	80.0-121			3.74	20
Bromoform	0.0250	0.0237	0.0238	94.6	95.2	65.0-133			0.672	20
Bromomethane	0.0250	0.0246	0.0250	98.3	100	26.0-160			1.74	20
n-Butylbenzene	0.0250	0.0261	0.0263	104	105	73.0-126			0.641	20
sec-Butylbenzene	0.0250	0.0255	0.0254	102	102	75.0-121			0.208	20
tert-Butylbenzene	0.0250	0.0256	0.0254	102	102	74.0-122			0.510	20
Carbon disulfide	0.0250	0.0224	0.0232	89.6	92.6	53.0-130			3.24	20
Carbon tetrachloride	0.0250	0.0231	0.0243	92.4	97.2	66.0-123			5.00	20
Chlorobenzene	0.0250	0.0255	0.0265	102	106	79.0-121			3.98	20
Chlorodibromomethane	0.0250	0.0250	0.0260	100	104	74.0-128			4.01	20
Chloroethane	0.0250	0.0242	0.0255	96.6	102	51.0-147			5.44	20
Chloroform	0.0250	0.0243	0.0255	97.4	102	73.0-123			4.48	20
Chloromethane	0.0250	0.0243	0.0244	97.3	97.7	51.0-138			0.334	20
2-Chlorotoluene	0.0250	0.0251	0.0251	100	100	72.0-124			0.187	20
4-Chlorotoluene	0.0250	0.0243	0.0246	97.3	98.5	78.0-120			1.20	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0234	0.0231	93.7	92.4	65.0-126			1.46	20
1,2-Dibromoethane	0.0250	0.0248	0.0250	99.0	100	78.0-122			1.07	20
Dibromomethane	0.0250	0.0238	0.0240	95.4	95.8	79.0-120			0.474	20
1,2-Dichlorobenzene	0.0250	0.0251	0.0257	100	103	80.0-120			2.42	20
1,3-Dichlorobenzene	0.0250	0.0257	0.0256	103	102	72.0-123			0.424	20
1,4-Dichlorobenzene	0.0250	0.0244	0.0244	97.8	97.5	77.0-120			0.349	20
trans-1,4-Dichloro-2-butene	0.0250	0.0247	0.0247	98.8	98.8	68.0-126			0.0136	20
Dichlorodifluoromethane	0.0250	0.0247	0.0253	98.8	101	49.0-155			2.29	20
1,1-Dichloroethane	0.0250	0.0250	0.0262	100	105	70.0-128			4.53	20
1,2-Dichloroethane	0.0250	0.0242	0.0242	96.6	96.7	69.0-128			0.0364	20
1,1-Dichloroethene	0.0250	0.0240	0.0252	96.2	101	63.0-131			4.69	20
cis-1,2-Dichloroethene	0.0250	0.0242	0.0255	96.9	102	74.0-123			5.16	20
trans-1,2-Dichloroethene	0.0250	0.0241	0.0253	96.6	101	72.0-122			4.67	20
1,2-Dichloropropane	0.0250	0.0247	0.0260	99.0	104	75.0-126			4.83	20
1,1-Dichloropropene	0.0250	0.0241	0.0250	96.3	99.8	72.0-130			3.62	20
1,3-Dichloropropene	0.0250	0.0243	0.0251	97.1	100	80.0-121			3.20	20
cis-1,3-Dichloropropene	0.0250	0.0249	0.0256	99.7	102	80.0-125			2.52	20
trans-1,3-Dichloropropene	0.0250	0.0253	0.0257	101	103	75.0-129			1.57	20
2,2-Dichloropropane	0.0250	0.0247	0.0255	98.7	102	60.0-129			3.09	20
Di-isopropyl ether	0.0250	0.0250	0.0260	100	104	62.0-133			3.77	20

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299462-1 04/01/18 22:50 • (LCSD) R3299462-2 04/01/18 23:11

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0252	0.0268	101	107	77.0-120			5.96	20
Hexachloro-1,3-butadiene	0.0250	0.0265	0.0276	106	110	68.0-128			3.98	20
2-Hexanone	0.125	0.130	0.132	104	106	61.0-143			1.97	20
n-Hexane	0.0250	0.0223	0.0225	89.3	90.1	57.0-125			0.898	20
Iodomethane	0.125	0.120	0.126	95.6	101	67.0-132			5.51	20
Isopropylbenzene	0.0250	0.0249	0.0248	99.5	99.1	75.0-120			0.428	20
p-Isopropyltoluene	0.0250	0.0263	0.0266	105	107	74.0-125			1.10	20
2-Butanone (MEK)	0.125	0.123	0.120	98.3	96.2	37.0-159			2.20	20
Methylene Chloride	0.0250	0.0239	0.0251	95.8	100	67.0-123			4.56	20
4-Methyl-2-pentanone (MIBK)	0.125	0.130	0.132	104	106	60.0-144			2.01	20
Methyl tert-butyl ether	0.0250	0.0242	0.0253	96.9	101	66.0-125			4.36	20
Naphthalene	0.0250	0.0239	0.0248	95.7	99.2	64.0-125			3.59	20
n-Propylbenzene	0.0250	0.0252	0.0254	101	102	78.0-120			0.939	20
Styrene	0.0250	0.0246	0.0250	98.2	99.9	78.0-124			1.70	20
1,1,1,2-Tetrachloroethane	0.0250	0.0258	0.0277	103	111	74.0-124			6.93	20
1,1,2,2-Tetrachloroethane	0.0250	0.0243	0.0238	97.3	95.4	73.0-120			2.02	20
Tetrachloroethene	0.0250	0.0258	0.0262	103	105	70.0-127			1.54	20
Toluene	0.0250	0.0238	0.0250	95.1	100	77.0-120			4.99	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0258	0.0265	103	106	64.0-135			2.63	20
1,2,3-Trichlorobenzene	0.0250	0.0254	0.0263	102	105	68.0-126			3.38	20
1,2,4-Trichlorobenzene	0.0250	0.0252	0.0260	101	104	70.0-127			2.98	20
1,1,1-Trichloroethane	0.0250	0.0245	0.0259	98.2	104	69.0-125			5.42	20
1,1,2-Trichloroethane	0.0250	0.0243	0.0246	97.4	98.5	78.0-120			1.11	20
Trichloroethene	0.0250	0.0253	0.0266	101	106	79.0-120			4.75	20
Trichlorofluoromethane	0.0250	0.0273	0.0264	109	105	59.0-136			3.48	20
1,2,3-Trichloropropane	0.0250	0.0236	0.0232	94.2	92.7	73.0-124			1.64	20
1,2,3-Trimethylbenzene	0.0250	0.0247	0.0250	98.7	100	76.0-120			1.31	20
1,2,4-Trimethylbenzene	0.0250	0.0254	0.0255	102	102	75.0-120			0.379	20
1,3,5-Trimethylbenzene	0.0250	0.0255	0.0253	102	101	75.0-120			0.617	20
Vinyl acetate	0.125	0.138	0.134	111	107	58.0-156			2.97	20
Vinyl chloride	0.0250	0.0265	0.0271	106	109	63.0-134			2.43	20
Xylenes, Total	0.0750	0.0775	0.0820	103	109	77.0-120			5.64	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										
	93.4				92.3	64.0-132				

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L981722-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L981722-05 04/02/18 07:50 • (MS) R3299462-4 04/02/18 08:11 • (MSD) R3299462-5 04/02/18 08:32

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.170	ND	332	351	195	206	1000	10.0-160	J5	J5	5.76	36
Acrylonitrile	0.170	ND	195	207	115	122	1000	14.0-160			5.88	33
Benzene	0.0341	ND	33.2	31.8	95.3	91.3	1000	13.0-146			4.17	27
Bromobenzene	0.0341	ND	35.4	34.7	104	102	1000	10.0-149			1.90	33
Bromodichloromethane	0.0341	ND	34.7	34.9	102	103	1000	15.0-142			0.665	28
Bromochloromethane	0.0341	ND	33.2	33.8	97.5	99.1	1000	24.0-146			1.64	27
Bromoform	0.0341	ND	35.4	37.0	104	108	1000	10.0-147			4.32	31
Bromomethane	0.0341	ND	31.8	29.9	93.5	87.9	1000	10.0-160			6.18	32
n-Butylbenzene	0.0341	5.41	39.9	39.0	101	98.6	1000	10.0-154			2.37	37
sec-Butylbenzene	0.0341	1.54	36.2	34.9	102	97.8	1000	10.0-151			3.92	36
tert-Butylbenzene	0.0341	ND	35.3	34.4	104	101	1000	10.0-152			2.63	35
Carbon disulfide	0.0341	ND	29.0	28.1	85.2	82.5	1000	10.0-141			3.30	30
Carbon tetrachloride	0.0341	ND	33.1	32.7	97.2	96.1	1000	13.0-140			1.20	30
Chlorobenzene	0.0341	ND	33.7	33.9	99.0	99.6	1000	10.0-149			0.584	31
Chlorodibromomethane	0.0341	ND	35.3	36.2	104	106	1000	12.0-147			2.70	29
Chloroethane	0.0341	ND	30.2	28.6	88.6	84.1	1000	10.0-159			5.23	33
Chloroform	0.0341	ND	34.8	34.2	102	100	1000	18.0-148			1.68	28
Chloromethane	0.0341	ND	31.1	29.9	91.4	87.7	1000	10.0-146			4.12	29
2-Chlorotoluene	0.0341	ND	39.5	37.9	116	111	1000	10.0-151			4.03	35
4-Chlorotoluene	0.0341	ND	33.3	32.4	97.7	95.0	1000	10.0-150			2.86	35
1,2-Dibromo-3-Chloropropane	0.0341	ND	38.1	38.8	112	114	1000	10.0-149			1.82	34
1,2-Dibromoethane	0.0341	ND	35.0	36.0	103	106	1000	14.0-145			2.84	28
Dibromomethane	0.0341	ND	35.0	35.5	103	104	1000	18.0-144			1.34	27
1,2-Dichlorobenzene	0.0341	ND	35.0	34.6	103	102	1000	10.0-153			1.13	34
1,3-Dichlorobenzene	0.0341	ND	34.6	33.5	102	98.3	1000	10.0-150			3.40	35
1,4-Dichlorobenzene	0.0341	ND	33.5	32.4	98.3	95.2	1000	10.0-148			3.22	34
trans-1,4-Dichloro-2-butene	0.0341	ND	40.2	40.5	118	119	1000	10.0-160			0.712	40
Dichlorodifluoromethane	0.0341	ND	32.0	30.4	93.9	89.3	1000	10.0-160			4.98	30
1,1-Dichloroethane	0.0341	ND	34.3	32.8	101	96.2	1000	19.0-148			4.73	28
1,2-Dichloroethane	0.0341	ND	33.2	32.8	97.5	96.3	1000	17.0-147			1.20	27
1,1-Dichloroethene	0.0341	ND	31.3	31.1	92.0	91.3	1000	10.0-150			0.801	31
cis-1,2-Dichloroethene	0.0341	ND	33.0	32.3	96.8	94.8	1000	16.0-145			2.13	28
trans-1,2-Dichloroethene	0.0341	ND	31.8	31.2	93.5	91.7	1000	11.0-142			1.91	29
1,2-Dichloropropene	0.0341	ND	35.3	34.9	104	102	1000	17.0-148			1.30	28
1,1-Dichloropropene	0.0341	ND	32.0	31.0	104	91.0	1000	10.0-150			3.29	30
1,3-Dichloropropene	0.0341	ND	33.8	34.9	99.3	102	1000	16.0-148			2.99	27
cis-1,3-Dichloropropene	0.0341	ND	33.5	34.0	98.4	99.8	1000	13.0-150			1.43	28
trans-1,3-Dichloropropene	0.0341	ND	33.4	33.9	98.0	99.6	1000	10.0-152			1.63	29
2,2-Dichloropropene	0.0341	ND	29.8	28.9	87.5	84.9	1000	16.0-143			2.98	30

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L981722-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L981722-05 04/02/18 07:50 • (MS) R3299462-4 04/02/18 08:11 • (MSD) R3299462-5 04/02/18 08:32

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0341	ND	34.6	34.1	102	100	1000	16.0-149			156	28
Ethylbenzene	0.0341	50.0	75.9	84.9	76.0	103	1000	10.0-147			11.2	31
Hexachloro-1,3-butadiene	0.0341	ND	35.9	35.5	105	104	1000	10.0-154			1.09	40
2-Hexanone	0.170	ND	203	228	119	134	1000	12.0-158			11.7	30
n-Hexane	0.0341	72.5	87.2	97.5	43.1	73.3	1000	10.0-140			11.2	34
Iodomethane	0.170	ND	159	157	93.3	92.0	1000	10.0-157			1.42	34
Isopropylbenzene	0.0341	ND	38.3	37.5	101	98.3	1000	10.0-147			2.25	33
p-Isopropyltoluene	0.0341	ND	38.7	36.8	112	107	1000	10.0-156			4.83	37
2-Butanone (MEK)	0.170	ND	276	293	162	172	1000	10.0-160	J5	J5	6.02	33
Methylene Chloride	0.0341	ND	32.2	31.4	94.6	92.3	1000	16.0-139			2.53	29
4-Methyl-2-pentanone (MIBK)	0.170	ND	195	213	114	125	1000	12.0-160			8.86	32
Methyl tert-butyl ether	0.0341	ND	34.6	35.5	101	104	1000	21.0-145			2.68	29
Naphthalene	0.0341	21.5	57.5	59.2	106	111	1000	10.0-153			2.92	36
n-Propylbenzene	0.0341	20.7	52.1	52.6	92.2	93.4	1000	10.0-151			0.812	34
Styrene	0.0341	ND	36.5	39.1	107	115	1000	10.0-155			6.80	34
1,1,1,2-Tetrachloroethane	0.0341	ND	35.5	35.8	104	105	1000	10.0-147			0.864	30
1,1,2,2-Tetrachloroethane	0.0341	ND	32.6	33.4	95.6	98.1	1000	10.0-155			2.57	31
Tetrachloroethene	0.0341	ND	31.9	32.3	93.8	94.7	1000	10.0-144			0.981	32
Toluene	0.0341	ND	35.2	34.6	96.5	94.6	1000	10.0-144			1.85	28
1,1,2-Trichlorotrifluoroethane	0.0341	ND	32.9	31.7	96.6	93.1	1000	10.0-153			3.73	33
1,2,3-Trichlorobenzene	0.0341	ND	36.0	36.7	106	108	1000	10.0-153			2.06	40
1,2,4-Trichlorobenzene	0.0341	ND	34.2	34.1	100	100	1000	10.0-156			0.265	40
1,1,1-Trichloroethane	0.0341	ND	33.2	32.3	97.6	94.7	1000	18.0-145			2.93	29
1,1,2-Trichloroethane	0.0341	ND	35.5	36.5	104	107	1000	12.0-151			2.54	28
Trichloroethene	0.0341	ND	36.5	35.4	107	104	1000	11.0-148			3.08	29
Trichlorofluoromethane	0.0341	ND	34.1	32.3	100	94.7	1000	10.0-157			5.55	34
1,2,3-Trichloropropene	0.0341	ND	35.3	36.2	104	106	1000	10.0-154			2.57	32
1,2,3-Trimethylbenzene	0.0341	27.1	65.6	62.5	113	104	1000	10.0-150			4.76	33
1,2,4-Trimethylbenzene	0.0341	133	79	173	133	117	1000	10.0-151			3.15	34
1,3,5-Trimethylbenzene	0.0341	39.5	78.4	75.3	114	105	1000	10.0-150			4.03	33
Vinyl acetate	0.170	ND	124	121	72.6	70.8	1000	10.0-160			2.45	40
Vinyl chloride	0.0341	ND	33.5	32.5	98.3	95.5	1000	10.0-150			2.85	29
Xylenes, Total	0.102	ND	380	387	372	379	1000	10.0-150	J5	J5	1.88	31
(S) Toluene-d8					103	105		80.0-120				
(S) Dibromofluoromethane					94.0	93.3		74.0-131				
(S) 4-Bromofluorobenzene					93.5	92.1		64.0-132				

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Method Blank (MB)

(MB) R32399262-3 04/01/18 22:45

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R32399262-3 04/01/18 22:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	110			80.0-120
(S) Dibromofluoromethane	98.1			74.0-131
(S) 4-Bromofluorobenzene	88.2			64.0-132

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299262-1 04/01/18 21:26 • (LCSD) R3299262-2 04/01/18 21:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.0489	0.0527	39.1	42.2	11.0-160			7.57	23
Acrylonitrile	0.125	0.111	0.114	89.2	91.3	61.0-143			2.39	20
Benzene	0.0250	0.0246	0.0250	98.5	99.9	71.0-124			1.46	20
Bromobenzene	0.0250	0.0232	0.0226	92.9	90.3	78.0-120			2.80	20
Bromodichloromethane	0.0250	0.0220	0.0226	88.1	90.3	75.0-120			2.48	20
Bromochloromethane	0.0250	0.0273	0.0278	109	111	80.0-121			2.02	20
Bromoform	0.0250	0.0194	0.0196	77.7	78.5	65.0-133			1.04	20
Bromomethane	0.0250	0.0233	0.0237	93.3	94.9	26.0-160			1.62	20
n-Butylbenzene	0.0250	0.0267	0.0261	107	105	73.0-126			2.19	20
sec-Butylbenzene	0.0250	0.0275	0.0266	110	106	75.0-121			3.44	20
tert-Butylbenzene	0.0250	0.0269	0.0262	108	105	74.0-122			2.85	20
Carbon disulfide	0.0250	0.0206	0.0220	82.5	87.9	53.0-130			6.28	20
Carbon tetrachloride	0.0250	0.0240	0.0245	96.2	98.1	66.0-123			1.96	20
Chlorobenzene	0.0250	0.0293	0.0289	117	116	79.0-121			1.50	20
Chlorodibromomethane	0.0250	0.0245	0.0238	98.1	95.3	74.0-128			2.86	20
Chloroethane	0.0250	0.0224	0.0232	89.7	92.8	51.0-147			3.38	20
Chloroform	0.0250	0.0237	0.0241	94.7	96.5	73.0-123			1.87	20
Chloromethane	0.0250	0.0192	0.0193	77.0	77.1	51.0-138			0.227	20
2-Chlorotoluene	0.0250	0.0251	0.0245	100	97.9	72.0-124			2.46	20
4-Chlorotoluene	0.0250	0.0256	0.0248	102	99.3	78.0-120			2.90	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0225	0.0234	90.1	93.7	65.0-126			3.96	20
1,2-Dibromoethane	0.0250	0.0276	0.0275	111	110	78.0-122			0.441	20
Dibromomethane	0.0250	0.0231	0.0244	92.4	97.5	79.0-120			5.37	20
1,2-Dichlorobenzene	0.0250	0.0276	0.0268	111	107	80.0-120			2.92	20
1,3-Dichlorobenzene	0.0250	0.0283	0.0273	113	109	72.0-123			3.56	20
1,4-Dichlorobenzene	0.0250	0.0275	0.0267	110	107	77.0-120			2.82	20
trans-1,4-Dichloro-2-butene	0.0250	0.0225	0.0235	90.0	93.9	68.0-126			4.23	20
Dichlorodifluoromethane	0.0250	0.0175	0.0164	70.0	65.6	49.0-155			6.57	20
1,1-Dichloroethane	0.0250	0.0245	0.0250	97.9	100	70.0-128			2.11	20
1,2-Dichloroethane	0.0250	0.0233	0.0239	93.0	95.5	69.0-128			2.59	20
1,1-Dichloroethene	0.0250	0.0224	0.0236	89.5	94.2	63.0-131			5.16	20
cis-1,2-Dichloroethene	0.0250	0.0240	0.0248	96.2	99.1	74.0-123			2.97	20
trans-1,2-Dichloroethene	0.0250	0.0239	0.0244	95.4	97.8	72.0-122			2.43	20
1,2-Dichloropropane	0.0250	0.0246	0.0246	98.5	98.4	75.0-126			0.125	20
1,1-Dichloropropene	0.0250	0.0255	0.0259	102	104	72.0-130			1.85	20
1,3-Dichloropropene	0.0250	0.0279	0.0268	111	107	80.0-121			3.91	20
cis-1,3-Dichloropropene	0.0250	0.0267	0.0268	107	107	80.0-125			0.500	20
trans-1,3-Dichloropropene	0.0250	0.0261	0.0259	104	104	75.0-129			0.474	20
2,2-Dichloropropane	0.0250	0.0241	0.0232	96.4	92.8	60.0-129			3.81	20
Di-isopropyl ether	0.0250	0.0197	0.0200	78.7	80.2	62.0-133			1.87	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3299262-1 04/01/18 21:26 • (LCSD) R3299262-2 04/01/18 21:46

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0282	0.0273	113	109	77.0-120			3.03	20
Hexachloro-1,3-butadiene	0.0250	0.0298	0.0295	119	118	68.0-128			1.00	20
2-Hexanone	0.125	0.119	0.120	95.2	96.0	61.0-143			0.827	20
n-Hexane	0.0250	0.0224	0.0228	89.4	91.0	57.0-125			1.80	20
Iodomethane	0.125	0.136	0.140	109	112	67.0-132			2.88	20
Isopropylbenzene	0.0250	0.0239	0.0234	95.7	93.7	75.0-120			2.10	20
p-Isopropyltoluene	0.0250	0.0272	0.0264	109	105	74.0-125			3.08	20
2-Butanone (MEK)	0.125	0.0708	0.0743	56.7	59.4	37.0-159			4.75	20
Methylene Chloride	0.0250	0.0235	0.0243	93.8	97.3	67.0-123			3.61	20
4-Methyl-2-pentanone (MIBK)	0.125	0.111	0.113	88.5	90.3	60.0-144			2.06	20
Methyl tert-butyl ether	0.0250	0.0228	0.0242	91.4	96.9	66.0-125			5.82	20
Naphthalene	0.0250	0.0261	0.0270	105	108	64.0-125			3.29	20
n-Propylbenzene	0.0250	0.0254	0.0245	102	98.2	78.0-120			3.61	20
Styrene	0.0250	0.0253	0.0248	101	99.1	78.0-124			1.99	20
1,1,1,2-Tetrachloroethane	0.0250	0.0265	0.0258	106	103	74.0-124			2.67	20
1,1,2,2-Tetrachloroethane	0.0250	0.0222	0.0224	88.9	89.5	73.0-120			0.645	20
Tetrachloroethene	0.0250	0.0299	0.0285	120	114	70.0-127			4.92	20
Toluene	0.0250	0.0268	0.0264	107	106	77.0-120			1.22	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0234	0.0250	93.4	99.8	64.0-135			6.63	20
1,2,3-Trichlorobenzene	0.0250	0.0318	0.0320	127	128	68.0-126	J4	J4	0.776	20
1,2,4-Trichlorobenzene	0.0250	0.0325	0.0322	130	129	70.0-127	J4	J4	0.733	20
1,1,1-Trichloroethane	0.0250	0.0219	0.0226	87.7	90.2	69.0-125			2.87	20
1,1,2-Trichloroethane	0.0250	0.0270	0.0262	108	105	78.0-120			2.83	20
Trichloroethene	0.0250	0.0278	0.0277	111	111	79.0-120			0.350	20
Trichlorofluoromethane	0.0250	0.0272	0.0286	109	115	59.0-136			5.25	20
1,2,3-Trichloropropane	0.0250	0.0227	0.0228	90.7	91.1	73.0-124			0.447	20
1,2,3-Trimethylbenzene	0.0250	0.0282	0.0274	113	110	76.0-120			2.68	20
1,2,4-Trimethylbenzene	0.0250	0.0255	0.0249	102	99.7	75.0-120			2.51	20
1,3,5-Trimethylbenzene	0.0250	0.0256	0.0250	102	100	75.0-120			2.47	20
Vinyl acetate	0.125	0.103	0.108	82.4	86.1	58.0-156			4.44	20
Vinyl chloride	0.0250	0.0232	0.0232	92.9	92.8	63.0-134			0.116	20
Xylenes, Total	0.0750	0.0854	0.0830	114	111	77.0-120			2.85	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										
				88.7	88.6	64.0-132				

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L981944-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L981944-02 04/02/18 05:32 • (MS) R3299262-4 04/02/18 05:51 • (MSD) R3299262-5 04/02/18 06:11

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.141	ND	77.4	78.4	54.9	55.6	1000	10.0-160			135	36
Acrylonitrile	0.141	ND	88.8	92.8	63.0	65.8	1000	14.0-160			4.48	33
Benzene	0.0282	ND	19.9	20.7	70.6	73.5	1000	13.0-146			4.09	27
Bromobenzene	0.0282	ND	19.5	20.6	69.3	73.2	1000	10.0-149			5.53	33
Bromodichloromethane	0.0282	ND	18.5	19.9	65.7	70.7	1000	15.0-142			7.31	28
Bromochloromethane	0.0282	ND	22.6	23.2	80.2	82.1	1000	24.0-146			2.43	27
Bromoform	0.0282	ND	14.9	16.3	52.8	57.8	1000	10.0-147			9.02	31
Bromomethane	0.0282	ND	18.5	19.6	65.7	69.5	1000	10.0-160			5.58	32
n-Butylbenzene	0.0282	7.22	24.8	27.0	62.3	70.2	1000	10.0-154			8.60	37
sec-Butylbenzene	0.0282	3.81	23.5	25.4	69.8	76.4	1000	10.0-151			7.61	36
tert-Butylbenzene	0.0282	ND	20.8	21.8	73.9	77.2	1000	10.0-152			4.47	35
Carbon disulfide	0.0282	ND	15.0	15.6	53.2	55.2	1000	10.0-141			3.62	30
Carbon tetrachloride	0.0282	ND	18.8	20.1	66.7	71.3	1000	13.0-140			6.76	30
Chlorobenzene	0.0282	ND	23.0	25.7	81.7	91.3	1000	10.0-149			11.1	31
Chlorodibromomethane	0.0282	ND	18.6	21.0	66.1	74.3	1000	12.0-147			11.7	29
Chloroethane	0.0282	ND	18.0	18.8	63.8	66.8	1000	10.0-159			4.62	33
Chloroform	0.0282	ND	19.6	20.4	69.4	72.2	1000	18.0-148			3.92	28
Chloromethane	0.0282	ND	16.8	17.3	59.6	61.2	1000	10.0-146			2.59	29
2-Chlorotoluene	0.0282	ND	25.7	28.5	91.1	101	1000	10.0-151			10.2	35
2-Chlorotoluene	0.0282	ND	20.0	21.1	71.0	75.0	1000	10.0-150			5.47	35
4-Chlorotoluene	0.0282	ND	20.0	21.1	71.0	75.0	1000	10.0-150			5.47	35
1,2-Dibromo-3-Chloropropane	0.0282	ND	17.6	19.2	62.5	68.2	1000	10.0-149			8.69	34
1,2-Dibromoethane	0.0282	ND	22.1	23.4	78.5	82.9	1000	14.0-145			5.45	28
Dibromomethane	0.0282	ND	18.9	19.7	67.1	69.9	1000	18.0-144			3.99	27
1,2-Dichlorobenzene	0.0282	ND	21.3	22.8	75.7	80.8	1000	10.0-153			6.54	34
1,3-Dichlorobenzene	0.0282	ND	21.8	22.7	77.4	80.3	1000	10.0-150			3.69	35
1,4-Dichlorobenzene	0.0282	ND	20.9	22.0	74.2	78.2	1000	10.0-148			5.21	34
trans-1,4-Dichloro-2-butene	0.0282	28.1	18.4	19.7	0.000	0.000	1000	10.0-160	J6	J6	6.45	40
Dichlorodifluoromethane	0.0282	ND	21.9	23.7	77.8	84.0	1000	10.0-160			7.77	30
1,1-Dichloroethane	0.0282	ND	20.0	20.7	70.9	73.4	1000	19.0-148			3.55	28
1,2-Dichloroethane	0.0282	ND	19.1	19.7	67.8	69.8	1000	17.0-147			3.01	27
1,1-Dichloroethene	0.0282	ND	18.4	19.4	65.1	68.9	1000	10.0-150			5.67	31
cis-1,2-Dichloroethene	0.0282	ND	20.3	20.7	71.8	73.3	1000	16.0-145			2.11	28
trans-1,2-Dichloroethene	0.0282	ND	18.7	19.7	66.3	70.0	1000	11.0-142			5.39	29
1,2-Dichloropropane	0.0282	ND	20.0	20.1	71.0	71.4	1000	17.0-148			0.588	28
1,1-Dichloropropene	0.0282	ND	20.3	21.7	72.1	76.9	1000	10.0-150			6.42	30
1,3-Dichloropropane	0.0282	ND	21.4	23.4	76.0	83.1	1000	16.0-148			8.94	27
cis-1,3-Dichloropropene	0.0282	ND	20.9	22.3	74.0	79.1	1000	13.0-150			6.58	28
trans-1,3-Dichloropropene	0.0282	ND	20.2	21.9	71.8	77.7	1000	10.0-152			7.90	29
2,2-Dichloropropene	0.0282	ND	17.5	18.6	62.1	65.8	1000	16.0-143			5.74	30

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L981944-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L981944-02 04/02/18 05:32 • (MS) R3299262-4 04/02/18 05:51 • (MSD) R3299262-5 04/02/18 06:11

Analyte	Spike Amount (dry) mg/kg	Original Result (dry) mg/kg	MS Result (dry) mg/kg	MSD Result (dry) mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Di-isopropyl ether	0.0282	ND	16.3	17.0	57.7	60.1	1000	16.0-149			4.10	28
Ethylbenzene	0.0282	9.40	28.3	32.4	67.0	81.7	1000	10.0-147			13.7	31
Hexachloro-1,3-butadiene	0.0282	ND	20.2	21.2	71.5	75.2	1000	10.0-154			5.05	40
2-Hexanone	0.141	ND	11.2	12.1	77.7	84.2	1000	12.0-158			7.83	30
n-Hexane	0.0282	ND	16.2	16.9	55.5	57.8	1000	10.0-140			4.08	34
Iodomethane	0.141	ND	10.7	11.2	76.1	79.5	1000	10.0-157			4.46	34
Isopropylbenzene	0.0282	4.20	22.1	24.4	63.6	71.5	1000	10.0-147			9.63	33
p-Isopropyltoluene	0.0282	2.46	23.1	23.7	73.3	75.4	1000	10.0-156			2.62	37
2-Butanone (MEK)	0.141	ND	82.9	88.3	58.8	62.6	1000	10.0-160			6.34	33
Methylene Chloride	0.0282	ND	19.5	20.3	69.1	72.0	1000	16.0-139			4.02	29
4-Methyl-2-pentanone (MIBK)	0.141	ND	95.6	104	67.8	74.0	1000	12.0-160			8.83	32
Methyl tert-butyl ether	0.0282	ND	19.5	20.1	69.1	71.3	1000	21.0-145			3.12	29
Naphthalene	0.0282	21.2	37.9	42.8	59.2	76.3	1000	10.0-153			12.0	36
n-Propylbenzene	0.0282	10.6	27.7	31.3	60.9	73.6	1000	10.0-151			12.1	34
Styrene	0.0282	ND	20.3	20.9	72.1	74.0	1000	10.0-155			2.61	34
1,1,1,2-Tetrachloroethane	0.0282	ND	20.7	22.4	73.5	79.3	1000	10.0-147			7.61	30
1,1,2,2-Tetrachloroethane	0.0282	ND	17.9	18.9	63.5	66.8	1000	10.0-155			5.13	31
Tetrachloroethene	0.0282	ND	22.3	24.4	79.1	86.5	1000	10.0-144			8.89	32
Toluene	0.0282	9.66	27.8	31.8	64.2	78.6	1000	10.0-144			13.6	28
1,1,2-Trichlorotrifluoroethane	0.0282	ND	19.9	20.2	70.7	71.7	1000	10.0-153			1.40	33
1,2,3-Trichlorobenzene	0.0282	ND	23.5	24.0	83.2	85.2	1000	10.0-153			2.42	40
1,2,4-Trichlorobenzene	0.0282	ND	22.7	23.6	80.4	83.8	1000	10.0-156			4.18	40
1,1,1-Trichloroethane	0.0282	ND	18.2	18.9	64.4	67.1	1000	18.0-145			4.11	29
1,1,2-Trichloroethane	0.0282	ND	23.6	25.8	83.6	91.4	1000	12.0-151			8.95	28
Trichloroethene	0.0282	ND	22.3	24.3	78.9	86.2	1000	11.0-148			8.86	29
Trichlorofluoromethane	0.0282	ND	22.1	23.6	78.4	83.8	1000	10.0-157			6.69	34
1,2,3-Trichloropropene	0.0282	ND	18.1	19.4	64.3	68.9	1000	10.0-154			6.90	32
1,2,3-Trimethylbenzene	0.0282	70.6	75.5	89.9	71.3	68.3	1000	10.0-150			17.4	33
1,2,4-Trimethylbenzene	0.0282	267	218	274	0.000	25.9	1000	10.0-151	E V	E	22.6	34
1,3,5-Trimethylbenzene	0.0282	77.0	77.7	94.5	2.61	62.1	1000	10.0-150			19.5	33
Vinyl acetate	0.141	ND	57.6	57.2	40.9	40.6	1000	10.0-160			0.703	40
Vinyl chloride	0.0282	ND	19.9	21.1	70.5	74.8	1000	10.0-150			5.88	29
Xylenes, Total	0.0846	486	415	536	0.000	58.7	1000	10.0-150	V	E	25.4	31
(S) Toluene-d8					108	111		80.0-120				
(S) Dibromofluoromethane					96.0	95.2		74.0-131				
(S) 4-Bromofluorobenzene					91.9	94.1		64.0-132				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

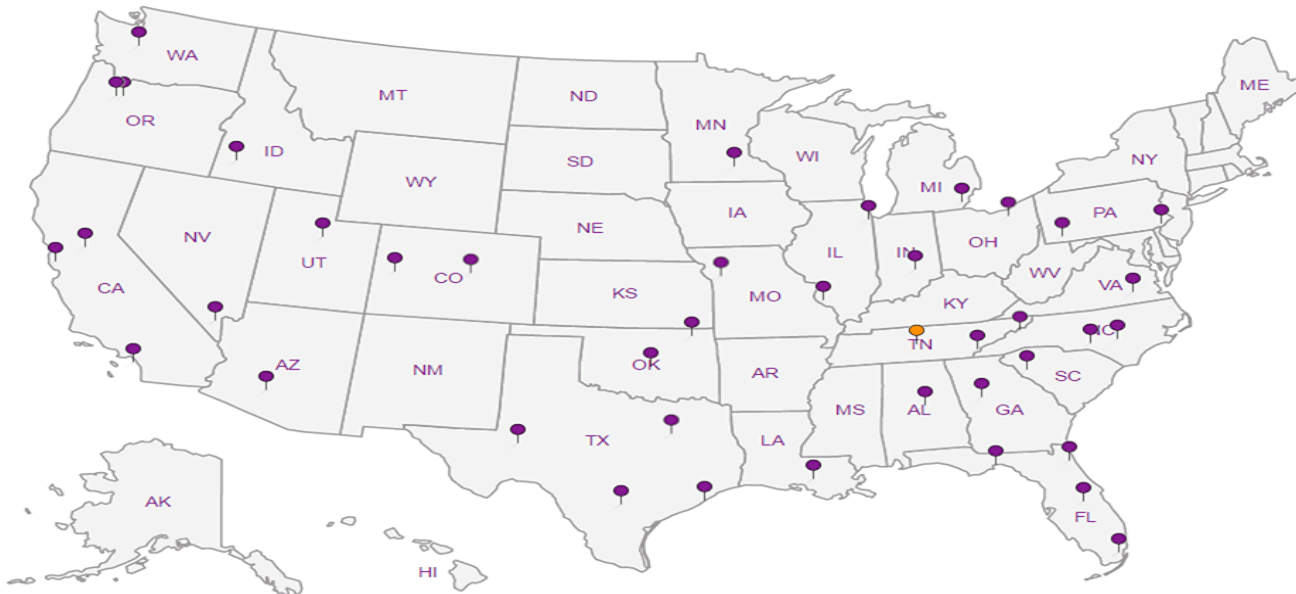
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



PES Environmental, Inc. - WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Report to:
 Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
 bhaldeman@pesenv.com

Project Description:

City/State: **Seattle WA**
 Lab Project #: **PESENVSWA-ALP**

Phone: **206-529-3980**
 Fax: **206-529-3985**

Client Project #: **1413.001.05.601**

Collected by (print):
Dan Johnson

Site/Facility ID #

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

Immediate/ Packed on ice N Y K

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Crits

No. of

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Crits	No. of	Analysis / Container / Preservative
B-244-5	Grab	SS	5	3-24-14	0919	5		V8260C VOCs 40ml/NaHSO4/Syr/MeOH
B-244-10		SS	10		0946			dry wt, voc screen 2ozClr-NoPres
B-244-15		SS	15		0954			
B-244-20		SS	20		1003			
B-244-25		SS	25		1011			
B-244-30		SS	30		1032			
B-244-35		SS	35		1041			
B-244-40		SS	40		1049			
B-244-42		SS	42		1055			
B-244-45		SS	45		1102			

Remarks:

* Matrix:
 SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Bioassay
 WW - Wastewater
 DW - Drinking Water
 OT - Other

Samples returned via:
 UPS FedEx Courier

Tracking # **92109 9212 5345**

Received by: (Signature)
[Signature]

Received by: (Signature)
[Signature]

Trip Blank Received: Yes / No
 Temp: **21.5** °C bottles received: **225**
 Date: **3/20/18** Time: **0845**

Sample Receipt/Checklist:
 Coc Seal present: Yes / No
 Coc Signed/accurate: Yes / No
 Bottles arrive intact: Yes / No
 Correct bottles used: Yes / No
 Sufficient volume sent: Yes / No
 If Applicable:
 VOA zero headspace: Yes / No
 Preservation correct/checked: Yes / No

Relinquished by: (Signature) *R. M. Staughli* Date: **3/29/18** Time: **1550**

Relinquished by: (Signature) _____ Date: _____ Time: _____

Condition: NCF / OY

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: donreal@pesenv.com;
bhaldeman@pesenv.com

Report to:
Brian O'Neal/Bill Haldeman

Project Description:
City/State Collected: **Seattle WA**

Client Project # **1413.001.05.601**
Lab Project # **PESENVSWA-ALP**

Phone: **206-529-3980**
Fax: **206-529-3985**

Collected by (print): **Dan Johnson**

Site/Facility ID #

Quote #

Rush? (Lab MUST be notified)
Same Day Five Day
Next Day 10 Day (Frid Only)
Two Day Three Day

Collected by (signature): *Dan Johnson*

Immediate Packed on ice N Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
B-244-50	Grab	SS	50	3-28-18	1114	5	V8260C VOCs 40ml/NaHSO4/Syr/MeOH
B-244-55		SS	55		1121	1	dry wt, voc screen 2ozClr-NoPres
B-244-60		SS	60		1132	1	
B-244-65		SS	65		1151	1	
B-244-70		SS	70		1250	1	
B-244-75		SS	75		1305	1	
B-244-80		SS	80		1313	1	
IW-907-70		SS	70		1145	1	
TRIP BLANK		SS		05-1-17		1	

Remarks:

Sample returned via:
UPS FedEx Courier

Relinquished by: (Signature) *B. Haldeman*
Date: 3-29-18 Time: 1530

Relinquished by: (Signature) _____
Date: _____ Time: _____

Received by: (Signature) _____
Date: _____ Time: _____

Received by: (Signature) *William Venkat*
Date: 3/30/18 Time: 0845

Tracking # **49632591102/42699225345**

Temp: *20* Bottom Received: *025*

Temp Blank Received: *2XDB*
Flow: _____ Other: _____

Hold: _____ Condition: *MCF / DW*

Sample Receipt Checklist:
COC Seal Present/Intact:
COC Signed/Accurate:
Bottles active/Intact:
Correct bottles used:
Sufficient volume sent:
IE Applicable:
COC Date Headspace:
Preservation Correct/Checked:

Chain of Custody Page ___ of ___

12065 Lehipton Rd
Mober Lake, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Accnum: **PESENVSWA**
Template: **T134174**
Prelogin: **P645177**
TSR: **110 - Brian Ford**
PB: _____

Shipped Via: _____
Remarks: _____
Sample # (lab only): _____

L# **1981889**
Table # _____

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Report to: Brian O'Neal/Bill Haldeman
Email To: boneal@pesenv.com; bhaldeman@pesenv.com

Project: American Linen Project
City/State Collected: Seattle WA

Phone: 206-529-3980
Fax: 206-529-3985
Client Project #: 1413.001.05.601
Lab Project #: PESENVSWA-ALP

Collected by (print): Dan Johnson
P.O. #

Collected by (signature): Dan Johnson
Rush? (Lab MUST Be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Immediately Packed on ice N Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts	Analysis / Container / Preservative	Chain of Custody
B-245-5	Grab	SS	5	3/28/18	1526	5	NWTPHGX 40ml/NaHSO4/Syr/MeOH	20
B-245-60		SS	10		1545		VOCs V8260C 40ml/NaHSO4/Syr/MeOH	21
B-245-15		SS	15		1555		dry wt, voc screen 2ozClr-NoPres	22
B-245-20		SS	20		1603			23
B-245-25		SS	25	X	1613			24
B-245-30		SS	30	3/29/18	0813			25
B-245-35		SS	35		0837			26
B-245-40		SS	40		0843			27
B-245-45		SS	45		0854			28
B-245-50		SS	50	X	0905			29

Remarks: 0914 RM

- * Matrix: SS - Soil, AIR - Air, F - Filter, GW - Groundwater, B - Blossary, WW - Waste Water, DW - Drinking Water, OT - Other

Sample returned via: UPS FedEx Courier

Tracking # 4990 329 1102
Received by: (Signature)

Trip Blank Received: (Signature)
Temp: 22°C
Bottle Received: (Signature)

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA zero headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature) *B. O'Neal* Date: 3/29/18 Time: 1530
Received by: (Signature) *Bill Haldeman* Date: 3/30/18 Time: 0845
Condition: NCF / OK

12065 Lebanon Rd.
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1981889

Table #
Account: PESENVSWA
Template: T134189
Prelogin: P645236
TSR-110 - Brian Ford
PB: 3-2218
Shipped Via: FedEx Ground

Remarks: Sample # (lab only)

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to: Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
bhaldeman@pesenv.com

Billing Information:

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-757-5859
Fax: 615-758-5859

Project Description: **American Lumen Project**

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #: 1413.001.05.601

City/State Collected: Seattle WA
Lab Project #: PESENVSWA-ALP

Collected by (print): Dan Tomlinson

Site/Facility ID #

P.O. #

Collected by (signature): Dan Tomlinson

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on ice N Y X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of Cntrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
B-245-55		SS		3/29/18	0923	5
B-245-60		SS			0934	
B-245-65		SS			0942	
B-245-70		SS			1008	
B-245-75		SS			1015	
B-245-80		SS			1027	

Analysis / Container / Preservative	Pres Chk
NWTPHGX 40ml/NaHSO4/Syr/MeOH	
VOCs V8260C 40ml/NaHSO4/Syr/MeOH	
dry wt, voc screen 2ozClr-NoPres	

Remarks: _____
Sample # (lab only)

Accrnum: PESENVSWA
Template: T134189
PerlogIn: P645236
TSR: 110 - Brian Ford
PB: 3-22-18
Shipped Via: FedEx Ground

Matrix:	Remarks:
SS - Soil	
AIR - Air	
F - Filter	
GW - Groundwater	
B - Biossary	
WW - Wastewater	
DW - Drinking Water	
OT - Other	

Relinquished by: (Signature) *P.T. McLaughlin* Date: 3/29/18 Time: 1530

Relinquished by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) _____ Date: _____ Time: _____

Temp: _____ °C

Flow: _____ Other: _____

PH: _____ Temp: _____

Tip Blank Received: No Yes

Temp: 22.5 °C

Date: 3/30/18 Time: 0845

Hold: _____

Condition: MCF OK

Sample Receipt Checklist

COC Seal Present/Intact: Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

If Applicable

VOL. Goro Headspace: Y N

Preservation Correct/Checked: Y N

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
bhaldeman@pesenv.com

Project: American Linen Project
City/State Collected: Seattle WA

Phone: 206-529-3980
Fax: 206-529-3985

Client Project # 1413.001.05.601
Lab Project # PESENVSWA-ALP

Collected by (print): Rachel McLaughlin
P.O. #

Collected by (signature): *Rachel McLaughlin*

Rush? (Lab MUST be Notified)

Quote #

Same Day Five Day
Next Day 10 Day (Rad Only)
Two Day 30 Day (Rad Only)
Three Day

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

V8260C VOCs 40ml/NaHSO4/Syr/MeOH
dry wt, voc screen 2ozClr-NoPres

Analysis / Container / Preservative

Chain of Custody Page ___ of ___



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# L981889

Table #

Accrurn: PESENVSWA

Template: T134174

Prelogin: P645177

TSR: 110 - Brian Ford

PB:

Shipped Via:

Remarks: *3/29/18* Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-153-10	Grab	SS	10	3/27/18	1045	5
MW-153-20		SS	20		1120	1
MW-153-30		SS	30		1145	1
MW-153-40		SS	40		1205	1
MW-153-50		SS	50		1235	1
MW-153-60		SS	60		1315	1
MW-153-70		SS	70		1340	1
MW-153-80		SS	80	3/28/18	1110	1
MW-153-90		SS	90		1135	1
MW-153-110		SS	110		1257	1

Remarks: Tier 2 QA/QC needed (batch QC OK)
Email copy of Data OK

Samples Returned Via: UPS FedEx Courier

pH _____ Temp _____
Flow _____ Other _____

Tracking # 4269 9212 5345
Trip Blank Received: Yes No
Bottles Received: MeOH H₂O

Sample Receipt Checklist
COC Rept Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive Intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
VOC zero Headspace: Y N
Preservation Correct/Checked: Y N

Received by (Signature): *[Signature]*
Temp: *24°C*
Date: *3/30/18*
Bottles Received: *225*

IF preservation required by Login: Date/Time

Relinquished by: (Signature)	Date:	Time:	Received by (Signature)	Date:	Time:	Hold:	Condition: NCS / OK
<i>[Signature]</i>	3/29/18	1550	<i>[Signature]</i>	3/30/18	0845		OK

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to: **Bill Haldeman / Brian Neal**

Email To: **bhaldeman@pesenv.com**
bneal@pesenv.com

Project: **American Linen Project**

City/State Collected: **Seattle WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project # **1413.001.02-602**
Site/Facility ID # **05.C01**

Lab Project # **PESENVSWA-ALP**

Collected by (print): **Rachel M**

Site/Facility ID #

P.O. #

Collected by (signature): *Rachel M*

Rush? (Lab MUST be Notified)

Quote #

Immediately Packed on Ice N Y

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cntrs

MW-153-130

Grab

SS

130

3/29/18

1019

5

X

TRIP BLANK

G

H

-

9/20/17

-

1

X

V8260C VOCs 40ml/NaHS04/Syr/MeOH
dry wt/voc screen 2ozClr-NoPres

Analysis / Container / Preservative

Chain of Custody Page ___ of ___



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-8858
Phone: 800-707-5859
Fax: 615-758-9859



L# **1981889**

Table #

Account: **PESENVSWA**

Template: **T130006**

Prelogin: **P638152**

TSR: **110 - Brian Ford**

PB:

Shipped Via:

Remarks

Sample # (lab only)

N

7/27/18

27

46

22

47

Sample Receipt Checklist:

- VOC Seal Present/Intact: Y N
- DOC Signed/Accurate: Y N
- Bottles arrive intact: Y N
- Correct bottles used: Y N
- Sufficient volume sent: Y N
- VOL Zero Headspace: Y N
- IF APPLICABLE: Y N
- Preservation: Correct/Checked: Y N

Remarks: **Tier 2 O/A/QC required (both OCOK)**
Email copy of data OK

Sample Returned Via: UPS FedEx Courier

Tracking # **WAG 92225345**

Received by: (Signature)

Trip Blank Received: Yes No

Received by: (Signature)

Temp: **22XB** °C Bortles Received: HCL MeOH

Received by: (Signature)

Temp: **24R** °C Bortles Received: HCL MeOH

Received by: (Signature)

Date: **3/30/18** Time: **0845**

Received by: (Signature)

Date: **3/29/18** Time: **1550**

Relinquished by: (Signature)

Date:

Time:

Date:

Time:

Received by: (Signature)

Date: **3/30/18** Time: **0845**

Hold:

Condition: **NCE / OK**

Brian Ford

From: Bill Haldeman <bhaldeman@pesenv.com>
Sent: Thursday, March 29, 2018 7:27 PM
To: Brian Ford
Cc: Rachel T. McLaughlin
Subject: American Linen Sample B-245-5

Brian, can ESC remove the request for NWT/PH-Gx analysis for the above sample? It was erroneously checked on the COC. Thanks! -Bill

Bill Haldeman
PES Environmental, Inc.
1215 Fourth Avenue, Suite 1350
Seattle, Washington 98161-1012

(206) 529-3980, ext. 107
bhaldeman@pesenv.com



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.2		1	04/04/2018 14:42	WG1093163

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.125	J3	0.0126	0.0631	1	03/31/2018 20:25	WG1092116
Acrylonitrile	U		0.00226	0.0126	1	03/31/2018 20:25	WG1092116
Benzene	0.00411		0.000341	0.00126	1	03/31/2018 20:25	WG1092116
Bromobenzene	U		0.000358	0.00126	1	03/31/2018 20:25	WG1092116
Bromodichloromethane	U		0.000321	0.00126	1	03/31/2018 20:25	WG1092116
Bromochloromethane	U		0.000492	0.00631	1	03/31/2018 20:25	WG1092116
Bromoform	U		0.000535	0.00126	1	03/31/2018 20:25	WG1092116
Bromomethane	U	J3	0.00169	0.00631	1	03/31/2018 20:25	WG1092116
n-Butylbenzene	U	J3	0.000326	0.00126	1	03/31/2018 20:25	WG1092116
sec-Butylbenzene	U	J3	0.000254	0.00126	1	03/31/2018 20:25	WG1092116
tert-Butylbenzene	U	J3	0.000260	0.00126	1	03/31/2018 20:25	WG1092116
Carbon disulfide	0.00929	J3	0.000279	0.00126	1	03/31/2018 20:25	WG1092116
Carbon tetrachloride	U	J3	0.000414	0.00126	1	03/31/2018 20:25	WG1092116
Chlorobenzene	U		0.000268	0.00126	1	03/31/2018 20:25	WG1092116
Chlorodibromomethane	U		0.000471	0.00126	1	03/31/2018 20:25	WG1092116
Chloroethane	U	J3	0.00119	0.00631	1	03/31/2018 20:25	WG1092116
Chloroform	U		0.000289	0.00631	1	03/31/2018 20:25	WG1092116
Chloromethane	U	J3	0.000473	0.00316	1	03/31/2018 20:25	WG1092116
2-Chlorotoluene	U		0.000380	0.00126	1	03/31/2018 20:25	WG1092116
4-Chlorotoluene	U		0.000303	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00133	0.00631	1	03/31/2018 20:25	WG1092116
1,2-Dibromoethane	U		0.000433	0.00126	1	03/31/2018 20:25	WG1092116
Dibromomethane	U		0.000482	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dichlorobenzene	U		0.000385	0.00126	1	03/31/2018 20:25	WG1092116
1,3-Dichlorobenzene	U		0.000302	0.00126	1	03/31/2018 20:25	WG1092116
1,4-Dichlorobenzene	U		0.000285	0.00126	1	03/31/2018 20:25	WG1092116
Dichlorodifluoromethane	U	J3	0.000900	0.00631	1	03/31/2018 20:25	WG1092116
1,1-Dichloroethane	U		0.000251	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dichloroethane	U		0.000334	0.00126	1	03/31/2018 20:25	WG1092116
1,1-Dichloroethene	U	J3	0.000382	0.00126	1	03/31/2018 20:25	WG1092116
cis-1,2-Dichloroethene	0.00740		0.000297	0.00126	1	03/31/2018 20:25	WG1092116
trans-1,2-Dichloroethene	U	J3	0.000333	0.00126	1	03/31/2018 20:25	WG1092116
1,2-Dichloropropane	U		0.000452	0.00126	1	03/31/2018 20:25	WG1092116
1,1-Dichloropropene	U		0.000400	0.00126	1	03/31/2018 20:25	WG1092116
1,3-Dichloropropane	U		0.000261	0.00126	1	03/31/2018 20:25	WG1092116
cis-1,3-Dichloropropene	U		0.000331	0.00126	1	03/31/2018 20:25	WG1092116
trans-1,3-Dichloropropene	U		0.000337	0.00126	1	03/31/2018 20:25	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000982	0.00316	1	03/31/2018 20:25	WG1092116
2,2-Dichloropropane	U	J3	0.000352	0.00126	1	03/31/2018 20:25	WG1092116
Di-isopropyl ether	U		0.000313	0.00126	1	03/31/2018 20:25	WG1092116
Ethylbenzene	U	J3	0.000375	0.00126	1	03/31/2018 20:25	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000432	0.00126	1	03/31/2018 20:25	WG1092116
2-Hexanone	0.0102	J	0.00173	0.0126	1	03/31/2018 20:25	WG1092116
n-Hexane	U	J3	0.000366	0.0126	1	03/31/2018 20:25	WG1092116
Iodomethane	U	J3	0.00319	0.0126	1	03/31/2018 20:25	WG1092116
Isopropylbenzene	U		0.000307	0.00126	1	03/31/2018 20:25	WG1092116
p-Isopropyltoluene	U	J3	0.000257	0.00126	1	03/31/2018 20:25	WG1092116
2-Butanone (MEK)	0.0320	J	0.00591	0.0126	1	03/31/2018 20:25	WG1092116
Methylene Chloride	U		0.00126	0.00631	1	03/31/2018 20:25	WG1092116
4-Methyl-2-pentanone (MIBK)	0.00267	J	0.00237	0.0126	1	03/31/2018 20:25	WG1092116

JC 4/25/18



Collected date/time: 03/28/18 09:19

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000268	0.00126	1	03/31/2018 20:25	WG1092116
Naphthalene	U		0.00126	0.00631	1	03/31/2018 20:25	WG1092116
n-Propylbenzene	U		0.000260	0.00126	1	03/31/2018 20:25	WG1092116
Styrene	U		0.000295	0.00126	1	03/31/2018 20:25	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000333	0.00126	1	03/31/2018 20:25	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000461	0.00126	1	03/31/2018 20:25	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000461	0.00126	1	03/31/2018 20:25	WG1092116
Tetrachloroethene	0.0205	J3	0.000348	0.00126	1	03/31/2018 20:25	WG1092116
Toluene	0.00127	J J	0.000548	0.00631	1	03/31/2018 20:25	WG1092116
1,2,3-Trichlorobenzene	U		0.000386	0.00126	1	03/31/2018 20:25	WG1092116
1,2,4-Trichlorobenzene	U		0.000490	0.00126	1	03/31/2018 20:25	WG1092116
1,1,1-Trichloroethane	U	J3	0.000361	0.00126	1	03/31/2018 20:25	WG1092116
1,1,2-Trichloroethane	U		0.000350	0.00126	1	03/31/2018 20:25	WG1092116
Trichloroethene	0.00511	J4	0.000352	0.00126	1	03/31/2018 20:25	WG1092116
Trichlorofluoromethane	U	J3	0.000482	0.00631	1	03/31/2018 20:25	WG1092116
1,2,3-Trichloropropane	U		0.000935	0.00316	1	03/31/2018 20:25	WG1092116
1,2,4-Trimethylbenzene	0.000583	J J	0.000266	0.00126	1	03/31/2018 20:25	WG1092116
1,2,3-Trimethylbenzene	U		0.000362	0.00126	1	03/31/2018 20:25	WG1092116
1,3,5-Trimethylbenzene	U		0.000336	0.00126	1	03/31/2018 20:25	WG1092116
Vinyl acetate	U	J3	0.00302	0.0126	1	03/31/2018 20:25	WG1092116
Vinyl chloride	0.00137	J3	0.000367	0.00126	1	03/31/2018 20:25	WG1092116
Xylenes, Total	0.00133	J J J3	0.000881	0.00379	1	03/31/2018 20:25	WG1092116
(S) Toluene-d8	98.5			80.0-120		03/31/2018 20:25	WG1092116
(S) Dibromofluoromethane	110			74.0-131		03/31/2018 20:25	WG1092116
(S) 4-Bromofluorobenzene	118			64.0-132		03/31/2018 20:25	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.9		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0308	J J3	0.0119	0.0596	1	03/31/2018 20:46	WG1092116
Acrylonitrile	U		0.00213	0.0119	1	03/31/2018 20:46	WG1092116
Benzene	0.000911	J J	0.000322	0.00119	1	03/31/2018 20:46	WG1092116
Bromobenzene	U		0.000338	0.00119	1	03/31/2018 20:46	WG1092116
Bromodichloromethane	U		0.000303	0.00119	1	03/31/2018 20:46	WG1092116
Bromochloromethane	U		0.000465	0.00596	1	03/31/2018 20:46	WG1092116
Bromoform	U		0.000505	0.00119	1	03/31/2018 20:46	WG1092116
Bromomethane	U	J3	0.00160	0.00596	1	03/31/2018 20:46	WG1092116
n-Butylbenzene	U	J3	0.000307	0.00119	1	03/31/2018 20:46	WG1092116
sec-Butylbenzene	U	J3	0.000239	0.00119	1	03/31/2018 20:46	WG1092116
tert-Butylbenzene	U	J3	0.000245	0.00119	1	03/31/2018 20:46	WG1092116
Carbon disulfide	0.00132	J3	0.000263	0.00119	1	03/31/2018 20:46	WG1092116
Carbon tetrachloride	U	J3	0.000391	0.00119	1	03/31/2018 20:46	WG1092116
Chlorobenzene	U		0.000253	0.00119	1	03/31/2018 20:46	WG1092116
Chlorodibromomethane	U		0.000444	0.00119	1	03/31/2018 20:46	WG1092116
Chloroethane	U	J3	0.00113	0.00596	1	03/31/2018 20:46	WG1092116
Chloroform	U		0.000273	0.00596	1	03/31/2018 20:46	WG1092116
Chloromethane	U	J3	0.000447	0.00298	1	03/31/2018 20:46	WG1092116
2-Chlorotoluene	U		0.000359	0.00119	1	03/31/2018 20:46	WG1092116
4-Chlorotoluene	U		0.000286	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00125	0.00596	1	03/31/2018 20:46	WG1092116
1,2-Dibromoethane	U		0.000409	0.00119	1	03/31/2018 20:46	WG1092116
Dibromomethane	U		0.000455	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dichlorobenzene	U		0.000363	0.00119	1	03/31/2018 20:46	WG1092116
1,3-Dichlorobenzene	U		0.000285	0.00119	1	03/31/2018 20:46	WG1092116
1,4-Dichlorobenzene	U		0.000269	0.00119	1	03/31/2018 20:46	WG1092116
Dichlorodifluoromethane	U	J3	0.000850	0.00596	1	03/31/2018 20:46	WG1092116
1,1-Dichloroethane	U		0.000237	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dichloroethane	U		0.000316	0.00119	1	03/31/2018 20:46	WG1092116
1,1-Dichloroethene	U	J3	0.000361	0.00119	1	03/31/2018 20:46	WG1092116
cis-1,2-Dichloroethene	0.00128		0.000280	0.00119	1	03/31/2018 20:46	WG1092116
trans-1,2-Dichloroethene	U	J3	0.000315	0.00119	1	03/31/2018 20:46	WG1092116
1,2-Dichloropropane	U		0.000427	0.00119	1	03/31/2018 20:46	WG1092116
1,1-Dichloropropene	U		0.000378	0.00119	1	03/31/2018 20:46	WG1092116
1,3-Dichloropropane	U		0.000247	0.00119	1	03/31/2018 20:46	WG1092116
cis-1,3-Dichloropropene	U		0.000312	0.00119	1	03/31/2018 20:46	WG1092116
trans-1,3-Dichloropropene	U		0.000318	0.00119	1	03/31/2018 20:46	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000927	0.00298	1	03/31/2018 20:46	WG1092116
2,2-Dichloropropane	U	J3	0.000332	0.00119	1	03/31/2018 20:46	WG1092116
Di-isopropyl ether	U		0.000295	0.00119	1	03/31/2018 20:46	WG1092116
Ethylbenzene	U	J3	0.000354	0.00119	1	03/31/2018 20:46	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000407	0.00119	1	03/31/2018 20:46	WG1092116
2-Hexanone	U		0.00163	0.0119	1	03/31/2018 20:46	WG1092116
n-Hexane	U	J3	0.000346	0.0119	1	03/31/2018 20:46	WG1092116
Iodomethane	U	J3	0.00301	0.0119	1	03/31/2018 20:46	WG1092116
Isopropylbenzene	U		0.000290	0.00119	1	03/31/2018 20:46	WG1092116
p-Isopropyltoluene	U	J3	0.000243	0.00119	1	03/31/2018 20:46	WG1092116
2-Butanone (MEK)	0.00628	J J J0 J3	0.00558	0.0119	1	03/31/2018 20:46	WG1092116
Methylene Chloride	U		0.00119	0.00596	1	03/31/2018 20:46	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00224	0.0119	1	03/31/2018 20:46	WG1092116

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 4/25/18



Collected date/time: 03/28/18 09:46

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000253	0.00119	1	03/31/2018 20:46	WG1092116
Naphthalene	U		0.00119	0.00596	1	03/31/2018 20:46	WG1092116
n-Propylbenzene	U		0.000245	0.00119	1	03/31/2018 20:46	WG1092116
Styrene	U		0.000279	0.00119	1	03/31/2018 20:46	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000315	0.00119	1	03/31/2018 20:46	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000435	0.00119	1	03/31/2018 20:46	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000435	0.00119	1	03/31/2018 20:46	WG1092116
Tetrachloroethene	0.00727	J3	0.000329	0.00119	1	03/31/2018 20:46	WG1092116
Toluene	0.000594	J J	0.000517	0.00596	1	03/31/2018 20:46	WG1092116
1,2,3-Trichlorobenzene	U		0.000365	0.00119	1	03/31/2018 20:46	WG1092116
1,2,4-Trichlorobenzene	U		0.000462	0.00119	1	03/31/2018 20:46	WG1092116
1,1,1-Trichloroethane	U	J3	0.000341	0.00119	1	03/31/2018 20:46	WG1092116
1,1,2-Trichloroethane	U		0.000330	0.00119	1	03/31/2018 20:46	WG1092116
Trichloroethene	0.000767	J J J4	0.000332	0.00119	1	03/31/2018 20:46	WG1092116
Trichlorofluoromethane	U	J3	0.000455	0.00596	1	03/31/2018 20:46	WG1092116
1,2,3-Trichloropropane	U		0.000883	0.00298	1	03/31/2018 20:46	WG1092116
1,2,4-Trimethylbenzene	U		0.000251	0.00119	1	03/31/2018 20:46	WG1092116
1,2,3-Trimethylbenzene	U		0.000342	0.00119	1	03/31/2018 20:46	WG1092116
1,3,5-Trimethylbenzene	U		0.000317	0.00119	1	03/31/2018 20:46	WG1092116
Vinyl acetate	U	J3	0.00285	0.0119	1	03/31/2018 20:46	WG1092116
Vinyl chloride	0.000526	J J J3	0.000347	0.00119	1	03/31/2018 20:46	WG1092116
Xylenes, Total	U	J3	0.000832	0.00357	1	03/31/2018 20:46	WG1092116
(S) Toluene-d8	102			80.0-120		03/31/2018 20:46	WG1092116
(S) Dibromofluoromethane	107			74.0-131		03/31/2018 20:46	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 20:46	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.6		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	0.0138	J	J J3	0.0114	0.0570	1	03/31/2018 21:07	WG1092116
Acrylonitrile	U			0.00204	0.0114	1	03/31/2018 21:07	WG1092116
Benzene	U			0.000308	0.00114	1	03/31/2018 21:07	WG1092116
Bromobenzene	U			0.000324	0.00114	1	03/31/2018 21:07	WG1092116
Bromodichloromethane	U			0.000290	0.00114	1	03/31/2018 21:07	WG1092116
Bromochloromethane	U			0.000445	0.00570	1	03/31/2018 21:07	WG1092116
Bromoform	U			0.000484	0.00114	1	03/31/2018 21:07	WG1092116
Bromomethane	U		J3	0.00153	0.00570	1	03/31/2018 21:07	WG1092116
n-Butylbenzene	U		J3	0.000294	0.00114	1	03/31/2018 21:07	WG1092116
sec-Butylbenzene	U		J3	0.000229	0.00114	1	03/31/2018 21:07	WG1092116
tert-Butylbenzene	U		J3	0.000235	0.00114	1	03/31/2018 21:07	WG1092116
Carbon disulfide	0.00161		J3	0.000252	0.00114	1	03/31/2018 21:07	WG1092116
Carbon tetrachloride	U		J3	0.000374	0.00114	1	03/31/2018 21:07	WG1092116
Chlorobenzene	U			0.000242	0.00114	1	03/31/2018 21:07	WG1092116
Chlorodibromomethane	U			0.000426	0.00114	1	03/31/2018 21:07	WG1092116
Chloroethane	U		J3	0.00108	0.00570	1	03/31/2018 21:07	WG1092116
Chloroform	U			0.000261	0.00570	1	03/31/2018 21:07	WG1092116
Chloromethane	U		J3	0.000428	0.00285	1	03/31/2018 21:07	WG1092116
2-Chlorotoluene	U			0.000343	0.00114	1	03/31/2018 21:07	WG1092116
4-Chlorotoluene	U			0.000274	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dibromo-3-Chloropropane	U			0.00120	0.00570	1	03/31/2018 21:07	WG1092116
1,2-Dibromoethane	U			0.000391	0.00114	1	03/31/2018 21:07	WG1092116
Dibromomethane	U			0.000436	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dichlorobenzene	U			0.000348	0.00114	1	03/31/2018 21:07	WG1092116
1,3-Dichlorobenzene	U			0.000273	0.00114	1	03/31/2018 21:07	WG1092116
1,4-Dichlorobenzene	U			0.000258	0.00114	1	03/31/2018 21:07	WG1092116
Dichlorodifluoromethane	U		J3	0.000814	0.00570	1	03/31/2018 21:07	WG1092116
1,1-Dichloroethane	U			0.000227	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dichloroethane	U			0.000302	0.00114	1	03/31/2018 21:07	WG1092116
1,1-Dichloroethene	U		J3	0.000346	0.00114	1	03/31/2018 21:07	WG1092116
cis-1,2-Dichloroethene	0.000833	J	J	0.000268	0.00114	1	03/31/2018 21:07	WG1092116
trans-1,2-Dichloroethene	U		J3	0.000301	0.00114	1	03/31/2018 21:07	WG1092116
1,2-Dichloropropane	U			0.000408	0.00114	1	03/31/2018 21:07	WG1092116
1,1-Dichloropropene	U			0.000362	0.00114	1	03/31/2018 21:07	WG1092116
1,3-Dichloropropane	U			0.000236	0.00114	1	03/31/2018 21:07	WG1092116
cis-1,3-Dichloropropene	U			0.000299	0.00114	1	03/31/2018 21:07	WG1092116
trans-1,3-Dichloropropene	U			0.000305	0.00114	1	03/31/2018 21:07	WG1092116
trans-1,4-Dichloro-2-butene	U			0.000888	0.00285	1	03/31/2018 21:07	WG1092116
2,2-Dichloropropane	U		J3	0.000318	0.00114	1	03/31/2018 21:07	WG1092116
Di-isopropyl ether	U			0.000283	0.00114	1	03/31/2018 21:07	WG1092116
Ethylbenzene	U		J3	0.000339	0.00114	1	03/31/2018 21:07	WG1092116
Hexachloro-1,3-butadiene	U		J3	0.000390	0.00114	1	03/31/2018 21:07	WG1092116
2-Hexanone	U			0.00156	0.0114	1	03/31/2018 21:07	WG1092116
n-Hexane	U		J3	0.000331	0.0114	1	03/31/2018 21:07	WG1092116
Iodomethane	U		J3	0.00289	0.0114	1	03/31/2018 21:07	WG1092116
Isopropylbenzene	U			0.000277	0.00114	1	03/31/2018 21:07	WG1092116
p-Isopropyltoluene	U		J3	0.000233	0.00114	1	03/31/2018 21:07	WG1092116
2-Butanone (MEK)	U		J3	0.00534	0.0114	1	03/31/2018 21:07	WG1092116
Methylene Chloride	U			0.00114	0.00570	1	03/31/2018 21:07	WG1092116
4-Methyl-2-pentanone (MIBK)	U			0.00215	0.0114	1	03/31/2018 21:07	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 09:54

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000242	0.00114	1	03/31/2018 21:07	WG1092116
Naphthalene	U		0.00114	0.00570	1	03/31/2018 21:07	WG1092116
n-Propylbenzene	U		0.000235	0.00114	1	03/31/2018 21:07	WG1092116
Styrene	U		0.000267	0.00114	1	03/31/2018 21:07	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000301	0.00114	1	03/31/2018 21:07	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000416	0.00114	1	03/31/2018 21:07	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000416	0.00114	1	03/31/2018 21:07	WG1092116
Tetrachloroethene	0.00254	J3	0.000315	0.00114	1	03/31/2018 21:07	WG1092116
Toluene	U		0.000495	0.00570	1	03/31/2018 21:07	WG1092116
1,2,3-Trichlorobenzene	U		0.000349	0.00114	1	03/31/2018 21:07	WG1092116
1,2,4-Trichlorobenzene	U		0.000443	0.00114	1	03/31/2018 21:07	WG1092116
1,1,1-Trichloroethane	U	J3	0.000326	0.00114	1	03/31/2018 21:07	WG1092116
1,1,2-Trichloroethane	U		0.000316	0.00114	1	03/31/2018 21:07	WG1092116
Trichloroethene	0.000615	J JJ4	0.000318	0.00114	1	03/31/2018 21:07	WG1092116
Trichlorofluoromethane	U	J3	0.000436	0.00570	1	03/31/2018 21:07	WG1092116
1,2,3-Trichloropropane	U		0.000845	0.00285	1	03/31/2018 21:07	WG1092116
1,2,4-Trimethylbenzene	U		0.000241	0.00114	1	03/31/2018 21:07	WG1092116
1,2,3-Trimethylbenzene	U		0.000327	0.00114	1	03/31/2018 21:07	WG1092116
1,3,5-Trimethylbenzene	U		0.000303	0.00114	1	03/31/2018 21:07	WG1092116
Vinyl acetate	U	J3	0.00273	0.0114	1	03/31/2018 21:07	WG1092116
Vinyl chloride	0.00102	J JJ3	0.000332	0.00114	1	03/31/2018 21:07	WG1092116
Xylenes, Total	U	J3	0.000796	0.00342	1	03/31/2018 21:07	WG1092116
(S) Toluene-d8	98.1			80.0-120		03/31/2018 21:07	WG1092116
(S) Dibromofluoromethane	109			74.0-131		03/31/2018 21:07	WG1092116
(S) 4-Bromofluorobenzene	100			64.0-132		03/31/2018 21:07	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.1		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	0.0126	J	J J3	0.0113	0.0567	1	03/31/2018 21:29	WG1092116
Acrylonitrile	U			0.00203	0.0113	1	03/31/2018 21:29	WG1092116
Benzene	U			0.000306	0.00113	1	03/31/2018 21:29	WG1092116
Bromobenzene	U			0.000322	0.00113	1	03/31/2018 21:29	WG1092116
Bromodichloromethane	U			0.000288	0.00113	1	03/31/2018 21:29	WG1092116
Bromochloromethane	U			0.000442	0.00567	1	03/31/2018 21:29	WG1092116
Bromoform	U			0.000481	0.00113	1	03/31/2018 21:29	WG1092116
Bromomethane	U		J3	0.00152	0.00567	1	03/31/2018 21:29	WG1092116
n-Butylbenzene	U		J3	0.000293	0.00113	1	03/31/2018 21:29	WG1092116
sec-Butylbenzene	U		J3	0.000228	0.00113	1	03/31/2018 21:29	WG1092116
tert-Butylbenzene	U		J3	0.000234	0.00113	1	03/31/2018 21:29	WG1092116
Carbon disulfide	0.000710	J	J J3	0.000251	0.00113	1	03/31/2018 21:29	WG1092116
Carbon tetrachloride	U		J3	0.000372	0.00113	1	03/31/2018 21:29	WG1092116
Chlorobenzene	U			0.000241	0.00113	1	03/31/2018 21:29	WG1092116
Chlorodibromomethane	U			0.000423	0.00113	1	03/31/2018 21:29	WG1092116
Chloroethane	U		J3	0.00107	0.00567	1	03/31/2018 21:29	WG1092116
Chloroform	U			0.000260	0.00567	1	03/31/2018 21:29	WG1092116
Chloromethane	U		J3	0.000425	0.00284	1	03/31/2018 21:29	WG1092116
2-Chlorotoluene	U			0.000342	0.00113	1	03/31/2018 21:29	WG1092116
4-Chlorotoluene	U			0.000272	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dibromo-3-Chloropropane	U			0.00119	0.00567	1	03/31/2018 21:29	WG1092116
1,2-Dibromoethane	U			0.000389	0.00113	1	03/31/2018 21:29	WG1092116
Dibromomethane	U			0.000433	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dichlorobenzene	U			0.000346	0.00113	1	03/31/2018 21:29	WG1092116
1,3-Dichlorobenzene	U			0.000271	0.00113	1	03/31/2018 21:29	WG1092116
1,4-Dichlorobenzene	U			0.000256	0.00113	1	03/31/2018 21:29	WG1092116
Dichlorodifluoromethane	U		J3	0.000809	0.00567	1	03/31/2018 21:29	WG1092116
1,1-Dichloroethane	U			0.000226	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dichloroethane	U			0.000301	0.00113	1	03/31/2018 21:29	WG1092116
1,1-Dichloroethene	U		J3	0.000344	0.00113	1	03/31/2018 21:29	WG1092116
cis-1,2-Dichloroethene	0.00537			0.000267	0.00113	1	03/31/2018 21:29	WG1092116
trans-1,2-Dichloroethene	0.000309	J	J J3	0.000300	0.00113	1	03/31/2018 21:29	WG1092116
1,2-Dichloropropane	U			0.000406	0.00113	1	03/31/2018 21:29	WG1092116
1,1-Dichloropropene	U			0.000360	0.00113	1	03/31/2018 21:29	WG1092116
1,3-Dichloropropane	U			0.000235	0.00113	1	03/31/2018 21:29	WG1092116
cis-1,3-Dichloropropene	U			0.000297	0.00113	1	03/31/2018 21:29	WG1092116
trans-1,3-Dichloropropene	U			0.000303	0.00113	1	03/31/2018 21:29	WG1092116
trans-1,4-Dichloro-2-butene	U			0.000883	0.00284	1	03/31/2018 21:29	WG1092116
2,2-Dichloropropane	U		J3	0.000317	0.00113	1	03/31/2018 21:29	WG1092116
Di-isopropyl ether	U			0.000281	0.00113	1	03/31/2018 21:29	WG1092116
Ethylbenzene	U		J3	0.000337	0.00113	1	03/31/2018 21:29	WG1092116
Hexachloro-1,3-butadiene	U		J3	0.000388	0.00113	1	03/31/2018 21:29	WG1092116
2-Hexanone	U			0.00155	0.0113	1	03/31/2018 21:29	WG1092116
n-Hexane	U		J3	0.000329	0.0113	1	03/31/2018 21:29	WG1092116
Iodomethane	U		J3	0.00287	0.0113	1	03/31/2018 21:29	WG1092116
Isopropylbenzene	U			0.000276	0.00113	1	03/31/2018 21:29	WG1092116
p-Isopropyltoluene	U		J3	0.000231	0.00113	1	03/31/2018 21:29	WG1092116
2-Butanone (MEK)	U		J3	0.00531	0.0113	1	03/31/2018 21:29	WG1092116
Methylene Chloride	U			0.00113	0.00567	1	03/31/2018 21:29	WG1092116
4-Methyl-2-pentanone (MIBK)	U			0.00213	0.0113	1	03/31/2018 21:29	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 10:03

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00113	1	03/31/2018 21:29	WG1092116
Naphthalene	U		0.00113	0.00567	1	03/31/2018 21:29	WG1092116
n-Propylbenzene	U		0.000234	0.00113	1	03/31/2018 21:29	WG1092116
Styrene	U		0.000265	0.00113	1	03/31/2018 21:29	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000300	0.00113	1	03/31/2018 21:29	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	03/31/2018 21:29	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000414	0.00113	1	03/31/2018 21:29	WG1092116
Tetrachloroethene	0.000760	J JJ3	0.000313	0.00113	1	03/31/2018 21:29	WG1092116
Toluene	U		0.000492	0.00567	1	03/31/2018 21:29	WG1092116
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	03/31/2018 21:29	WG1092116
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	03/31/2018 21:29	WG1092116
1,1,1-Trichloroethane	U	J3	0.000324	0.00113	1	03/31/2018 21:29	WG1092116
1,1,2-Trichloroethane	U		0.000314	0.00113	1	03/31/2018 21:29	WG1092116
Trichloroethene	0.00185	J4	0.000317	0.00113	1	03/31/2018 21:29	WG1092116
Trichlorofluoromethane	U	J3	0.000433	0.00567	1	03/31/2018 21:29	WG1092116
1,2,3-Trichloropropane	U		0.000841	0.00284	1	03/31/2018 21:29	WG1092116
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	03/31/2018 21:29	WG1092116
1,2,3-Trimethylbenzene	U		0.000326	0.00113	1	03/31/2018 21:29	WG1092116
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	03/31/2018 21:29	WG1092116
Vinyl acetate	U	J3	0.00271	0.0113	1	03/31/2018 21:29	WG1092116
Vinyl chloride	0.000575	J JJ3	0.000330	0.00113	1	03/31/2018 21:29	WG1092116
Xylenes, Total	U	J3	0.000792	0.00340	1	03/31/2018 21:29	WG1092116
(S) Toluene-d8	98.5			80.0-120		03/31/2018 21:29	WG1092116
(S) Dibromofluoromethane	109			74.0-131		03/31/2018 21:29	WG1092116
(S) 4-Bromofluorobenzene	104			64.0-132		03/31/2018 21:29	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	94.5		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0107	J J3	0.0106	0.0529	1	03/31/2018 21:50	WG1092116
Acrylonitrile	U		0.00190	0.0106	1	03/31/2018 21:50	WG1092116
Benzene	U		0.000286	0.00106	1	03/31/2018 21:50	WG1092116
Bromobenzene	U		0.000301	0.00106	1	03/31/2018 21:50	WG1092116
Bromodichloromethane	U		0.000269	0.00106	1	03/31/2018 21:50	WG1092116
Bromochloromethane	U		0.000413	0.00529	1	03/31/2018 21:50	WG1092116
Bromoform	U		0.000449	0.00106	1	03/31/2018 21:50	WG1092116
Bromomethane	U	J3	0.00142	0.00529	1	03/31/2018 21:50	WG1092116
n-Butylbenzene	U	J3	0.000273	0.00106	1	03/31/2018 21:50	WG1092116
sec-Butylbenzene	U	J3	0.000213	0.00106	1	03/31/2018 21:50	WG1092116
tert-Butylbenzene	U	J3	0.000218	0.00106	1	03/31/2018 21:50	WG1092116
Carbon disulfide	U	J3	0.000234	0.00106	1	03/31/2018 21:50	WG1092116
Carbon tetrachloride	U	J3	0.000347	0.00106	1	03/31/2018 21:50	WG1092116
Chlorobenzene	U		0.000224	0.00106	1	03/31/2018 21:50	WG1092116
Chlorodibromomethane	U		0.000395	0.00106	1	03/31/2018 21:50	WG1092116
Chloroethane	U	J3	0.00100	0.00529	1	03/31/2018 21:50	WG1092116
Chloroform	U		0.000242	0.00529	1	03/31/2018 21:50	WG1092116
Chloromethane	U	J3	0.000397	0.00265	1	03/31/2018 21:50	WG1092116
2-Chlorotoluene	U		0.000319	0.00106	1	03/31/2018 21:50	WG1092116
4-Chlorotoluene	U		0.000254	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00111	0.00529	1	03/31/2018 21:50	WG1092116
1,2-Dibromoethane	U		0.000363	0.00106	1	03/31/2018 21:50	WG1092116
Dibromomethane	U		0.000404	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dichlorobenzene	U		0.000323	0.00106	1	03/31/2018 21:50	WG1092116
1,3-Dichlorobenzene	U		0.000253	0.00106	1	03/31/2018 21:50	WG1092116
1,4-Dichlorobenzene	U		0.000239	0.00106	1	03/31/2018 21:50	WG1092116
Dichlorodifluoromethane	U	J3	0.000755	0.00529	1	03/31/2018 21:50	WG1092116
1,1-Dichloroethane	U		0.000211	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dichloroethane	U		0.000281	0.00106	1	03/31/2018 21:50	WG1092116
1,1-Dichloroethene	U	J3	0.000321	0.00106	1	03/31/2018 21:50	WG1092116
cis-1,2-Dichloroethene	0.00556		0.000249	0.00106	1	03/31/2018 21:50	WG1092116
trans-1,2-Dichloroethene	U	J3	0.000280	0.00106	1	03/31/2018 21:50	WG1092116
1,2-Dichloropropane	U		0.000379	0.00106	1	03/31/2018 21:50	WG1092116
1,1-Dichloropropene	U		0.000336	0.00106	1	03/31/2018 21:50	WG1092116
1,3-Dichloropropane	U		0.000219	0.00106	1	03/31/2018 21:50	WG1092116
cis-1,3-Dichloropropene	U		0.000277	0.00106	1	03/31/2018 21:50	WG1092116
trans-1,3-Dichloropropene	U		0.000283	0.00106	1	03/31/2018 21:50	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000824	0.00265	1	03/31/2018 21:50	WG1092116
2,2-Dichloropropane	U	J3	0.000295	0.00106	1	03/31/2018 21:50	WG1092116
Di-isopropyl ether	U		0.000263	0.00106	1	03/31/2018 21:50	WG1092116
Ethylbenzene	U	J3	0.000314	0.00106	1	03/31/2018 21:50	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000362	0.00106	1	03/31/2018 21:50	WG1092116
2-Hexanone	U		0.00145	0.0106	1	03/31/2018 21:50	WG1092116
n-Hexane	U	J3	0.000307	0.0106	1	03/31/2018 21:50	WG1092116
Iodomethane	U	J3	0.00268	0.0106	1	03/31/2018 21:50	WG1092116
Isopropylbenzene	U		0.000257	0.00106	1	03/31/2018 21:50	WG1092116
p-Isopropyltoluene	U	J3	0.000216	0.00106	1	03/31/2018 21:50	WG1092116
2-Butanone (MEK)	U	J3	0.00495	0.0106	1	03/31/2018 21:50	WG1092116
Methylene Chloride	U		0.00106	0.00529	1	03/31/2018 21:50	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00199	0.0106	1	03/31/2018 21:50	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 10:11

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000224	0.00106	1	03/31/2018 21:50	WG1092116
Naphthalene	U		0.00106	0.00529	1	03/31/2018 21:50	WG1092116
n-Propylbenzene	U		0.000218	0.00106	1	03/31/2018 21:50	WG1092116
Styrene	U		0.000248	0.00106	1	03/31/2018 21:50	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000280	0.00106	1	03/31/2018 21:50	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000386	0.00106	1	03/31/2018 21:50	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000386	0.00106	1	03/31/2018 21:50	WG1092116
Tetrachloroethene	U	J3	0.000292	0.00106	1	03/31/2018 21:50	WG1092116
Toluene	U		0.000459	0.00529	1	03/31/2018 21:50	WG1092116
1,2,3-Trichlorobenzene	U		0.000324	0.00106	1	03/31/2018 21:50	WG1092116
1,2,4-Trichlorobenzene	U		0.000411	0.00106	1	03/31/2018 21:50	WG1092116
1,1,1-Trichloroethane	U	J3	0.000303	0.00106	1	03/31/2018 21:50	WG1092116
1,1,2-Trichloroethane	U		0.000293	0.00106	1	03/31/2018 21:50	WG1092116
Trichloroethene	0.000296	J J4	0.000295	0.00106	1	03/31/2018 21:50	WG1092116
Trichlorofluoromethane	U	J3	0.000404	0.00529	1	03/31/2018 21:50	WG1092116
1,2,3-Trichloropropane	U		0.000785	0.00265	1	03/31/2018 21:50	WG1092116
1,2,4-Trimethylbenzene	U		0.000223	0.00106	1	03/31/2018 21:50	WG1092116
1,2,3-Trimethylbenzene	U		0.000304	0.00106	1	03/31/2018 21:50	WG1092116
1,3,5-Trimethylbenzene	U		0.000282	0.00106	1	03/31/2018 21:50	WG1092116
Vinyl acetate	U	J3	0.00253	0.0106	1	03/31/2018 21:50	WG1092116
Vinyl chloride	0.00150	J3	0.000308	0.00106	1	03/31/2018 21:50	WG1092116
Xylenes, Total	U	J3	0.000739	0.00318	1	03/31/2018 21:50	WG1092116
(S) Toluene-d8	99.1			80.0-120		03/31/2018 21:50	WG1092116
(S) Dibromofluoromethane	106			74.0-131		03/31/2018 21:50	WG1092116
(S) 4-Bromofluorobenzene	101			64.0-132		03/31/2018 21:50	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.5		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	0.0133	J	J J3	0.0109	0.0547	1	03/31/2018 22:11	WG1092116
Acrylonitrile	U			0.00196	0.0109	1	03/31/2018 22:11	WG1092116
Benzene	U			0.000295	0.00109	1	03/31/2018 22:11	WG1092116
Bromobenzene	U			0.000311	0.00109	1	03/31/2018 22:11	WG1092116
Bromodichloromethane	U			0.000278	0.00109	1	03/31/2018 22:11	WG1092116
Bromochloromethane	U			0.000426	0.00547	1	03/31/2018 22:11	WG1092116
Bromoform	U			0.000464	0.00109	1	03/31/2018 22:11	WG1092116
Bromomethane	U		J3	0.00147	0.00547	1	03/31/2018 22:11	WG1092116
n-Butylbenzene	U		J3	0.000282	0.00109	1	03/31/2018 22:11	WG1092116
sec-Butylbenzene	U		J3	0.000220	0.00109	1	03/31/2018 22:11	WG1092116
tert-Butylbenzene	U		J3	0.000225	0.00109	1	03/31/2018 22:11	WG1092116
Carbon disulfide	0.000655	J	J J3	0.000242	0.00109	1	03/31/2018 22:11	WG1092116
Carbon tetrachloride	U		J3	0.000359	0.00109	1	03/31/2018 22:11	WG1092116
Chlorobenzene	U			0.000232	0.00109	1	03/31/2018 22:11	WG1092116
Chlorodibromomethane	U			0.000408	0.00109	1	03/31/2018 22:11	WG1092116
Chloroethane	U		J3	0.00103	0.00547	1	03/31/2018 22:11	WG1092116
Chloroform	U			0.000250	0.00547	1	03/31/2018 22:11	WG1092116
Chloromethane	U		J3	0.000410	0.00273	1	03/31/2018 22:11	WG1092116
2-Chlorotoluene	U			0.000329	0.00109	1	03/31/2018 22:11	WG1092116
4-Chlorotoluene	U			0.000262	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dibromo-3-Chloropropane	U			0.00115	0.00547	1	03/31/2018 22:11	WG1092116
1,2-Dibromoethane	U			0.000375	0.00109	1	03/31/2018 22:11	WG1092116
Dibromomethane	U			0.000418	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dichlorobenzene	U			0.000333	0.00109	1	03/31/2018 22:11	WG1092116
1,3-Dichlorobenzene	U			0.000261	0.00109	1	03/31/2018 22:11	WG1092116
1,4-Dichlorobenzene	U			0.000247	0.00109	1	03/31/2018 22:11	WG1092116
Dichlorodifluoromethane	U		J3	0.000780	0.00547	1	03/31/2018 22:11	WG1092116
1,1-Dichloroethane	U			0.000218	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dichloroethane	U			0.000290	0.00109	1	03/31/2018 22:11	WG1092116
1,1-Dichloroethene	0.000672	J	J J3	0.000331	0.00109	1	03/31/2018 22:11	WG1092116
cis-1,2-Dichloroethene	0.0243			0.000257	0.00109	1	03/31/2018 22:11	WG1092116
trans-1,2-Dichloroethene	0.00106	J	J J3	0.000289	0.00109	1	03/31/2018 22:11	WG1092116
1,2-Dichloropropane	U			0.000391	0.00109	1	03/31/2018 22:11	WG1092116
1,1-Dichloropropene	U			0.000347	0.00109	1	03/31/2018 22:11	WG1092116
1,3-Dichloropropane	U			0.000226	0.00109	1	03/31/2018 22:11	WG1092116
cis-1,3-Dichloropropene	U			0.000286	0.00109	1	03/31/2018 22:11	WG1092116
trans-1,3-Dichloropropene	U			0.000292	0.00109	1	03/31/2018 22:11	WG1092116
trans-1,4-Dichloro-2-butene	U			0.000851	0.00273	1	03/31/2018 22:11	WG1092116
2,2-Dichloropropane	U		J3	0.000305	0.00109	1	03/31/2018 22:11	WG1092116
Di-isopropyl ether	U			0.000271	0.00109	1	03/31/2018 22:11	WG1092116
Ethylbenzene	U		J3	0.000325	0.00109	1	03/31/2018 22:11	WG1092116
Hexachloro-1,3-butadiene	U		J3	0.000374	0.00109	1	03/31/2018 22:11	WG1092116
2-Hexanone	U			0.00150	0.0109	1	03/31/2018 22:11	WG1092116
n-Hexane	U		J3	0.000317	0.0109	1	03/31/2018 22:11	WG1092116
Iodomethane	U		J3	0.00277	0.0109	1	03/31/2018 22:11	WG1092116
Isopropylbenzene	U			0.000266	0.00109	1	03/31/2018 22:11	WG1092116
p-Isopropyltoluene	U		J3	0.000223	0.00109	1	03/31/2018 22:11	WG1092116
2-Butanone (MEK)	U		J3	0.00512	0.0109	1	03/31/2018 22:11	WG1092116
Methylene Chloride	U			0.00109	0.00547	1	03/31/2018 22:11	WG1092116
4-Methyl-2-pentanone (MIBK)	U			0.00206	0.0109	1	03/31/2018 22:11	WG1092116

JC 4/25/18

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 10:32

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000232	0.00109	1	03/31/2018 22:11	WG1092116
Naphthalene	U		0.00109	0.00547	1	03/31/2018 22:11	WG1092116
n-Propylbenzene	U		0.000225	0.00109	1	03/31/2018 22:11	WG1092116
Styrene	U		0.000256	0.00109	1	03/31/2018 22:11	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000289	0.00109	1	03/31/2018 22:11	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000399	0.00109	1	03/31/2018 22:11	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000399	0.00109	1	03/31/2018 22:11	WG1092116
Tetrachloroethene	0.00210	J3	0.000302	0.00109	1	03/31/2018 22:11	WG1092116
Toluene	U		0.000475	0.00547	1	03/31/2018 22:11	WG1092116
1,2,3-Trichlorobenzene	U		0.000335	0.00109	1	03/31/2018 22:11	WG1092116
1,2,4-Trichlorobenzene	U		0.000424	0.00109	1	03/31/2018 22:11	WG1092116
1,1,1-Trichloroethane	U	J3	0.000313	0.00109	1	03/31/2018 22:11	WG1092116
1,1,2-Trichloroethane	U		0.000303	0.00109	1	03/31/2018 22:11	WG1092116
Trichloroethene	U	J4	0.000305	0.00109	1	03/31/2018 22:11	WG1092116
Trichlorofluoromethane	U	J3	0.000418	0.00547	1	03/31/2018 22:11	WG1092116
1,2,3-Trichloropropane	U		0.000810	0.00273	1	03/31/2018 22:11	WG1092116
1,2,4-Trimethylbenzene	U		0.000231	0.00109	1	03/31/2018 22:11	WG1092116
1,2,3-Trimethylbenzene	U		0.000314	0.00109	1	03/31/2018 22:11	WG1092116
1,3,5-Trimethylbenzene	U		0.000291	0.00109	1	03/31/2018 22:11	WG1092116
Vinyl acetate	U	J3	0.00261	0.0109	1	03/31/2018 22:11	WG1092116
Vinyl chloride	0.00144	J3	0.000318	0.00109	1	03/31/2018 22:11	WG1092116
Xylenes, Total	U	J3	0.000763	0.00328	1	03/31/2018 22:11	WG1092116
(S) Toluene-d8	99.4			80.0-120		03/31/2018 22:11	WG1092116
(S) Dibromofluoromethane	108			74.0-131		03/31/2018 22:11	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 22:11	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.1		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0135	J JJ3	0.0115	0.0574	1	03/31/2018 22:32	WG1092116
Acrylonitrile	U		0.00206	0.0115	1	03/31/2018 22:32	WG1092116
Benzene	U		0.000310	0.00115	1	03/31/2018 22:32	WG1092116
Bromobenzene	U		0.000326	0.00115	1	03/31/2018 22:32	WG1092116
Bromodichloromethane	U		0.000292	0.00115	1	03/31/2018 22:32	WG1092116
Bromochloromethane	U		0.000448	0.00574	1	03/31/2018 22:32	WG1092116
Bromoform	U		0.000487	0.00115	1	03/31/2018 22:32	WG1092116
Bromomethane	U	J3	0.00154	0.00574	1	03/31/2018 22:32	WG1092116
n-Butylbenzene	U	J3	0.000296	0.00115	1	03/31/2018 22:32	WG1092116
sec-Butylbenzene	U	J3	0.000231	0.00115	1	03/31/2018 22:32	WG1092116
tert-Butylbenzene	U	J3	0.000237	0.00115	1	03/31/2018 22:32	WG1092116
Carbon disulfide	0.00116	J3	0.000254	0.00115	1	03/31/2018 22:32	WG1092116
Carbon tetrachloride	U	J3	0.000377	0.00115	1	03/31/2018 22:32	WG1092116
Chlorobenzene	U		0.000243	0.00115	1	03/31/2018 22:32	WG1092116
Chlorodibromomethane	U		0.000428	0.00115	1	03/31/2018 22:32	WG1092116
Chloroethane	U	J3	0.00109	0.00574	1	03/31/2018 22:32	WG1092116
Chloroform	U		0.000263	0.00574	1	03/31/2018 22:32	WG1092116
Chloromethane	U	J3	0.000431	0.00287	1	03/31/2018 22:32	WG1092116
2-Chlorotoluene	U		0.000346	0.00115	1	03/31/2018 22:32	WG1092116
4-Chlorotoluene	U		0.000276	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00574	1	03/31/2018 22:32	WG1092116
1,2-Dibromoethane	U		0.000394	0.00115	1	03/31/2018 22:32	WG1092116
Dibromomethane	U		0.000439	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dichlorobenzene	U		0.000350	0.00115	1	03/31/2018 22:32	WG1092116
1,3-Dichlorobenzene	U		0.000275	0.00115	1	03/31/2018 22:32	WG1092116
1,4-Dichlorobenzene	U		0.000260	0.00115	1	03/31/2018 22:32	WG1092116
Dichlorodifluoromethane	U	J3	0.000819	0.00574	1	03/31/2018 22:32	WG1092116
1,1-Dichloroethane	U		0.000229	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dichloroethane	U		0.000304	0.00115	1	03/31/2018 22:32	WG1092116
1,1-Dichloroethene	0.000446	J JJ3	0.000348	0.00115	1	03/31/2018 22:32	WG1092116
cis-1,2-Dichloroethene	0.0522		0.000270	0.00115	1	03/31/2018 22:32	WG1092116
trans-1,2-Dichloroethene	0.00211	J3	0.000303	0.00115	1	03/31/2018 22:32	WG1092116
1,2-Dichloropropane	U		0.000411	0.00115	1	03/31/2018 22:32	WG1092116
1,1-Dichloropropene	U		0.000364	0.00115	1	03/31/2018 22:32	WG1092116
1,3-Dichloropropane	U		0.000238	0.00115	1	03/31/2018 22:32	WG1092116
cis-1,3-Dichloropropene	U		0.000301	0.00115	1	03/31/2018 22:32	WG1092116
trans-1,3-Dichloropropene	U		0.000307	0.00115	1	03/31/2018 22:32	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000894	0.00287	1	03/31/2018 22:32	WG1092116
2,2-Dichloropropane	U	J3	0.000320	0.00115	1	03/31/2018 22:32	WG1092116
Di-isopropyl ether	U		0.000285	0.00115	1	03/31/2018 22:32	WG1092116
Ethylbenzene	U	J3	0.000341	0.00115	1	03/31/2018 22:32	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000393	0.00115	1	03/31/2018 22:32	WG1092116
2-Hexanone	U		0.00157	0.0115	1	03/31/2018 22:32	WG1092116
n-Hexane	U	J3	0.000333	0.0115	1	03/31/2018 22:32	WG1092116
Iodomethane	U	J3	0.00291	0.0115	1	03/31/2018 22:32	WG1092116
Isopropylbenzene	U		0.000279	0.00115	1	03/31/2018 22:32	WG1092116
p-Isopropyltoluene	U	J3	0.000234	0.00115	1	03/31/2018 22:32	WG1092116
2-Butanone (MEK)	U	J3	0.00538	0.0115	1	03/31/2018 22:32	WG1092116
Methylene Chloride	U		0.00115	0.00574	1	03/31/2018 22:32	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	03/31/2018 22:32	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 10:41

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	03/31/2018 22:32	WG1092116
Naphthalene	U		0.00115	0.00574	1	03/31/2018 22:32	WG1092116
n-Propylbenzene	U		0.000237	0.00115	1	03/31/2018 22:32	WG1092116
Styrene	U		0.000269	0.00115	1	03/31/2018 22:32	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000303	0.00115	1	03/31/2018 22:32	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	03/31/2018 22:32	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000419	0.00115	1	03/31/2018 22:32	WG1092116
Tetrachloroethene	0.0158	J3	0.000317	0.00115	1	03/31/2018 22:32	WG1092116
Toluene	U		0.000498	0.00574	1	03/31/2018 22:32	WG1092116
1,2,3-Trichlorobenzene	U		0.000351	0.00115	1	03/31/2018 22:32	WG1092116
1,2,4-Trichlorobenzene	U		0.000446	0.00115	1	03/31/2018 22:32	WG1092116
1,1,1-Trichloroethane	U	J3	0.000328	0.00115	1	03/31/2018 22:32	WG1092116
1,1,2-Trichloroethane	U		0.000318	0.00115	1	03/31/2018 22:32	WG1092116
Trichloroethene	0.00357	J4	0.000320	0.00115	1	03/31/2018 22:32	WG1092116
Trichlorofluoromethane	U	J3	0.000439	0.00574	1	03/31/2018 22:32	WG1092116
1,2,3-Trichloropropane	U		0.000851	0.00287	1	03/31/2018 22:32	WG1092116
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	03/31/2018 22:32	WG1092116
1,2,3-Trimethylbenzene	U		0.000330	0.00115	1	03/31/2018 22:32	WG1092116
1,3,5-Trimethylbenzene	U		0.000306	0.00115	1	03/31/2018 22:32	WG1092116
Vinyl acetate	U	J3	0.00275	0.0115	1	03/31/2018 22:32	WG1092116
Vinyl chloride	0.00668	J3	0.000334	0.00115	1	03/31/2018 22:32	WG1092116
Xylenes, Total	U	J3	0.000802	0.00345	1	03/31/2018 22:32	WG1092116
(S) Toluene-d8	99.2			80.0-120		03/31/2018 22:32	WG1092116
(S) Dibromofluoromethane	108			74.0-131		03/31/2018 22:32	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 22:32	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	04/04/2018 14:42	WG1093163

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	J3	0.0110	0.0551	1	03/31/2018 22:53	WG1092116
Acrylonitrile	U		0.00197	0.0110	1	03/31/2018 22:53	WG1092116
Benzene	U		0.000298	0.00110	1	03/31/2018 22:53	WG1092116
Bromobenzene	U		0.000313	0.00110	1	03/31/2018 22:53	WG1092116
Bromodichloromethane	U		0.000280	0.00110	1	03/31/2018 22:53	WG1092116
Bromochloromethane	U		0.000430	0.00551	1	03/31/2018 22:53	WG1092116
Bromoform	U		0.000468	0.00110	1	03/31/2018 22:53	WG1092116
Bromomethane	U	J3	0.00148	0.00551	1	03/31/2018 22:53	WG1092116
n-Butylbenzene	U	J3	0.000285	0.00110	1	03/31/2018 22:53	WG1092116
sec-Butylbenzene	U	J3	0.000222	0.00110	1	03/31/2018 22:53	WG1092116
tert-Butylbenzene	U	J3	0.000227	0.00110	1	03/31/2018 22:53	WG1092116
Carbon disulfide	0.000822	J J3	0.000244	0.00110	1	03/31/2018 22:53	WG1092116
Carbon tetrachloride	U	J3	0.000362	0.00110	1	03/31/2018 22:53	WG1092116
Chlorobenzene	U		0.000234	0.00110	1	03/31/2018 22:53	WG1092116
Chlorodibromomethane	U		0.000411	0.00110	1	03/31/2018 22:53	WG1092116
Chloroethane	U	J3	0.00104	0.00551	1	03/31/2018 22:53	WG1092116
Chloroform	U		0.000253	0.00551	1	03/31/2018 22:53	WG1092116
Chloromethane	U	J3	0.000414	0.00276	1	03/31/2018 22:53	WG1092116
2-Chlorotoluene	U		0.000332	0.00110	1	03/31/2018 22:53	WG1092116
4-Chlorotoluene	U		0.000265	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	03/31/2018 22:53	WG1092116
1,2-Dibromoethane	U		0.000378	0.00110	1	03/31/2018 22:53	WG1092116
Dibromomethane	U		0.000421	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dichlorobenzene	U		0.000336	0.00110	1	03/31/2018 22:53	WG1092116
1,3-Dichlorobenzene	U		0.000264	0.00110	1	03/31/2018 22:53	WG1092116
1,4-Dichlorobenzene	U		0.000249	0.00110	1	03/31/2018 22:53	WG1092116
Dichlorodifluoromethane	U	J3	0.000786	0.00551	1	03/31/2018 22:53	WG1092116
1,1-Dichloroethane	U		0.000219	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dichloroethane	U		0.000292	0.00110	1	03/31/2018 22:53	WG1092116
1,1-Dichloroethene	0.000845	J J3	0.000334	0.00110	1	03/31/2018 22:53	WG1092116
cis-1,2-Dichloroethene	2.00		0.00648	0.0276	25	04/06/2018 00:44	WG1092116
trans-1,2-Dichloroethene	0.0665	J3	0.000291	0.00110	1	03/31/2018 22:53	WG1092116
1,2-Dichloropropane	U		0.000395	0.00110	1	03/31/2018 22:53	WG1092116
1,1-Dichloropropene	U		0.000350	0.00110	1	03/31/2018 22:53	WG1092116
1,3-Dichloropropane	U		0.000228	0.00110	1	03/31/2018 22:53	WG1092116
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	03/31/2018 22:53	WG1092116
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	03/31/2018 22:53	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000858	0.00276	1	03/31/2018 22:53	WG1092116
2,2-Dichloropropane	U	J3	0.000308	0.00110	1	03/31/2018 22:53	WG1092116
Di-isopropyl ether	U		0.000274	0.00110	1	03/31/2018 22:53	WG1092116
Ethylbenzene	U	J3	0.000328	0.00110	1	03/31/2018 22:53	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000377	0.00110	1	03/31/2018 22:53	WG1092116
2-Hexanone	U		0.00151	0.0110	1	03/31/2018 22:53	WG1092116
n-Hexane	U	J3	0.000320	0.0110	1	03/31/2018 22:53	WG1092116
Iodomethane	U	J3	0.00279	0.0110	1	03/31/2018 22:53	WG1092116
Isopropylbenzene	U		0.000268	0.00110	1	03/31/2018 22:53	WG1092116
p-Isopropyltoluene	U	J3	0.000225	0.00110	1	03/31/2018 22:53	WG1092116
2-Butanone (MEK)	U	J3	0.00516	0.0110	1	03/31/2018 22:53	WG1092116
Methylene Chloride	U		0.00110	0.00551	1	03/31/2018 22:53	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	03/31/2018 22:53	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 10:49

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	03/31/2018 22:53	WG1092116
Naphthalene	U		0.00110	0.00551	1	03/31/2018 22:53	WG1092116
n-Propylbenzene	U		0.000227	0.00110	1	03/31/2018 22:53	WG1092116
Styrene	U		0.000258	0.00110	1	03/31/2018 22:53	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	03/31/2018 22:53	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	03/31/2018 22:53	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000403	0.00110	1	03/31/2018 22:53	WG1092116
Tetrachloroethene	0.00131	J3	0.000304	0.00110	1	03/31/2018 22:53	WG1092116
Toluene	U		0.000479	0.00551	1	03/31/2018 22:53	WG1092116
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	03/31/2018 22:53	WG1092116
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	03/31/2018 22:53	WG1092116
1,1,1-Trichloroethane	U	J3	0.000315	0.00110	1	03/31/2018 22:53	WG1092116
1,1,2-Trichloroethane	U		0.000305	0.00110	1	03/31/2018 22:53	WG1092116
Trichloroethene	0.000382	J JJ4	0.000308	0.00110	1	03/31/2018 22:53	WG1092116
Trichlorofluoromethane	U	J3	0.000421	0.00551	1	03/31/2018 22:53	WG1092116
1,2,3-Trichloropropane	U		0.000817	0.00276	1	03/31/2018 22:53	WG1092116
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	03/31/2018 22:53	WG1092116
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	03/31/2018 22:53	WG1092116
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	03/31/2018 22:53	WG1092116
Vinyl acetate	U	J3	0.00264	0.0110	1	03/31/2018 22:53	WG1092116
Vinyl chloride	1.35	J3	0.00803	0.0276	25	04/06/2018 00:44	WG1092116
Xylenes, Total	U	J3	0.000770	0.00331	1	03/31/2018 22:53	WG1092116
(S) Toluene-d8	97.8			80.0-120		03/31/2018 22:53	WG1092116
(S) Toluene-d8	97.5			80.0-120		04/06/2018 00:44	WG1092116
(S) Dibromofluoromethane	111			74.0-131		03/31/2018 22:53	WG1092116
(S) Dibromofluoromethane	95.2			74.0-131		04/06/2018 00:44	WG1092116
(S) 4-Bromofluorobenzene	103			64.0-132		03/31/2018 22:53	WG1092116
(S) 4-Bromofluorobenzene	98.8			64.0-132		04/06/2018 00:44	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	U	J3	0.281	1.41	25	04/01/2018 01:19	WG1092116	
Acrylonitrile	U	J3	0.0504	0.281	25	04/01/2018 01:19	WG1092116	
Benzene	U	J3	0.00759	0.0281	25	04/01/2018 01:19	WG1092116	
Bromobenzene	U	J3	0.00799	0.0281	25	04/01/2018 01:19	WG1092116	
Bromodichloromethane	U	J3 J5	0.00714	0.0281	25	04/01/2018 01:19	WG1092116	
Bromochloromethane	U	J3 J5	0.0110	0.141	25	04/01/2018 01:19	WG1092116	
Bromoform	U	J3	0.0119	0.0281	25	04/01/2018 01:19	WG1092116	
Bromomethane	U	J3	0.0377	0.141	25	04/01/2018 01:19	WG1092116	
n-Butylbenzene	U	J3	0.00726	0.0281	25	04/01/2018 01:19	WG1092116	
sec-Butylbenzene	U	J3	0.00565	0.0281	25	04/01/2018 01:19	WG1092116	
tert-Butylbenzene	U	J3	0.00579	0.0281	25	04/01/2018 01:19	WG1092116	
Carbon disulfide	U	J3 J5	0.00621	0.0281	25	04/01/2018 01:19	WG1092116	
Carbon tetrachloride	U	J3	0.00923	0.0281	25	04/01/2018 01:19	WG1092116	
Chlorobenzene	U	J3	0.00596	0.0281	25	04/01/2018 01:19	WG1092116	
Chlorodibromomethane	U	J3	0.0105	0.0281	25	04/01/2018 01:19	WG1092116	
Chloroethane	U	J3	0.0266	0.141	25	04/01/2018 01:19	WG1092116	
Chloroform	U	J3	0.00644	0.141	25	04/01/2018 01:19	WG1092116	
Chloromethane	U	J3	0.0106	0.0703	25	04/01/2018 01:19	WG1092116	
2-Chlorotoluene	U	J3	0.00846	0.0281	25	04/01/2018 01:19	WG1092116	
4-Chlorotoluene	U	J3	0.00675	0.0281	25	04/01/2018 01:19	WG1092116	
1,2-Dibromo-3-Chloropropane	U	J3	0.0295	0.141	25	04/01/2018 01:19	WG1092116	
1,2-Dibromoethane	U	J3	0.00965	0.0281	25	04/01/2018 01:19	WG1092116	
Dibromomethane	U	J3 J5	0.0107	0.0281	25	04/01/2018 01:19	WG1092116	
1,2-Dichlorobenzene	U	J3	0.00857	0.0281	25	04/01/2018 01:19	WG1092116	
1,3-Dichlorobenzene	U	J3	0.00673	0.0281	25	04/01/2018 01:19	WG1092116	
1,4-Dichlorobenzene	U	J3	0.00636	0.0281	25	04/01/2018 01:19	WG1092116	
Dichlorodifluoromethane	U	J3	0.0200	0.141	25	04/01/2018 01:19	WG1092116	
1,1-Dichloroethane	U	J3	0.00560	0.0281	25	04/01/2018 01:19	WG1092116	
1,2-Dichloroethane	U	J3	0.00745	0.0281	25	04/01/2018 01:19	WG1092116	
1,1-Dichloroethene	U	J3	0.00853	0.0281	25	04/01/2018 01:19	WG1092116	
cis-1,2-Dichloroethene	0.886		0.00662	0.0281	25	04/01/2018 01:19	WG1092116	
trans-1,2-Dichloroethene	0.0882	J	J3 J5	0.00743	0.0281	25	04/01/2018 01:19	WG1092116
1,2-Dichloropropane	U	J3	0.0101	0.0281	25	04/01/2018 01:19	WG1092116	
1,1-Dichloropropene	U	J3	0.00891	0.0281	25	04/01/2018 01:19	WG1092116	
1,3-Dichloropropane	U	J3	0.00583	0.0281	25	04/01/2018 01:19	WG1092116	
cis-1,3-Dichloropropene	U	J3	0.00737	0.0281	25	04/01/2018 01:19	WG1092116	
trans-1,3-Dichloropropene	U	J3	0.00752	0.0281	25	04/01/2018 01:19	WG1092116	
trans-1,4-Dichloro-2-butene	U	J3	0.0218	0.0703	25	04/01/2018 01:19	WG1092116	
2,2-Dichloropropane	U	J3	0.00785	0.0281	25	04/01/2018 01:19	WG1092116	
Di-isopropyl ether	U	J3	0.00698	0.0281	25	04/01/2018 01:19	WG1092116	
Ethylbenzene	U	J3	0.00835	0.0281	25	04/01/2018 01:19	WG1092116	
Hexachloro-1,3-butadiene	U	J3	0.00962	0.0281	25	04/01/2018 01:19	WG1092116	
2-Hexanone	U	J3	0.0385	0.281	25	04/01/2018 01:19	WG1092116	
n-Hexane	U	J3 J5	0.00816	0.281	25	04/01/2018 01:19	WG1092116	
Iodomethane	U	J3	0.0711	0.281	25	04/01/2018 01:19	WG1092116	
Isopropylbenzene	U	J3	0.00684	0.0281	25	04/01/2018 01:19	WG1092116	
p-Isopropyltoluene	U	J3	0.00574	0.0281	25	04/01/2018 01:19	WG1092116	
2-Butanone (MEK)	U	J3	0.132	0.281	25	04/01/2018 01:19	WG1092116	
Methylene Chloride	U	J3 J5	0.0281	0.141	25	04/01/2018 01:19	WG1092116	
4-Methyl-2-pentanone (MIBK)	U	J3	0.0529	0.281	25	04/01/2018 01:19	WG1092116	

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 10:55

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U	J3 J5	0.00596	0.0281	25	04/01/2018 01:19	WG1092116
Naphthalene	U	J3	0.0281	0.141	25	04/01/2018 01:19	WG1092116
n-Propylbenzene	U	J3	0.00579	0.0281	25	04/01/2018 01:19	WG1092116
Styrene	U	J3	0.00658	0.0281	25	04/01/2018 01:19	WG1092116
1,1,1,2-Tetrachloroethane	U	J3	0.00743	0.0281	25	04/01/2018 01:19	WG1092116
1,1,2,2-Tetrachloroethane	U	J3	0.0103	0.0281	25	04/01/2018 01:19	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.0103	0.0281	25	04/01/2018 01:19	WG1092116
Tetrachloroethene	0.237	J3	0.00776	0.0281	25	04/01/2018 01:19	WG1092116
Toluene	U	J3	0.0122	0.141	25	04/01/2018 01:19	WG1092116
1,2,3-Trichlorobenzene	U	J3	0.00861	0.0281	25	04/01/2018 01:19	WG1092116
1,2,4-Trichlorobenzene	U	J3	0.0109	0.0281	25	04/01/2018 01:19	WG1092116
1,1,1-Trichloroethane	U	J3	0.00804	0.0281	25	04/01/2018 01:19	WG1092116
1,1,2-Trichloroethane	U	J3	0.00779	0.0281	25	04/01/2018 01:19	WG1092116
Trichloroethene	0.0208	J J3 J4 J5	0.00785	0.0281	25	04/01/2018 01:19	WG1092116
Trichlorofluoromethane	U	J3	0.0107	0.141	25	04/01/2018 01:19	WG1092116
1,2,3-Trichloropropane	U	J3	0.0208	0.0703	25	04/01/2018 01:19	WG1092116
1,2,4-Trimethylbenzene	U	J3	0.00594	0.0281	25	04/01/2018 01:19	WG1092116
1,2,3-Trimethylbenzene	U	J3	0.00808	0.0281	25	04/01/2018 01:19	WG1092116
1,3,5-Trimethylbenzene	U	J3	0.00748	0.0281	25	04/01/2018 01:19	WG1092116
Vinyl acetate	U	J3	0.0673	0.281	25	04/01/2018 01:19	WG1092116
Vinyl chloride	0.256	J3	0.00819	0.0281	25	04/01/2018 01:19	WG1092116
Xylenes, Total	U	J3	0.0196	0.0844	25	04/01/2018 01:19	WG1092116
(S) Toluene-d8	99.5			80.0-120		04/01/2018 01:19	WG1092116
(S) Dibromofluoromethane	102			74.0-131		04/01/2018 01:19	WG1092116
(S) 4-Bromofluorobenzene	102			64.0-132		04/01/2018 01:19	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L981889-09 WG1092116: Cannot be analyzed at a lower dilution due to high levels of target analytes.

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0273	J JJ3	0.0113	0.0563	1	03/31/2018 23:13	WG1092116
Acrylonitrile	U		0.00201	0.0113	1	03/31/2018 23:13	WG1092116
Benzene	U		0.000304	0.00113	1	03/31/2018 23:13	WG1092116
Bromobenzene	U		0.000320	0.00113	1	03/31/2018 23:13	WG1092116
Bromodichloromethane	U		0.000286	0.00113	1	03/31/2018 23:13	WG1092116
Bromochloromethane	U		0.000439	0.00563	1	03/31/2018 23:13	WG1092116
Bromoform	U		0.000477	0.00113	1	03/31/2018 23:13	WG1092116
Bromomethane	U	J3	0.00151	0.00563	1	03/31/2018 23:13	WG1092116
n-Butylbenzene	U	J3	0.000290	0.00113	1	03/31/2018 23:13	WG1092116
sec-Butylbenzene	U	J3	0.000226	0.00113	1	03/31/2018 23:13	WG1092116
tert-Butylbenzene	U	J3	0.000232	0.00113	1	03/31/2018 23:13	WG1092116
Carbon disulfide	0.00162	J3	0.000249	0.00113	1	03/31/2018 23:13	WG1092116
Carbon tetrachloride	U	J3	0.000369	0.00113	1	03/31/2018 23:13	WG1092116
Chlorobenzene	U		0.000239	0.00113	1	03/31/2018 23:13	WG1092116
Chlorodibromomethane	U		0.000420	0.00113	1	03/31/2018 23:13	WG1092116
Chloroethane	U	J3	0.00106	0.00563	1	03/31/2018 23:13	WG1092116
Chloroform	U		0.000258	0.00563	1	03/31/2018 23:13	WG1092116
Chloromethane	0.00475	J3	0.000422	0.00281	1	03/31/2018 23:13	WG1092116
2-Chlorotoluene	U		0.000339	0.00113	1	03/31/2018 23:13	WG1092116
4-Chlorotoluene	U		0.000270	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00563	1	03/31/2018 23:13	WG1092116
1,2-Dibromoethane	U		0.000386	0.00113	1	03/31/2018 23:13	WG1092116
Dibromomethane	U		0.000430	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dichlorobenzene	U		0.000343	0.00113	1	03/31/2018 23:13	WG1092116
1,3-Dichlorobenzene	U		0.000269	0.00113	1	03/31/2018 23:13	WG1092116
1,4-Dichlorobenzene	U		0.000254	0.00113	1	03/31/2018 23:13	WG1092116
Dichlorodifluoromethane	U	J3	0.000802	0.00563	1	03/31/2018 23:13	WG1092116
1,1-Dichloroethane	U		0.000224	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dichloroethane	U		0.000298	0.00113	1	03/31/2018 23:13	WG1092116
1,1-Dichloroethene	0.00376	J3	0.000341	0.00113	1	03/31/2018 23:13	WG1092116
cis-1,2-Dichloroethene	5.01		0.0529	0.225	200	04/06/2018 14:19	WG1092116
trans-1,2-Dichloroethene	0.0619	J3	0.000297	0.00113	1	03/31/2018 23:13	WG1092116
1,2-Dichloropropane	U		0.000403	0.00113	1	03/31/2018 23:13	WG1092116
1,1-Dichloropropene	U		0.000357	0.00113	1	03/31/2018 23:13	WG1092116
1,3-Dichloropropane	U		0.000233	0.00113	1	03/31/2018 23:13	WG1092116
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	03/31/2018 23:13	WG1092116
trans-1,3-Dichloropropene	U		0.000301	0.00113	1	03/31/2018 23:13	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000876	0.00281	1	03/31/2018 23:13	WG1092116
2,2-Dichloropropane	U	J3	0.000314	0.00113	1	03/31/2018 23:13	WG1092116
Di-isopropyl ether	U		0.000279	0.00113	1	03/31/2018 23:13	WG1092116
Ethylbenzene	U	J3	0.000334	0.00113	1	03/31/2018 23:13	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000385	0.00113	1	03/31/2018 23:13	WG1092116
2-Hexanone	U		0.00154	0.0113	1	03/31/2018 23:13	WG1092116
n-Hexane	U	J3	0.000326	0.0113	1	03/31/2018 23:13	WG1092116
Iodomethane	U	J3	0.00285	0.0113	1	03/31/2018 23:13	WG1092116
Isopropylbenzene	U		0.000273	0.00113	1	03/31/2018 23:13	WG1092116
p-Isopropyltoluene	U	J3	0.000230	0.00113	1	03/31/2018 23:13	WG1092116
2-Butanone (MEK)	0.00730	J JJ3	0.00527	0.0113	1	03/31/2018 23:13	WG1092116
Methylene Chloride	U		0.00113	0.00563	1	03/31/2018 23:13	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	03/31/2018 23:13	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:02

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	03/31/2018 23:13	WG1092116
Naphthalene	U		0.00113	0.00563	1	03/31/2018 23:13	WG1092116
n-Propylbenzene	U		0.000232	0.00113	1	03/31/2018 23:13	WG1092116
Styrene	U		0.000263	0.00113	1	03/31/2018 23:13	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000297	0.00113	1	03/31/2018 23:13	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	03/31/2018 23:13	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000411	0.00113	1	03/31/2018 23:13	WG1092116
Tetrachloroethene	0.0323	J3	0.000311	0.00113	1	03/31/2018 23:13	WG1092116
Toluene	U		0.000488	0.00563	1	03/31/2018 23:13	WG1092116
1,2,3-Trichlorobenzene	U		0.000344	0.00113	1	03/31/2018 23:13	WG1092116
1,2,4-Trichlorobenzene	U		0.000437	0.00113	1	03/31/2018 23:13	WG1092116
1,1,1-Trichloroethane	U	J3	0.000322	0.00113	1	03/31/2018 23:13	WG1092116
1,1,2-Trichloroethane	U		0.000312	0.00113	1	03/31/2018 23:13	WG1092116
Trichloroethene	0.0212	J4	0.000314	0.00113	1	03/31/2018 23:13	WG1092116
Trichlorofluoromethane	U	J3	0.000430	0.00563	1	03/31/2018 23:13	WG1092116
1,2,3-Trichloropropane	U		0.000834	0.00281	1	03/31/2018 23:13	WG1092116
1,2,4-Trimethylbenzene	U		0.000237	0.00113	1	03/31/2018 23:13	WG1092116
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	03/31/2018 23:13	WG1092116
1,3,5-Trimethylbenzene	U		0.000299	0.00113	1	03/31/2018 23:13	WG1092116
Vinyl acetate	U	J3	0.00269	0.0113	1	03/31/2018 23:13	WG1092116
Vinyl chloride	0.858	J3	0.0164	0.0563	50	04/06/2018 01:05	WG1092116
Xylenes, Total	U	J3	0.000786	0.00338	1	03/31/2018 23:13	WG1092116
(S) Toluene-d8	101			80.0-120		03/31/2018 23:13	WG1092116
(S) Toluene-d8	104			80.0-120		04/06/2018 14:19	WG1092116
(S) Toluene-d8	93.2			80.0-120		04/06/2018 01:05	WG1092116
(S) Dibromofluoromethane	102			74.0-131		04/06/2018 14:19	WG1092116
(S) Dibromofluoromethane	110			74.0-131		03/31/2018 23:13	WG1092116
(S) Dibromofluoromethane	93.6			74.0-131		04/06/2018 01:05	WG1092116
(S) 4-Bromofluorobenzene	106			64.0-132		03/31/2018 23:13	WG1092116
(S) 4-Bromofluorobenzene	99.7			64.0-132		04/06/2018 14:19	WG1092116
(S) 4-Bromofluorobenzene	95.3			64.0-132		04/06/2018 01:05	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.4		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	0.0285	J	J J3	0.0111	0.0553	1	03/31/2018 23:34	WG1092116
Acrylonitrile	U			0.00198	0.0111	1	03/31/2018 23:34	WG1092116
Benzene	U			0.000299	0.00111	1	03/31/2018 23:34	WG1092116
Bromobenzene	U			0.000314	0.00111	1	03/31/2018 23:34	WG1092116
Bromodichloromethane	U			0.000281	0.00111	1	03/31/2018 23:34	WG1092116
Bromochloromethane	U			0.000431	0.00553	1	03/31/2018 23:34	WG1092116
Bromoform	U			0.000469	0.00111	1	03/31/2018 23:34	WG1092116
Bromomethane	U		J3	0.00148	0.00553	1	03/31/2018 23:34	WG1092116
n-Butylbenzene	U		J3	0.000285	0.00111	1	03/31/2018 23:34	WG1092116
sec-Butylbenzene	U		J3	0.000222	0.00111	1	03/31/2018 23:34	WG1092116
tert-Butylbenzene	U		J3	0.000228	0.00111	1	03/31/2018 23:34	WG1092116
Carbon disulfide	0.00124		J3	0.000244	0.00111	1	03/31/2018 23:34	WG1092116
Carbon tetrachloride	U		J3	0.000363	0.00111	1	03/31/2018 23:34	WG1092116
Chlorobenzene	U			0.000234	0.00111	1	03/31/2018 23:34	WG1092116
Chlorodibromomethane	U			0.000413	0.00111	1	03/31/2018 23:34	WG1092116
Chloroethane	U		J3	0.00105	0.00553	1	03/31/2018 23:34	WG1092116
Chloroform	U			0.000253	0.00553	1	03/31/2018 23:34	WG1092116
Chloromethane	0.000967	J	J J3	0.000415	0.00276	1	03/31/2018 23:34	WG1092116
2-Chlorotoluene	U			0.000333	0.00111	1	03/31/2018 23:34	WG1092116
4-Chlorotoluene	U			0.000265	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dibromo-3-Chloropropane	U			0.00116	0.00553	1	03/31/2018 23:34	WG1092116
1,2-Dibromoethane	U			0.000379	0.00111	1	03/31/2018 23:34	WG1092116
Dibromomethane	U			0.000422	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dichlorobenzene	U			0.000337	0.00111	1	03/31/2018 23:34	WG1092116
1,3-Dichlorobenzene	U			0.000264	0.00111	1	03/31/2018 23:34	WG1092116
1,4-Dichlorobenzene	U			0.000250	0.00111	1	03/31/2018 23:34	WG1092116
Dichlorodifluoromethane	U		J3	0.000789	0.00553	1	03/31/2018 23:34	WG1092116
1,1-Dichloroethane	U			0.000220	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dichloroethane	U			0.000293	0.00111	1	03/31/2018 23:34	WG1092116
1,1-Dichloroethene	0.00268		J3	0.000335	0.00111	1	03/31/2018 23:34	WG1092116
cis-1,2-Dichloroethene	4.57			0.0130	0.0553	50	04/06/2018 01:26	WG1092116
trans-1,2-Dichloroethene	0.0339		J3	0.000292	0.00111	1	03/31/2018 23:34	WG1092116
1,2-Dichloropropane	U			0.000396	0.00111	1	03/31/2018 23:34	WG1092116
1,1-Dichloropropene	U			0.000351	0.00111	1	03/31/2018 23:34	WG1092116
1,3-Dichloropropane	U			0.000229	0.00111	1	03/31/2018 23:34	WG1092116
cis-1,3-Dichloropropene	U			0.000290	0.00111	1	03/31/2018 23:34	WG1092116
trans-1,3-Dichloropropene	U			0.000295	0.00111	1	03/31/2018 23:34	WG1092116
trans-1,4-Dichloro-2-butene	U			0.000860	0.00276	1	03/31/2018 23:34	WG1092116
2,2-Dichloropropane	U		J3	0.000309	0.00111	1	03/31/2018 23:34	WG1092116
Di-isopropyl ether	U			0.000274	0.00111	1	03/31/2018 23:34	WG1092116
Ethylbenzene	U		J3	0.000328	0.00111	1	03/31/2018 23:34	WG1092116
Hexachloro-1,3-butadiene	U		J3	0.000378	0.00111	1	03/31/2018 23:34	WG1092116
2-Hexanone	U			0.00152	0.0111	1	03/31/2018 23:34	WG1092116
n-Hexane	U		J3	0.000321	0.0111	1	03/31/2018 23:34	WG1092116
Iodomethane	U		J3	0.00280	0.0111	1	03/31/2018 23:34	WG1092116
Isopropylbenzene	U			0.000269	0.00111	1	03/31/2018 23:34	WG1092116
p-Isopropyltoluene	U		J3	0.000226	0.00111	1	03/31/2018 23:34	WG1092116
2-Butanone (MEK)	U		J3	0.00518	0.0111	1	03/31/2018 23:34	WG1092116
Methylene Chloride	U			0.00111	0.00553	1	03/31/2018 23:34	WG1092116
4-Methyl-2-pentanone (MIBK)	U			0.00208	0.0111	1	03/31/2018 23:34	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:14

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.0011	1	03/31/2018 23:34	WG1092116
Naphthalene	U		0.0011	0.00553	1	03/31/2018 23:34	WG1092116
n-Propylbenzene	U		0.000228	0.0011	1	03/31/2018 23:34	WG1092116
Styrene	U		0.000259	0.0011	1	03/31/2018 23:34	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000292	0.0011	1	03/31/2018 23:34	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000404	0.0011	1	03/31/2018 23:34	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000404	0.0011	1	03/31/2018 23:34	WG1092116
Tetrachloroethene	0.0352	J3	0.000305	0.0011	1	03/31/2018 23:34	WG1092116
Toluene	U		0.000480	0.00553	1	03/31/2018 23:34	WG1092116
1,2,3-Trichlorobenzene	U		0.000338	0.0011	1	03/31/2018 23:34	WG1092116
1,2,4-Trichlorobenzene	U		0.000429	0.0011	1	03/31/2018 23:34	WG1092116
1,1,1-Trichloroethane	U	J3	0.000316	0.0011	1	03/31/2018 23:34	WG1092116
1,1,2-Trichloroethane	U		0.000306	0.0011	1	03/31/2018 23:34	WG1092116
Trichloroethene	0.0107	J4	0.000309	0.0011	1	03/31/2018 23:34	WG1092116
Trichlorofluoromethane	U	J3	0.000422	0.00553	1	03/31/2018 23:34	WG1092116
1,2,3-Trichloropropane	U		0.000819	0.00276	1	03/31/2018 23:34	WG1092116
1,2,4-Trimethylbenzene	U		0.000233	0.0011	1	03/31/2018 23:34	WG1092116
1,2,3-Trimethylbenzene	U		0.000317	0.0011	1	03/31/2018 23:34	WG1092116
1,3,5-Trimethylbenzene	U		0.000294	0.0011	1	03/31/2018 23:34	WG1092116
Vinyl acetate	U	J3	0.00264	0.011	1	03/31/2018 23:34	WG1092116
Vinyl chloride	0.0824	J3	0.000322	0.0011	1	03/31/2018 23:34	WG1092116
Xylenes, Total	U	J3	0.000772	0.00332	1	03/31/2018 23:34	WG1092116
(S) Toluene-d8	107			80.0-120		04/06/2018 01:26	WG1092116
(S) Toluene-d8	99.1			80.0-120		03/31/2018 23:34	WG1092116
(S) Dibromofluoromethane	109			74.0-131		03/31/2018 23:34	WG1092116
(S) Dibromofluoromethane	93.0			74.0-131		04/06/2018 01:26	WG1092116
(S) 4-Bromofluorobenzene	98.2			64.0-132		04/06/2018 01:26	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		03/31/2018 23:34	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.8		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0177	J J3	0.0110	0.0551	1	03/31/2018 23:55	WG1092116
Acrylonitrile	U		0.00197	0.0110	1	03/31/2018 23:55	WG1092116
Benzene	U		0.000297	0.00110	1	03/31/2018 23:55	WG1092116
Bromobenzene	U		0.000313	0.00110	1	03/31/2018 23:55	WG1092116
Bromodichloromethane	U		0.000280	0.00110	1	03/31/2018 23:55	WG1092116
Bromochloromethane	U		0.000429	0.00551	1	03/31/2018 23:55	WG1092116
Bromoform	U		0.000467	0.00110	1	03/31/2018 23:55	WG1092116
Bromomethane	U	J3	0.00148	0.00551	1	03/31/2018 23:55	WG1092116
n-Butylbenzene	U	J3	0.000284	0.00110	1	03/31/2018 23:55	WG1092116
sec-Butylbenzene	U	J3	0.000221	0.00110	1	03/31/2018 23:55	WG1092116
tert-Butylbenzene	U	J3	0.000227	0.00110	1	03/31/2018 23:55	WG1092116
Carbon disulfide	0.00270	J3	0.000243	0.00110	1	03/31/2018 23:55	WG1092116
Carbon tetrachloride	U	J3	0.000361	0.00110	1	03/31/2018 23:55	WG1092116
Chlorobenzene	U		0.000233	0.00110	1	03/31/2018 23:55	WG1092116
Chlorodibromomethane	U		0.000411	0.00110	1	03/31/2018 23:55	WG1092116
Chloroethane	U	J3	0.00104	0.00551	1	03/31/2018 23:55	WG1092116
Chloroform	U		0.000252	0.00551	1	03/31/2018 23:55	WG1092116
Chloromethane	U	J3	0.000413	0.00275	1	03/31/2018 23:55	WG1092116
2-Chlorotoluene	U		0.000331	0.00110	1	03/31/2018 23:55	WG1092116
4-Chlorotoluene	U		0.000264	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	03/31/2018 23:55	WG1092116
1,2-Dibromoethane	U		0.000378	0.00110	1	03/31/2018 23:55	WG1092116
Dibromomethane	U		0.000421	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dichlorobenzene	U		0.000336	0.00110	1	03/31/2018 23:55	WG1092116
1,3-Dichlorobenzene	U		0.000263	0.00110	1	03/31/2018 23:55	WG1092116
1,4-Dichlorobenzene	U		0.000249	0.00110	1	03/31/2018 23:55	WG1092116
Dichlorodifluoromethane	U	J3	0.000785	0.00551	1	03/31/2018 23:55	WG1092116
1,1-Dichloroethane	U		0.000219	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dichloroethane	U		0.000292	0.00110	1	03/31/2018 23:55	WG1092116
1,1-Dichloroethene	0.00501	J3	0.000334	0.00110	1	03/31/2018 23:55	WG1092116
cis-1,2-Dichloroethene	6.54		0.259	1.10	1000	04/06/2018 14:58	WG1092116
trans-1,2-Dichloroethene	0.0502	J3	0.000291	0.00110	1	03/31/2018 23:55	WG1092116
1,2-Dichloropropane	U		0.000394	0.00110	1	03/31/2018 23:55	WG1092116
1,1-Dichloropropene	U		0.000349	0.00110	1	03/31/2018 23:55	WG1092116
1,3-Dichloropropane	U		0.000228	0.00110	1	03/31/2018 23:55	WG1092116
cis-1,3-Dichloropropene	U		0.000288	0.00110	1	03/31/2018 23:55	WG1092116
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	03/31/2018 23:55	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000857	0.00275	1	03/31/2018 23:55	WG1092116
2,2-Dichloropropane	U	J3	0.000307	0.00110	1	03/31/2018 23:55	WG1092116
Di-isopropyl ether	U		0.000273	0.00110	1	03/31/2018 23:55	WG1092116
Ethylbenzene	U	J3	0.000327	0.00110	1	03/31/2018 23:55	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000377	0.00110	1	03/31/2018 23:55	WG1092116
2-Hexanone	U		0.00151	0.0110	1	03/31/2018 23:55	WG1092116
n-Hexane	U	J3	0.000319	0.0110	1	03/31/2018 23:55	WG1092116
Iodomethane	U	J3	0.00279	0.0110	1	03/31/2018 23:55	WG1092116
Isopropylbenzene	U		0.000268	0.00110	1	03/31/2018 23:55	WG1092116
p-Isopropyltoluene	U	J3	0.000225	0.00110	1	03/31/2018 23:55	WG1092116
2-Butanone (MEK)	U	J3	0.00515	0.0110	1	03/31/2018 23:55	WG1092116
Methylene Chloride	U		0.00110	0.00551	1	03/31/2018 23:55	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	03/31/2018 23:55	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:21

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	03/31/2018 23:55	WG1092116
Naphthalene	U		0.00110	0.00551	1	03/31/2018 23:55	WG1092116
n-Propylbenzene	U		0.000227	0.00110	1	03/31/2018 23:55	WG1092116
Styrene	U		0.000258	0.00110	1	03/31/2018 23:55	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	03/31/2018 23:55	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000402	0.00110	1	03/31/2018 23:55	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000402	0.00110	1	03/31/2018 23:55	WG1092116
Tetrachloroethene	0.0635	J3	0.000304	0.00110	1	03/31/2018 23:55	WG1092116
Toluene	U		0.000478	0.00551	1	03/31/2018 23:55	WG1092116
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	03/31/2018 23:55	WG1092116
1,2,4-Trichlorobenzene	U		0.000427	0.00110	1	03/31/2018 23:55	WG1092116
1,1,1-Trichloroethane	U	J3	0.000315	0.00110	1	03/31/2018 23:55	WG1092116
1,1,2-Trichloroethane	U		0.000305	0.00110	1	03/31/2018 23:55	WG1092116
Trichloroethene	0.0408	J4	0.000307	0.00110	1	03/31/2018 23:55	WG1092116
Trichlorofluoromethane	U	J3	0.000421	0.00551	1	03/31/2018 23:55	WG1092116
1,2,3-Trichloropropane	U		0.000816	0.00275	1	03/31/2018 23:55	WG1092116
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	03/31/2018 23:55	WG1092116
1,2,3-Trimethylbenzene	U		0.000316	0.00110	1	03/31/2018 23:55	WG1092116
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	03/31/2018 23:55	WG1092116
Vinyl acetate	U	J3	0.00263	0.0110	1	03/31/2018 23:55	WG1092116
Vinyl chloride	0.0120	J3	0.000320	0.00110	1	03/31/2018 23:55	WG1092116
Xylenes, Total	U	J3	0.000769	0.00330	1	03/31/2018 23:55	WG1092116
(S) Toluene-d8	105			80.0-120		04/06/2018 14:58	WG1092116
(S) Toluene-d8	98.4			80.0-120		03/31/2018 23:55	WG1092116
(S) Dibromofluoromethane	108			74.0-131		03/31/2018 23:55	WG1092116
(S) Dibromofluoromethane	100			74.0-131		04/06/2018 14:58	WG1092116
(S) 4-Bromofluorobenzene	106			64.0-132		03/31/2018 23:55	WG1092116
(S) 4-Bromofluorobenzene	99.7			64.0-132		04/06/2018 14:58	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	0.0411	J	J J3	0.0112	0.0558	1	04/01/2018 00:16	WG1092116
Acrylonitrile	U			0.00200	0.0112	1	04/01/2018 00:16	WG1092116
Benzene	U			0.000301	0.00112	1	04/01/2018 00:16	WG1092116
Bromobenzene	U			0.000317	0.00112	1	04/01/2018 00:16	WG1092116
Bromodichloromethane	U			0.000284	0.00112	1	04/01/2018 00:16	WG1092116
Bromochloromethane	U			0.000435	0.00558	1	04/01/2018 00:16	WG1092116
Bromoform	U			0.000473	0.00112	1	04/01/2018 00:16	WG1092116
Bromomethane	U		J3	0.00150	0.00558	1	04/01/2018 00:16	WG1092116
n-Butylbenzene	U		J3	0.000288	0.00112	1	04/01/2018 00:16	WG1092116
sec-Butylbenzene	U		J3	0.000224	0.00112	1	04/01/2018 00:16	WG1092116
tert-Butylbenzene	U		J3	0.000230	0.00112	1	04/01/2018 00:16	WG1092116
Carbon disulfide	0.00140		J3	0.000247	0.00112	1	04/01/2018 00:16	WG1092116
Carbon tetrachloride	U		J3	0.000366	0.00112	1	04/01/2018 00:16	WG1092116
Chlorobenzene	U			0.000237	0.00112	1	04/01/2018 00:16	WG1092116
Chlorodibromomethane	U			0.000416	0.00112	1	04/01/2018 00:16	WG1092116
Chloroethane	U		J3	0.00106	0.00558	1	04/01/2018 00:16	WG1092116
Chloroform	U			0.000256	0.00558	1	04/01/2018 00:16	WG1092116
Chloromethane	U		J3	0.000419	0.00279	1	04/01/2018 00:16	WG1092116
2-Chlorotoluene	U			0.000336	0.00112	1	04/01/2018 00:16	WG1092116
4-Chlorotoluene	U			0.000268	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dibromo-3-Chloropropane	U			0.00117	0.00558	1	04/01/2018 00:16	WG1092116
1,2-Dibromoethane	U			0.000383	0.00112	1	04/01/2018 00:16	WG1092116
Dibromomethane	U			0.000426	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dichlorobenzene	U			0.000340	0.00112	1	04/01/2018 00:16	WG1092116
1,3-Dichlorobenzene	U			0.000267	0.00112	1	04/01/2018 00:16	WG1092116
1,4-Dichlorobenzene	U			0.000252	0.00112	1	04/01/2018 00:16	WG1092116
Dichlorodifluoromethane	U		J3	0.000796	0.00558	1	04/01/2018 00:16	WG1092116
1,1-Dichloroethane	U			0.000222	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dichloroethane	U			0.000296	0.00112	1	04/01/2018 00:16	WG1092116
1,1-Dichloroethene	0.00703		J3	0.000338	0.00112	1	04/01/2018 00:16	WG1092116
cis-1,2-Dichloroethene	4.83			0.0525	0.223	200	04/06/2018 14:00	WG1092116
trans-1,2-Dichloroethene	0.0297		J3	0.000295	0.00112	1	04/01/2018 00:16	WG1092116
1,2-Dichloropropane	U			0.000400	0.00112	1	04/01/2018 00:16	WG1092116
1,1-Dichloropropene	U			0.000354	0.00112	1	04/01/2018 00:16	WG1092116
1,3-Dichloropropane	U			0.000231	0.00112	1	04/01/2018 00:16	WG1092116
cis-1,3-Dichloropropene	U			0.000292	0.00112	1	04/01/2018 00:16	WG1092116
trans-1,3-Dichloropropene	U			0.000298	0.00112	1	04/01/2018 00:16	WG1092116
trans-1,4-Dichloro-2-butene	U			0.000869	0.00279	1	04/01/2018 00:16	WG1092116
2,2-Dichloropropane	U		J3	0.000311	0.00112	1	04/01/2018 00:16	WG1092116
Di-isopropyl ether	U			0.000277	0.00112	1	04/01/2018 00:16	WG1092116
Ethylbenzene	U		J3	0.000332	0.00112	1	04/01/2018 00:16	WG1092116
Hexachloro-1,3-butadiene	U		J3	0.000382	0.00112	1	04/01/2018 00:16	WG1092116
2-Hexanone	U			0.00153	0.0112	1	04/01/2018 00:16	WG1092116
n-Hexane	U		J3	0.000324	0.0112	1	04/01/2018 00:16	WG1092116
Iodomethane	U		J3	0.00282	0.0112	1	04/01/2018 00:16	WG1092116
Isopropylbenzene	U			0.000271	0.00112	1	04/01/2018 00:16	WG1092116
p-Isopropyltoluene	U		J3	0.000228	0.00112	1	04/01/2018 00:16	WG1092116
2-Butanone (MEK)	U		J3	0.00522	0.0112	1	04/01/2018 00:16	WG1092116
Methylene Chloride	U			0.00112	0.00558	1	04/01/2018 00:16	WG1092116
4-Methyl-2-pentanone (MIBK)	U			0.00210	0.0112	1	04/01/2018 00:16	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:32

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/01/2018 00:16	WG1092116
Naphthalene	U		0.00112	0.00558	1	04/01/2018 00:16	WG1092116
n-Propylbenzene	U		0.000230	0.00112	1	04/01/2018 00:16	WG1092116
Styrene	U		0.000261	0.00112	1	04/01/2018 00:16	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/01/2018 00:16	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000407	0.00112	1	04/01/2018 00:16	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000407	0.00112	1	04/01/2018 00:16	WG1092116
Tetrachloroethene	5.05	J3	0.0616	0.223	200	04/06/2018 14:00	WG1092116
Toluene	U		0.000485	0.00558	1	04/01/2018 00:16	WG1092116
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/01/2018 00:16	WG1092116
1,2,4-Trichlorobenzene	U		0.000433	0.00112	1	04/01/2018 00:16	WG1092116
1,1,1-Trichloroethane	U	J3	0.000319	0.00112	1	04/01/2018 00:16	WG1092116
1,1,2-Trichloroethane	U		0.000309	0.00112	1	04/01/2018 00:16	WG1092116
Trichloroethene	0.127	J4	0.000311	0.00112	1	04/01/2018 00:16	WG1092116
Trichlorofluoromethane	U	J3	0.000426	0.00558	1	04/01/2018 00:16	WG1092116
1,2,3-Trichloropropane	U		0.000827	0.00279	1	04/01/2018 00:16	WG1092116
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/01/2018 00:16	WG1092116
1,2,3-Trimethylbenzene	U		0.000320	0.00112	1	04/01/2018 00:16	WG1092116
1,3,5-Trimethylbenzene	U		0.000297	0.00112	1	04/01/2018 00:16	WG1092116
Vinyl acetate	U	J3	0.00267	0.0112	1	04/01/2018 00:16	WG1092116
Vinyl chloride	0.0104	J3	0.000325	0.00112	1	04/01/2018 00:16	WG1092116
Xylenes, Total	U	J3	0.000779	0.00335	1	04/01/2018 00:16	WG1092116
(S) Toluene-d8	98.2			80.0-120		04/01/2018 00:16	WG1092116
(S) Toluene-d8	87.0			80.0-120		04/06/2018 14:00	WG1092116
(S) Dibromofluoromethane	99.8			74.0-131		04/06/2018 14:00	WG1092116
(S) Dibromofluoromethane	107			74.0-131		04/01/2018 00:16	WG1092116
(S) 4-Bromofluorobenzene	98.7			64.0-132		04/06/2018 14:00	WG1092116
(S) 4-Bromofluorobenzene	103			64.0-132		04/01/2018 00:16	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	0.0220	J	J J3	0.0113	0.0567	1	04/01/2018 00:37	WG1092116
Acrylonitrile	U			0.00203	0.0113	1	04/01/2018 00:37	WG1092116
Benzene	0.00184			0.000306	0.00113	1	04/01/2018 00:37	WG1092116
Bromobenzene	U			0.000322	0.00113	1	04/01/2018 00:37	WG1092116
Bromodichloromethane	U			0.000288	0.00113	1	04/01/2018 00:37	WG1092116
Bromochloromethane	U			0.000442	0.00567	1	04/01/2018 00:37	WG1092116
Bromoform	U			0.000481	0.00113	1	04/01/2018 00:37	WG1092116
Bromomethane	U		J3	0.00152	0.00567	1	04/01/2018 00:37	WG1092116
n-Butylbenzene	U		J3	0.000293	0.00113	1	04/01/2018 00:37	WG1092116
sec-Butylbenzene	U		J3	0.000228	0.00113	1	04/01/2018 00:37	WG1092116
tert-Butylbenzene	U		J3	0.000234	0.00113	1	04/01/2018 00:37	WG1092116
Carbon disulfide	0.00144		J3	0.000251	0.00113	1	04/01/2018 00:37	WG1092116
Carbon tetrachloride	U		J3	0.000372	0.00113	1	04/01/2018 00:37	WG1092116
Chlorobenzene	U			0.000240	0.00113	1	04/01/2018 00:37	WG1092116
Chlorodibromomethane	U			0.000423	0.00113	1	04/01/2018 00:37	WG1092116
Chloroethane	U		J3	0.00107	0.00567	1	04/01/2018 00:37	WG1092116
Chloroform	U			0.000260	0.00567	1	04/01/2018 00:37	WG1092116
Chloromethane	U		J3	0.000425	0.00283	1	04/01/2018 00:37	WG1092116
2-Chlorotoluene	U			0.000341	0.00113	1	04/01/2018 00:37	WG1092116
4-Chlorotoluene	U			0.000272	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dibromo-3-Chloropropane	U			0.00119	0.00567	1	04/01/2018 00:37	WG1092116
1,2-Dibromoethane	U			0.000389	0.00113	1	04/01/2018 00:37	WG1092116
Dibromomethane	U			0.000433	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dichlorobenzene	U			0.000346	0.00113	1	04/01/2018 00:37	WG1092116
1,3-Dichlorobenzene	U			0.000271	0.00113	1	04/01/2018 00:37	WG1092116
1,4-Dichlorobenzene	U			0.000256	0.00113	1	04/01/2018 00:37	WG1092116
Dichlorodifluoromethane	U		J3	0.000808	0.00567	1	04/01/2018 00:37	WG1092116
1,1-Dichloroethane	U			0.000226	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dichloroethane	U			0.000300	0.00113	1	04/01/2018 00:37	WG1092116
1,1-Dichloroethene	0.00576		J3	0.000344	0.00113	1	04/01/2018 00:37	WG1092116
cis-1,2-Dichloroethene	0.918			0.0151	0.0641	56.5	04/06/2018 02:30	WG1092116
trans-1,2-Dichloroethene	0.0169		J3	0.000299	0.00113	1	04/01/2018 00:37	WG1092116
1,2-Dichloropropane	U			0.000406	0.00113	1	04/01/2018 00:37	WG1092116
1,1-Dichloropropene	U			0.000359	0.00113	1	04/01/2018 00:37	WG1092116
1,3-Dichloropropane	U			0.000235	0.00113	1	04/01/2018 00:37	WG1092116
cis-1,3-Dichloropropene	U			0.000297	0.00113	1	04/01/2018 00:37	WG1092116
trans-1,3-Dichloropropene	U			0.000303	0.00113	1	04/01/2018 00:37	WG1092116
trans-1,4-Dichloro-2-butene	U			0.000882	0.00283	1	04/01/2018 00:37	WG1092116
2,2-Dichloropropane	U		J3	0.000316	0.00113	1	04/01/2018 00:37	WG1092116
Di-isopropyl ether	U			0.000281	0.00113	1	04/01/2018 00:37	WG1092116
Ethylbenzene	U		J3	0.000337	0.00113	1	04/01/2018 00:37	WG1092116
Hexachloro-1,3-butadiene	U		J3	0.000388	0.00113	1	04/01/2018 00:37	WG1092116
2-Hexanone	U			0.00155	0.0113	1	04/01/2018 00:37	WG1092116
n-Hexane	U		J3	0.000329	0.0113	1	04/01/2018 00:37	WG1092116
Iodomethane	U		J3	0.00287	0.0113	1	04/01/2018 00:37	WG1092116
Isopropylbenzene	U			0.000275	0.00113	1	04/01/2018 00:37	WG1092116
p-Isopropyltoluene	U		J3	0.000231	0.00113	1	04/01/2018 00:37	WG1092116
2-Butanone (MEK)	0.00655	J	J J3	0.00531	0.0113	1	04/01/2018 00:37	WG1092116
Methylene Chloride	U			0.00113	0.00567	1	04/01/2018 00:37	WG1092116
4-Methyl-2-pentanone (MIBK)	U			0.00213	0.0113	1	04/01/2018 00:37	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:51

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/01/2018 00:37	WG1092116
Naphthalene	U		0.00113	0.00567	1	04/01/2018 00:37	WG1092116
n-Propylbenzene	U		0.000234	0.00113	1	04/01/2018 00:37	WG1092116
Styrene	U		0.000265	0.00113	1	04/01/2018 00:37	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/01/2018 00:37	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/01/2018 00:37	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000414	0.00113	1	04/01/2018 00:37	WG1092116
Tetrachloroethene	0.504	J3	0.0177	0.0641	56.5	04/06/2018 02:30	WG1092116
Toluene	0.000670	J	0.000492	0.00567	1	04/01/2018 00:37	WG1092116
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	04/01/2018 00:37	WG1092116
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	04/01/2018 00:37	WG1092116
1,1,1-Trichloroethane	U	J3	0.000324	0.00113	1	04/01/2018 00:37	WG1092116
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/01/2018 00:37	WG1092116
Trichloroethene	0.0970	J4	0.000316	0.00113	1	04/01/2018 00:37	WG1092116
Trichlorofluoromethane	U	J3	0.000433	0.00567	1	04/01/2018 00:37	WG1092116
1,2,3-Trichloropropane	U		0.000840	0.00283	1	04/01/2018 00:37	WG1092116
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/01/2018 00:37	WG1092116
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/01/2018 00:37	WG1092116
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	04/01/2018 00:37	WG1092116
Vinyl acetate	U	J3	0.00271	0.0113	1	04/01/2018 00:37	WG1092116
Vinyl chloride	0.0244	J3	0.000330	0.00113	1	04/01/2018 00:37	WG1092116
Xylenes, Total	U	J3	0.000791	0.00340	1	04/01/2018 00:37	WG1092116
(S) Toluene-d8	100			80.0-120		04/01/2018 00:37	WG1092116
(S) Toluene-d8	103			80.0-120		04/06/2018 02:30	WG1092116
(S) Dibromofluoromethane	93.8			74.0-131		04/06/2018 02:30	WG1092116
(S) Dibromofluoromethane	104			74.0-131		04/01/2018 00:37	WG1092116
(S) 4-Bromofluorobenzene	96.7			64.0-132		04/06/2018 02:30	WG1092116
(S) 4-Bromofluorobenzene	109			64.0-132		04/01/2018 00:37	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.1		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0157	J JJ3	0.0109	0.0543	1	04/01/2018 00:58	WG1092116
Acrylonitrile	U		0.00194	0.0109	1	04/01/2018 00:58	WG1092116
Benzene	U		0.000293	0.00109	1	04/01/2018 00:58	WG1092116
Bromobenzene	U		0.000308	0.00109	1	04/01/2018 00:58	WG1092116
Bromodichloromethane	U		0.000276	0.00109	1	04/01/2018 00:58	WG1092116
Bromochloromethane	U		0.000423	0.00543	1	04/01/2018 00:58	WG1092116
Bromoform	U		0.000460	0.00109	1	04/01/2018 00:58	WG1092116
Bromomethane	U	J3	0.00145	0.00543	1	04/01/2018 00:58	WG1092116
n-Butylbenzene	U	J3	0.000280	0.00109	1	04/01/2018 00:58	WG1092116
sec-Butylbenzene	U	J3	0.000218	0.00109	1	04/01/2018 00:58	WG1092116
tert-Butylbenzene	U	J3	0.000224	0.00109	1	04/01/2018 00:58	WG1092116
Carbon disulfide	0.00118	J3	0.000240	0.00109	1	04/01/2018 00:58	WG1092116
Carbon tetrachloride	U	J3	0.000356	0.00109	1	04/01/2018 00:58	WG1092116
Chlorobenzene	U		0.000230	0.00109	1	04/01/2018 00:58	WG1092116
Chlorodibromomethane	U		0.000405	0.00109	1	04/01/2018 00:58	WG1092116
Chloroethane	U	J3	0.00103	0.00543	1	04/01/2018 00:58	WG1092116
Chloroform	U		0.000249	0.00543	1	04/01/2018 00:58	WG1092116
Chloromethane	U	J3	0.000407	0.00271	1	04/01/2018 00:58	WG1092116
2-Chlorotoluene	U		0.000327	0.00109	1	04/01/2018 00:58	WG1092116
4-Chlorotoluene	U		0.000261	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00543	1	04/01/2018 00:58	WG1092116
1,2-Dibromoethane	U		0.000372	0.00109	1	04/01/2018 00:58	WG1092116
Dibromomethane	U		0.000415	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dichlorobenzene	U		0.000331	0.00109	1	04/01/2018 00:58	WG1092116
1,3-Dichlorobenzene	U		0.000259	0.00109	1	04/01/2018 00:58	WG1092116
1,4-Dichlorobenzene	U		0.000245	0.00109	1	04/01/2018 00:58	WG1092116
Dichlorodifluoromethane	U	J3	0.000774	0.00543	1	04/01/2018 00:58	WG1092116
1,1-Dichloroethane	U		0.000216	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dichloroethane	U		0.000288	0.00109	1	04/01/2018 00:58	WG1092116
1,1-Dichloroethene	0.0119	J3	0.000329	0.00109	1	04/01/2018 00:58	WG1092116
cis-1,2-Dichloroethene	6.08		0.255	1.09	1000	04/06/2018 14:39	WG1092116
trans-1,2-Dichloroethene	0.0240	J3	0.000287	0.00109	1	04/01/2018 00:58	WG1092116
1,2-Dichloropropane	U		0.000389	0.00109	1	04/01/2018 00:58	WG1092116
1,1-Dichloropropene	U		0.000344	0.00109	1	04/01/2018 00:58	WG1092116
1,3-Dichloropropane	U		0.000225	0.00109	1	04/01/2018 00:58	WG1092116
cis-1,3-Dichloropropene	U		0.000284	0.00109	1	04/01/2018 00:58	WG1092116
trans-1,3-Dichloropropene	U		0.000290	0.00109	1	04/01/2018 00:58	WG1092116
trans-1,4-Dichloro-2-butene	U		0.000845	0.00271	1	04/01/2018 00:58	WG1092116
2,2-Dichloropropane	U	J3	0.000303	0.00109	1	04/01/2018 00:58	WG1092116
Di-isopropyl ether	U		0.000269	0.00109	1	04/01/2018 00:58	WG1092116
Ethylbenzene	U	J3	0.000322	0.00109	1	04/01/2018 00:58	WG1092116
Hexachloro-1,3-butadiene	U	J3	0.000371	0.00109	1	04/01/2018 00:58	WG1092116
2-Hexanone	U		0.00149	0.0109	1	04/01/2018 00:58	WG1092116
n-Hexane	U	J3	0.000315	0.0109	1	04/01/2018 00:58	WG1092116
Iodomethane	U	J3	0.00275	0.0109	1	04/01/2018 00:58	WG1092116
Isopropylbenzene	U		0.000264	0.00109	1	04/01/2018 00:58	WG1092116
p-Isopropyltoluene	U	J3	0.000221	0.00109	1	04/01/2018 00:58	WG1092116
2-Butanone (MEK)	U	J3	0.00508	0.0109	1	04/01/2018 00:58	WG1092116
Methylene Chloride	U		0.00109	0.00543	1	04/01/2018 00:58	WG1092116
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0109	1	04/01/2018 00:58	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 12:50

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00109	1	04/01/2018 00:58	WG1092116
Naphthalene	U		0.00109	0.00543	1	04/01/2018 00:58	WG1092116
n-Propylbenzene	U		0.000224	0.00109	1	04/01/2018 00:58	WG1092116
Styrene	U		0.000254	0.00109	1	04/01/2018 00:58	WG1092116
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/01/2018 00:58	WG1092116
1,1,2,2-Tetrachloroethane	U		0.000396	0.00109	1	04/01/2018 00:58	WG1092116
1,1,2-Trichlorotrifluoroethane	U	J3	0.000396	0.00109	1	04/01/2018 00:58	WG1092116
Tetrachloroethene	0.0620	J	J3	0.000300	0.00109	04/01/2018 00:58	WG1092116
Toluene	U		0.000471	0.00543	1	04/01/2018 00:58	WG1092116
1,2,3-Trichlorobenzene	U		0.000332	0.00109	1	04/01/2018 00:58	WG1092116
1,2,4-Trichlorobenzene	U		0.000421	0.00109	1	04/01/2018 00:58	WG1092116
1,1,1-Trichloroethane	U	J3	0.000310	0.00109	1	04/01/2018 00:58	WG1092116
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/01/2018 00:58	WG1092116
Trichloroethene	0.0320	J	J4	0.000303	0.00109	04/01/2018 00:58	WG1092116
Trichlorofluoromethane	U	J3	0.000415	0.00543	1	04/01/2018 00:58	WG1092116
1,2,3-Trichloropropane	U		0.000804	0.00271	1	04/01/2018 00:58	WG1092116
1,2,4-Trimethylbenzene	U		0.000229	0.00109	1	04/01/2018 00:58	WG1092116
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/01/2018 00:58	WG1092116
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/01/2018 00:58	WG1092116
Vinyl acetate	U	J3	0.00259	0.0109	1	04/01/2018 00:58	WG1092116
Vinyl chloride	0.00878	J	J3	0.000316	0.00109	04/01/2018 00:58	WG1092116
Xylenes, Total	U	J3	0.000758	0.00326	1	04/01/2018 00:58	WG1092116
(S) Toluene-d8	101			80.0-120		04/06/2018 14:39	WG1092116
(S) Toluene-d8	100			80.0-120		04/01/2018 00:58	WG1092116
(S) Dibromofluoromethane	107			74.0-131		04/06/2018 14:39	WG1092116
(S) Dibromofluoromethane	108			74.0-131		04/01/2018 00:58	WG1092116
(S) 4-Bromofluorobenzene	105			64.0-132		04/01/2018 00:58	WG1092116
(S) 4-Bromofluorobenzene	96.0			64.0-132		04/06/2018 14:39	WG1092116

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Field duplicate

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.2		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0128	J J	0.0115	0.0573	1	04/02/2018 01:40	WG1092315
Acrylonitrile	U		0.00205	0.0115	1	04/02/2018 01:40	WG1092315
Benzene	U		0.000310	0.00115	1	04/02/2018 01:40	WG1092315
Bromobenzene	U		0.000326	0.00115	1	04/02/2018 01:40	WG1092315
Bromodichloromethane	U		0.000291	0.00115	1	04/02/2018 01:40	WG1092315
Bromochloromethane	U		0.000447	0.00573	1	04/02/2018 01:40	WG1092315
Bromoform	U		0.000486	0.00115	1	04/02/2018 01:40	WG1092315
Bromomethane	U		0.00154	0.00573	1	04/02/2018 01:40	WG1092315
n-Butylbenzene	U		0.000296	0.00115	1	04/02/2018 01:40	WG1092315
sec-Butylbenzene	U		0.000231	0.00115	1	04/02/2018 01:40	WG1092315
tert-Butylbenzene	U		0.000236	0.00115	1	04/02/2018 01:40	WG1092315
Carbon disulfide	0.000969	J J	0.000253	0.00115	1	04/02/2018 01:40	WG1092315
Carbon tetrachloride	U		0.000376	0.00115	1	04/02/2018 01:40	WG1092315
Chlorobenzene	U		0.000243	0.00115	1	04/02/2018 01:40	WG1092315
Chlorodibromomethane	U		0.000428	0.00115	1	04/02/2018 01:40	WG1092315
Chloroethane	U		0.00108	0.00573	1	04/02/2018 01:40	WG1092315
Chloroform	U		0.000263	0.00573	1	04/02/2018 01:40	WG1092315
Chloromethane	U		0.000430	0.00287	1	04/02/2018 01:40	WG1092315
2-Chlorotoluene	U		0.000345	0.00115	1	04/02/2018 01:40	WG1092315
4-Chlorotoluene	U		0.000275	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00573	1	04/02/2018 01:40	WG1092315
1,2-Dibromoethane	U		0.000393	0.00115	1	04/02/2018 01:40	WG1092315
Dibromomethane	U		0.000438	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dichlorobenzene	U		0.000350	0.00115	1	04/02/2018 01:40	WG1092315
1,3-Dichlorobenzene	U		0.000274	0.00115	1	04/02/2018 01:40	WG1092315
1,4-Dichlorobenzene	U		0.000259	0.00115	1	04/02/2018 01:40	WG1092315
Dichlorodifluoromethane	U		0.000818	0.00573	1	04/02/2018 01:40	WG1092315
1,1-Dichloroethane	U		0.000228	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dichloroethane	U		0.000304	0.00115	1	04/02/2018 01:40	WG1092315
1,1-Dichloroethene	0.00664		0.000348	0.00115	1	04/02/2018 01:40	WG1092315
cis-1,2-Dichloroethene	5.77		0.0135	0.0573	50	04/06/2018 04:15	WG1092315
trans-1,2-Dichloroethene	0.00337		0.000303	0.00115	1	04/02/2018 01:40	WG1092315
1,2-Dichloropropane	U		0.000411	0.00115	1	04/02/2018 01:40	WG1092315
1,1-Dichloropropene	U		0.000364	0.00115	1	04/02/2018 01:40	WG1092315
1,3-Dichloropropane	U		0.000237	0.00115	1	04/02/2018 01:40	WG1092315
cis-1,3-Dichloropropene	U		0.000300	0.00115	1	04/02/2018 01:40	WG1092315
trans-1,3-Dichloropropene	U		0.000306	0.00115	1	04/02/2018 01:40	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000892	0.00287	1	04/02/2018 01:40	WG1092315
2,2-Dichloropropane	U		0.000320	0.00115	1	04/02/2018 01:40	WG1092315
Di-isopropyl ether	U		0.000284	0.00115	1	04/02/2018 01:40	WG1092315
Ethylbenzene	U		0.000341	0.00115	1	04/02/2018 01:40	WG1092315
Hexachloro-1,3-butadiene	U		0.000392	0.00115	1	04/02/2018 01:40	WG1092315
2-Hexanone	U		0.00157	0.0115	1	04/02/2018 01:40	WG1092315
n-Hexane	0.000507	U B J	0.000333	0.0115	1	04/02/2018 01:40	WG1092315
Iodomethane	U		0.00290	0.0115	1	04/02/2018 01:40	WG1092315
Isopropylbenzene	U		0.000279	0.00115	1	04/02/2018 01:40	WG1092315
p-Isopropyltoluene	U		0.000234	0.00115	1	04/02/2018 01:40	WG1092315
2-Butanone (MEK)	U		0.00537	0.0115	1	04/02/2018 01:40	WG1092315
Methylene Chloride	U		0.00115	0.00573	1	04/02/2018 01:40	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	04/02/2018 01:40	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 13:05

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	04/02/2018 01:40	WG1092315
Naphthalene	U		0.00115	0.00573	1	04/02/2018 01:40	WG1092315
n-Propylbenzene	U		0.000236	0.00115	1	04/02/2018 01:40	WG1092315
Styrene	U		0.000268	0.00115	1	04/02/2018 01:40	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000303	0.00115	1	04/02/2018 01:40	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	04/02/2018 01:40	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000419	0.00115	1	04/02/2018 01:40	WG1092315
Tetrachloroethene	0.00375		0.000317	0.00115	1	04/02/2018 01:40	WG1092315
Toluene	U		0.000498	0.00573	1	04/02/2018 01:40	WG1092315
1,2,3-Trichlorobenzene	U		0.000351	0.00115	1	04/02/2018 01:40	WG1092315
1,2,4-Trichlorobenzene	U		0.000445	0.00115	1	04/02/2018 01:40	WG1092315
1,1,1-Trichloroethane	U		0.000328	0.00115	1	04/02/2018 01:40	WG1092315
1,1,2-Trichloroethane	U		0.000318	0.00115	1	04/02/2018 01:40	WG1092315
Trichloroethene	0.00183		0.000320	0.00115	1	04/02/2018 01:40	WG1092315
Trichlorofluoromethane	U		0.000438	0.00573	1	04/02/2018 01:40	WG1092315
1,2,3-Trichloropropane	U		0.000850	0.00287	1	04/02/2018 01:40	WG1092315
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/02/2018 01:40	WG1092315
1,2,3-Trimethylbenzene	U		0.000329	0.00115	1	04/02/2018 01:40	WG1092315
1,3,5-Trimethylbenzene	U		0.000305	0.00115	1	04/02/2018 01:40	WG1092315
Vinyl acetate	U		0.00274	0.0115	1	04/02/2018 01:40	WG1092315
Vinyl chloride	0.0252		0.000334	0.00115	1	04/02/2018 01:40	WG1092315
Xylenes, Total	U		0.000801	0.00344	1	04/02/2018 01:40	WG1092315
(S) Toluene-d8	103			80.0-120		04/02/2018 01:40	WG1092315
(S) Toluene-d8	106			80.0-120		04/06/2018 04:15	WG1092315
(S) Dibromofluoromethane	91.5			74.0-131		04/06/2018 04:15	WG1092315
(S) Dibromofluoromethane	99.9			74.0-131		04/02/2018 01:40	WG1092315
(S) 4-Bromofluorobenzene	102			64.0-132		04/02/2018 01:40	WG1092315
(S) 4-Bromofluorobenzene	96.7			64.0-132		04/06/2018 04:15	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.0		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0116	0.0581	1	04/02/2018 02:01	WG1092315
Acrylonitrile	U		0.00208	0.0116	1	04/02/2018 02:01	WG1092315
Benzene	U		0.000314	0.00116	1	04/02/2018 02:01	WG1092315
Bromobenzene	U		0.000330	0.00116	1	04/02/2018 02:01	WG1092315
Bromodichloromethane	U		0.000295	0.00116	1	04/02/2018 02:01	WG1092315
Bromochloromethane	U		0.000453	0.00581	1	04/02/2018 02:01	WG1092315
Bromoform	U		0.000493	0.00116	1	04/02/2018 02:01	WG1092315
Bromomethane	U		0.00156	0.00581	1	04/02/2018 02:01	WG1092315
n-Butylbenzene	U		0.000300	0.00116	1	04/02/2018 02:01	WG1092315
sec-Butylbenzene	U		0.000234	0.00116	1	04/02/2018 02:01	WG1092315
tert-Butylbenzene	U		0.000239	0.00116	1	04/02/2018 02:01	WG1092315
Carbon disulfide	U		0.000257	0.00116	1	04/02/2018 02:01	WG1092315
Carbon tetrachloride	U		0.000381	0.00116	1	04/02/2018 02:01	WG1092315
Chlorobenzene	U		0.000246	0.00116	1	04/02/2018 02:01	WG1092315
Chlorodibromomethane	U		0.000434	0.00116	1	04/02/2018 02:01	WG1092315
Chloroethane	U		0.00110	0.00581	1	04/02/2018 02:01	WG1092315
Chloroform	U		0.000266	0.00581	1	04/02/2018 02:01	WG1092315
Chloromethane	U		0.000436	0.00291	1	04/02/2018 02:01	WG1092315
2-Chlorotoluene	U		0.000350	0.00116	1	04/02/2018 02:01	WG1092315
4-Chlorotoluene	U		0.000279	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00581	1	04/02/2018 02:01	WG1092315
1,2-Dibromoethane	U		0.000399	0.00116	1	04/02/2018 02:01	WG1092315
Dibromomethane	U		0.000444	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dichlorobenzene	U		0.000355	0.00116	1	04/02/2018 02:01	WG1092315
1,3-Dichlorobenzene	U		0.000278	0.00116	1	04/02/2018 02:01	WG1092315
1,4-Dichlorobenzene	U		0.000263	0.00116	1	04/02/2018 02:01	WG1092315
Dichlorodifluoromethane	U		0.000829	0.00581	1	04/02/2018 02:01	WG1092315
1,1-Dichloroethane	U		0.000231	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dichloroethane	U		0.000308	0.00116	1	04/02/2018 02:01	WG1092315
1,1-Dichloroethene	U		0.000352	0.00116	1	04/02/2018 02:01	WG1092315
cis-1,2-Dichloroethene	0.0188		0.000273	0.00116	1	04/06/2018 04:37	WG1092315
trans-1,2-Dichloroethene	0.000314	J J	0.000307	0.00116	1	04/02/2018 02:01	WG1092315
1,2-Dichloropropane	U		0.000416	0.00116	1	04/02/2018 02:01	WG1092315
1,1-Dichloropropene	U		0.000369	0.00116	1	04/02/2018 02:01	WG1092315
1,3-Dichloropropane	U		0.000241	0.00116	1	04/02/2018 02:01	WG1092315
cis-1,3-Dichloropropene	U		0.000305	0.00116	1	04/02/2018 02:01	WG1092315
trans-1,3-Dichloropropene	U		0.000310	0.00116	1	04/02/2018 02:01	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000904	0.00291	1	04/02/2018 02:01	WG1092315
2,2-Dichloropropane	U		0.000324	0.00116	1	04/02/2018 02:01	WG1092315
Di-isopropyl ether	U		0.000288	0.00116	1	04/02/2018 02:01	WG1092315
Ethylbenzene	U		0.000345	0.00116	1	04/02/2018 02:01	WG1092315
Hexachloro-1,3-butadiene	U		0.000398	0.00116	1	04/02/2018 02:01	WG1092315
2-Hexanone	U		0.00159	0.0116	1	04/02/2018 02:01	WG1092315
n-Hexane	0.000649	U B J	0.000337	0.0116	1	04/02/2018 02:01	WG1092315
Iodomethane	U		0.00294	0.0116	1	04/02/2018 02:01	WG1092315
Isopropylbenzene	U		0.000282	0.00116	1	04/02/2018 02:01	WG1092315
p-Isopropyltoluene	U		0.000237	0.00116	1	04/02/2018 02:01	WG1092315
2-Butanone (MEK)	U		0.00544	0.0116	1	04/02/2018 02:01	WG1092315
Methylene Chloride	U		0.00116	0.00581	1	04/02/2018 02:01	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00219	0.0116	1	04/02/2018 02:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 13:13

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/02/2018 02:01	WG1092315
Naphthalene	U		0.00116	0.00581	1	04/02/2018 02:01	WG1092315
n-Propylbenzene	U		0.000239	0.00116	1	04/02/2018 02:01	WG1092315
Styrene	U		0.000272	0.00116	1	04/02/2018 02:01	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000307	0.00116	1	04/02/2018 02:01	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000424	0.00116	1	04/02/2018 02:01	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000424	0.00116	1	04/02/2018 02:01	WG1092315
Tetrachloroethene	0.00219		0.000321	0.00116	1	04/02/2018 02:01	WG1092315
Toluene	U		0.000505	0.00581	1	04/02/2018 02:01	WG1092315
1,2,3-Trichlorobenzene	U		0.000356	0.00116	1	04/02/2018 02:01	WG1092315
1,2,4-Trichlorobenzene	U		0.000451	0.00116	1	04/02/2018 02:01	WG1092315
1,1,1-Trichloroethane	U		0.000332	0.00116	1	04/02/2018 02:01	WG1092315
1,1,2-Trichloroethane	U		0.000322	0.00116	1	04/02/2018 02:01	WG1092315
Trichloroethene	0.000678	J	0.000324	0.00116	1	04/02/2018 02:01	WG1092315
Trichlorofluoromethane	U		0.000444	0.00581	1	04/02/2018 02:01	WG1092315
1,2,3-Trichloropropane	U		0.000861	0.00291	1	04/02/2018 02:01	WG1092315
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	04/02/2018 02:01	WG1092315
1,2,3-Trimethylbenzene	U		0.000334	0.00116	1	04/02/2018 02:01	WG1092315
1,3,5-Trimethylbenzene	U		0.000309	0.00116	1	04/02/2018 02:01	WG1092315
Vinyl acetate	U		0.00278	0.0116	1	04/02/2018 02:01	WG1092315
Vinyl chloride	0.00399		0.000338	0.00116	1	04/02/2018 02:01	WG1092315
Xylenes, Total	U		0.000811	0.00349	1	04/02/2018 02:01	WG1092315
(S) Toluene-d8	104			80.0-120		04/02/2018 02:01	WG1092315
(S) Toluene-d8	101			80.0-120		04/06/2018 04:37	WG1092315
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 02:01	WG1092315
(S) Dibromofluoromethane	100			74.0-131		04/06/2018 04:37	WG1092315
(S) 4-Bromofluorobenzene	97.4			64.0-132		04/06/2018 04:37	WG1092315
(S) 4-Bromofluorobenzene	103			64.0-132		04/02/2018 02:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	04/04/2018 14:27	WG1093165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0151	J	0.0109	0.0544	1	04/02/2018 02:22	WG1092315
Acrylonitrile	U		0.00195	0.0109	1	04/02/2018 02:22	WG1092315
Benzene	U		0.000294	0.00109	1	04/02/2018 02:22	WG1092315
Bromobenzene	U		0.000309	0.00109	1	04/02/2018 02:22	WG1092315
Bromodichloromethane	U		0.000277	0.00109	1	04/02/2018 02:22	WG1092315
Bromochloromethane	U		0.000425	0.00544	1	04/02/2018 02:22	WG1092315
Bromoform	U		0.000462	0.00109	1	04/02/2018 02:22	WG1092315
Bromomethane	U		0.00146	0.00544	1	04/02/2018 02:22	WG1092315
n-Butylbenzene	U		0.000281	0.00109	1	04/02/2018 02:22	WG1092315
sec-Butylbenzene	U		0.000219	0.00109	1	04/02/2018 02:22	WG1092315
tert-Butylbenzene	U		0.000224	0.00109	1	04/02/2018 02:22	WG1092315
Carbon disulfide	0.000931	J	0.000241	0.00109	1	04/02/2018 02:22	WG1092315
Carbon tetrachloride	U		0.000357	0.00109	1	04/02/2018 02:22	WG1092315
Chlorobenzene	U		0.000231	0.00109	1	04/02/2018 02:22	WG1092315
Chlorodibromomethane	U		0.000406	0.00109	1	04/02/2018 02:22	WG1092315
Chloroethane	U		0.00103	0.00544	1	04/02/2018 02:22	WG1092315
Chloroform	U		0.000249	0.00544	1	04/02/2018 02:22	WG1092315
Chloromethane	U		0.000408	0.00272	1	04/02/2018 02:22	WG1092315
2-Chlorotoluene	U		0.000328	0.00109	1	04/02/2018 02:22	WG1092315
4-Chlorotoluene	U		0.000261	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00544	1	04/02/2018 02:22	WG1092315
1,2-Dibromoethane	U		0.000373	0.00109	1	04/02/2018 02:22	WG1092315
Dibromomethane	U		0.000416	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dichlorobenzene	U		0.000332	0.00109	1	04/02/2018 02:22	WG1092315
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/02/2018 02:22	WG1092315
1,4-Dichlorobenzene	U		0.000246	0.00109	1	04/02/2018 02:22	WG1092315
Dichlorodifluoromethane	U		0.000776	0.00544	1	04/02/2018 02:22	WG1092315
1,1-Dichloroethane	U		0.000217	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dichloroethane	U		0.000288	0.00109	1	04/02/2018 02:22	WG1092315
1,1-Dichloroethene	0.0143		0.000330	0.00109	1	04/02/2018 02:22	WG1092315
cis-1,2-Dichloroethene	6.39		0.0512	0.218	200	04/06/2018 04:58	WG1092315
trans-1,2-Dichloroethene	0.0209		0.000287	0.00109	1	04/02/2018 02:22	WG1092315
1,2-Dichloropropane	U		0.000390	0.00109	1	04/02/2018 02:22	WG1092315
1,1-Dichloropropene	U		0.000345	0.00109	1	04/02/2018 02:22	WG1092315
1,3-Dichloropropane	U		0.000225	0.00109	1	04/02/2018 02:22	WG1092315
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/02/2018 02:22	WG1092315
trans-1,3-Dichloropropene	U		0.000291	0.00109	1	04/02/2018 02:22	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000847	0.00272	1	04/02/2018 02:22	WG1092315
2,2-Dichloropropane	U		0.000304	0.00109	1	04/02/2018 02:22	WG1092315
Di-isopropyl ether	U		0.000270	0.00109	1	04/02/2018 02:22	WG1092315
Ethylbenzene	U		0.000323	0.00109	1	04/02/2018 02:22	WG1092315
Hexachloro-1,3-butadiene	U		0.000372	0.00109	1	04/02/2018 02:22	WG1092315
2-Hexanone	U		0.00149	0.0109	1	04/02/2018 02:22	WG1092315
n-Hexane	0.00100	U	0.000316	0.0109	1	04/02/2018 02:22	WG1092315
Iodomethane	U		0.00275	0.0109	1	04/02/2018 02:22	WG1092315
Isopropylbenzene	U		0.000265	0.00109	1	04/02/2018 02:22	WG1092315
p-Isopropyltoluene	U		0.000222	0.00109	1	04/02/2018 02:22	WG1092315
2-Butanone (MEK)	U		0.00509	0.0109	1	04/02/2018 02:22	WG1092315
Methylene Chloride	U		0.00109	0.00544	1	04/02/2018 02:22	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0109	1	04/02/2018 02:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000231	0.00109	1	04/02/2018 02:22	WG1092315
Naphthalene	U		0.00109	0.00544	1	04/02/2018 02:22	WG1092315
n-Propylbenzene	U		0.000224	0.00109	1	04/02/2018 02:22	WG1092315
Styrene	U		0.000255	0.00109	1	04/02/2018 02:22	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/02/2018 02:22	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000397	0.00109	1	04/02/2018 02:22	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000397	0.00109	1	04/02/2018 02:22	WG1092315
Tetrachloroethene	0.0176	J	0.000300	0.00109	1	04/02/2018 02:22	WG1092315
Toluene	U		0.000472	0.00544	1	04/02/2018 02:22	WG1092315
1,2,3-Trichlorobenzene	U		0.000333	0.00109	1	04/02/2018 02:22	WG1092315
1,2,4-Trichlorobenzene	U		0.000422	0.00109	1	04/02/2018 02:22	WG1092315
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/02/2018 02:22	WG1092315
1,1,2-Trichloroethane	U		0.000302	0.00109	1	04/02/2018 02:22	WG1092315
Trichloroethene	0.00987	J	0.000304	0.00109	1	04/02/2018 02:22	WG1092315
Trichlorofluoromethane	U		0.000416	0.00544	1	04/02/2018 02:22	WG1092315
1,2,3-Trichloropropane	U		0.000807	0.00272	1	04/02/2018 02:22	WG1092315
1,2,4-Trimethylbenzene	U		0.000230	0.00109	1	04/02/2018 02:22	WG1092315
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/02/2018 02:22	WG1092315
1,3,5-Trimethylbenzene	U		0.000290	0.00109	1	04/02/2018 02:22	WG1092315
Vinyl acetate	U		0.00260	0.0109	1	04/02/2018 02:22	WG1092315
Vinyl chloride	0.0139	J	0.000317	0.00109	1	04/02/2018 02:22	WG1092315
Xylenes, Total	U		0.000760	0.00327	1	04/02/2018 02:22	WG1092315
(S) Toluene-d8	102			80.0-120		04/02/2018 02:22	WG1092315
(S) Toluene-d8	109			80.0-120		04/06/2018 04:58	WG1092315
(S) Dibromofluoromethane	108			74.0-131		04/02/2018 02:22	WG1092315
(S) Dibromofluoromethane	91.9			74.0-131		04/06/2018 04:58	WG1092315
(S) 4-Bromofluorobenzene	96.2			64.0-132		04/06/2018 04:58	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 02:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 00:00

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	03/31/2018 18:26	WG1092115
Acrylonitrile	U	UJ JO	0.873	5.00	1	03/31/2018 18:26	WG1092115
Benzene	U		0.0896	0.500	1	03/31/2018 18:26	WG1092115
Bromobenzene	U		0.133	0.500	1	03/31/2018 18:26	WG1092115
Bromodichloromethane	U		0.0800	0.500	1	03/31/2018 18:26	WG1092115
Bromochloromethane	U		0.145	0.500	1	03/31/2018 18:26	WG1092115
Bromoform	U		0.186	0.500	1	03/31/2018 18:26	WG1092115
Bromomethane	U		0.157	2.50	1	03/31/2018 18:26	WG1092115
n-Butylbenzene	U		0.143	0.500	1	03/31/2018 18:26	WG1092115
sec-Butylbenzene	U		0.134	0.500	1	03/31/2018 18:26	WG1092115
tert-Butylbenzene	U		0.183	0.500	1	03/31/2018 18:26	WG1092115
Carbon disulfide	U		0.101	0.500	1	03/31/2018 18:26	WG1092115
Carbon tetrachloride	U		0.159	0.500	1	03/31/2018 18:26	WG1092115
Chlorobenzene	U		0.140	0.500	1	03/31/2018 18:26	WG1092115
Chlorodibromomethane	U		0.128	0.500	1	03/31/2018 18:26	WG1092115
Chloroethane	U		0.141	2.50	1	03/31/2018 18:26	WG1092115
Chloroform	U		0.0860	0.500	1	03/31/2018 18:26	WG1092115
Chloromethane	U		0.153	1.25	1	03/31/2018 18:26	WG1092115
2-Chlorotoluene	U		0.111	0.500	1	03/31/2018 18:26	WG1092115
4-Chlorotoluene	U		0.0972	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	03/31/2018 18:26	WG1092115
1,2-Dibromoethane	U		0.193	0.500	1	03/31/2018 18:26	WG1092115
Dibromomethane	U		0.117	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dichlorobenzene	U		0.101	0.500	1	03/31/2018 18:26	WG1092115
1,3-Dichlorobenzene	U		0.130	0.500	1	03/31/2018 18:26	WG1092115
1,4-Dichlorobenzene	U		0.121	0.500	1	03/31/2018 18:26	WG1092115
Dichlorodifluoromethane	U		0.127	2.50	1	03/31/2018 18:26	WG1092115
1,1-Dichloroethane	U		0.114	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dichloroethane	U		0.108	0.500	1	03/31/2018 18:26	WG1092115
1,1-Dichloroethene	U		0.188	0.500	1	03/31/2018 18:26	WG1092115
cis-1,2-Dichloroethene	U	UJ JO	0.0933	0.500	1	03/31/2018 18:26	WG1092115
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/31/2018 18:26	WG1092115
1,2-Dichloropropane	U		0.190	0.500	1	03/31/2018 18:26	WG1092115
1,1-Dichloropropene	U		0.128	0.500	1	03/31/2018 18:26	WG1092115
1,3-Dichloropropane	U		0.147	1.00	1	03/31/2018 18:26	WG1092115
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/31/2018 18:26	WG1092115
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/31/2018 18:26	WG1092115
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/31/2018 18:26	WG1092115
2,2-Dichloropropane	U		0.0929	0.500	1	03/31/2018 18:26	WG1092115
Di-isopropyl ether	U		0.0924	0.500	1	03/31/2018 18:26	WG1092115
Ethylbenzene	U		0.158	0.500	1	03/31/2018 18:26	WG1092115
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/31/2018 18:26	WG1092115
2-Hexanone	U		0.757	5.00	1	03/31/2018 18:26	WG1092115
n-Hexane	U		0.305	5.00	1	03/31/2018 18:26	WG1092115
Iodomethane	U		0.377	10.0	1	03/31/2018 18:26	WG1092115
Isopropylbenzene	U		0.126	0.500	1	03/31/2018 18:26	WG1092115
p-Isopropyltoluene	U		0.138	0.500	1	03/31/2018 18:26	WG1092115
2-Butanone (MEK)	U		1.28	5.00	1	03/31/2018 18:26	WG1092115
Methylene Chloride	U		1.07	2.50	1	03/31/2018 18:26	WG1092115
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	03/31/2018 18:26	WG1092115
Methyl tert-butyl ether	U		0.102	0.500	1	03/31/2018 18:26	WG1092115
Naphthalene	U		0.174	2.50	1	03/31/2018 18:26	WG1092115
n-Propylbenzene	U		0.162	0.500	1	03/31/2018 18:26	WG1092115
Styrene	U		0.117	0.500	1	03/31/2018 18:26	WG1092115 JC 4/25/18
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/31/2018 18:26	WG1092115
1,1,2,2-Tetrachloroethane	U	UJ JO	0.130	0.500	1	03/31/2018 18:26	WG1092115

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/28/18 00:00

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/31/2018 18:26	WG1092115
Tetrachloroethene	U		0.199	0.500	1	03/31/2018 18:26	WG1092115
Toluene	U		0.412	0.500	1	03/31/2018 18:26	WG1092115
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/31/2018 18:26	WG1092115
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/31/2018 18:26	WG1092115
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/31/2018 18:26	WG1092115
1,1,2-Trichloroethane	U		0.186	0.500	1	03/31/2018 18:26	WG1092115
Trichloroethene	U		0.153	0.500	1	03/31/2018 18:26	WG1092115
Trichlorofluoromethane	U	J4	0.130	2.50	1	03/31/2018 18:26	WG1092115
1,2,3-Trichloropropane	U		0.247	2.50	1	03/31/2018 18:26	WG1092115
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/31/2018 18:26	WG1092115
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/31/2018 18:26	WG1092115
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/31/2018 18:26	WG1092115
Vinyl acetate	U		0.645	5.00	1	03/31/2018 18:26	WG1092115
Vinyl chloride	U		0.118	0.500	1	03/31/2018 18:26	WG1092115
Xylenes, Total	U		0.316	1.50	1	03/31/2018 18:26	WG1092115
(S) Toluene-d8	102			80.0-120		03/31/2018 18:26	WG1092115
(S) Dibromofluoromethane	107			76.0-123		03/31/2018 18:26	WG1092115
(S) 4-Bromofluorobenzene	96.1			80.0-120		03/31/2018 18:26	WG1092115

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.9		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0278	J J	0.0109	0.0544	1	04/02/2018 02:43	WG1092315
Acrylonitrile	U		0.00195	0.0109	1	04/02/2018 02:43	WG1092315
Benzene	U		0.000294	0.00109	1	04/02/2018 02:43	WG1092315
Bromobenzene	U		0.000309	0.00109	1	04/02/2018 02:43	WG1092315
Bromodichloromethane	U		0.000276	0.00109	1	04/02/2018 02:43	WG1092315
Bromochloromethane	U		0.000424	0.00544	1	04/02/2018 02:43	WG1092315
Bromoform	U		0.000461	0.00109	1	04/02/2018 02:43	WG1092315
Bromomethane	U		0.00146	0.00544	1	04/02/2018 02:43	WG1092315
n-Butylbenzene	U		0.000281	0.00109	1	04/02/2018 02:43	WG1092315
sec-Butylbenzene	U		0.000219	0.00109	1	04/02/2018 02:43	WG1092315
tert-Butylbenzene	U		0.000224	0.00109	1	04/02/2018 02:43	WG1092315
Carbon disulfide	U		0.000240	0.00109	1	04/02/2018 02:43	WG1092315
Carbon tetrachloride	U		0.000357	0.00109	1	04/02/2018 02:43	WG1092315
Chlorobenzene	U		0.000231	0.00109	1	04/02/2018 02:43	WG1092315
Chlorodibromomethane	U		0.000406	0.00109	1	04/02/2018 02:43	WG1092315
Chloroethane	U		0.00103	0.00544	1	04/02/2018 02:43	WG1092315
Chloroform	U		0.000249	0.00544	1	04/02/2018 02:43	WG1092315
Chloromethane	U		0.000408	0.00272	1	04/02/2018 02:43	WG1092315
2-Chlorotoluene	U		0.000328	0.00109	1	04/02/2018 02:43	WG1092315
4-Chlorotoluene	U		0.000261	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00544	1	04/02/2018 02:43	WG1092315
1,2-Dibromoethane	U		0.000373	0.00109	1	04/02/2018 02:43	WG1092315
Dibromomethane	U		0.000416	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dichlorobenzene	U		0.000332	0.00109	1	04/02/2018 02:43	WG1092315
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/02/2018 02:43	WG1092315
1,4-Dichlorobenzene	U		0.000246	0.00109	1	04/02/2018 02:43	WG1092315
Dichlorodifluoromethane	U		0.000776	0.00544	1	04/02/2018 02:43	WG1092315
1,1-Dichloroethane	U		0.000217	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dichloroethane	U		0.000288	0.00109	1	04/02/2018 02:43	WG1092315
1,1-Dichloroethene	U		0.000330	0.00109	1	04/02/2018 02:43	WG1092315
cis-1,2-Dichloroethene	0.000490	J J	0.000256	0.00109	1	04/06/2018 05:19	WG1092315
trans-1,2-Dichloroethene	U		0.000287	0.00109	1	04/02/2018 02:43	WG1092315
1,2-Dichloropropane	U		0.000390	0.00109	1	04/02/2018 02:43	WG1092315
1,1-Dichloropropene	U		0.000345	0.00109	1	04/02/2018 02:43	WG1092315
1,3-Dichloropropane	U		0.000225	0.00109	1	04/02/2018 02:43	WG1092315
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/02/2018 02:43	WG1092315
trans-1,3-Dichloropropene	U		0.000291	0.00109	1	04/02/2018 02:43	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000847	0.00272	1	04/02/2018 02:43	WG1092315
2,2-Dichloropropane	U		0.000304	0.00109	1	04/02/2018 02:43	WG1092315
Di-isopropyl ether	U		0.000270	0.00109	1	04/02/2018 02:43	WG1092315
Ethylbenzene	U		0.000323	0.00109	1	04/02/2018 02:43	WG1092315
Hexachloro-1,3-butadiene	U		0.000372	0.00109	1	04/02/2018 02:43	WG1092315
2-Hexanone	U		0.00149	0.0109	1	04/02/2018 02:43	WG1092315
n-Hexane	0.000383	U B J	0.000316	0.0109	1	04/02/2018 02:43	WG1092315
Iodomethane	U		0.00275	0.0109	1	04/02/2018 02:43	WG1092315
Isopropylbenzene	U		0.000264	0.00109	1	04/02/2018 02:43	WG1092315
p-Isopropyltoluene	U		0.000222	0.00109	1	04/02/2018 02:43	WG1092315
2-Butanone (MEK)	U		0.00509	0.0109	1	04/02/2018 02:43	WG1092315
Methylene Chloride	U		0.00109	0.00544	1	04/02/2018 02:43	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00205	0.0109	1	04/02/2018 02:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 15:26

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000231	0.00109	1	04/02/2018 02:43	WG1092315
Naphthalene	U		0.00109	0.00544	1	04/02/2018 02:43	WG1092315
n-Propylbenzene	U		0.000224	0.00109	1	04/02/2018 02:43	WG1092315
Styrene	U		0.000255	0.00109	1	04/02/2018 02:43	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/02/2018 02:43	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000397	0.00109	1	04/02/2018 02:43	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000397	0.00109	1	04/02/2018 02:43	WG1092315
Tetrachloroethene	0.00371		0.000300	0.00109	1	04/02/2018 02:43	WG1092315
Toluene	U		0.000472	0.00544	1	04/02/2018 02:43	WG1092315
1,2,3-Trichlorobenzene	U		0.000333	0.00109	1	04/02/2018 02:43	WG1092315
1,2,4-Trichlorobenzene	U		0.000422	0.00109	1	04/02/2018 02:43	WG1092315
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/02/2018 02:43	WG1092315
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/02/2018 02:43	WG1092315
Trichloroethene	U		0.000304	0.00109	1	04/02/2018 02:43	WG1092315
Trichlorofluoromethane	U		0.000416	0.00544	1	04/02/2018 02:43	WG1092315
1,2,3-Trichloropropane	U		0.000806	0.00272	1	04/02/2018 02:43	WG1092315
1,2,4-Trimethylbenzene	U		0.000230	0.00109	1	04/02/2018 02:43	WG1092315
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/02/2018 02:43	WG1092315
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/02/2018 02:43	WG1092315
Vinyl acetate	U		0.00260	0.0109	1	04/02/2018 02:43	WG1092315
Vinyl chloride	0.00142		0.000317	0.00109	1	04/02/2018 02:43	WG1092315
Xylenes, Total	U		0.000760	0.00326	1	04/02/2018 02:43	WG1092315
(S) Toluene-d8	102			80.0-120		04/02/2018 02:43	WG1092315
(S) Toluene-d8	103			80.0-120		04/06/2018 05:19	WG1092315
(S) Dibromofluoromethane	99.5			74.0-131		04/06/2018 05:19	WG1092315
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 02:43	WG1092315
(S) 4-Bromofluorobenzene	97.6			64.0-132		04/06/2018 05:19	WG1092315
(S) 4-Bromofluorobenzene	101			64.0-132		04/02/2018 02:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.2		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0115	0.0574	1	04/02/2018 03:04	WG1092315
Acrylonitrile	U		0.00205	0.0115	1	04/02/2018 03:04	WG1092315
Benzene	U		0.000310	0.00115	1	04/02/2018 03:04	WG1092315
Bromobenzene	U		0.000326	0.00115	1	04/02/2018 03:04	WG1092315
Bromodichloromethane	U		0.000291	0.00115	1	04/02/2018 03:04	WG1092315
Bromochloromethane	U		0.000447	0.00574	1	04/02/2018 03:04	WG1092315
Bromoform	U		0.000486	0.00115	1	04/02/2018 03:04	WG1092315
Bromomethane	U		0.00154	0.00574	1	04/02/2018 03:04	WG1092315
n-Butylbenzene	U		0.000296	0.00115	1	04/02/2018 03:04	WG1092315
sec-Butylbenzene	U		0.000231	0.00115	1	04/02/2018 03:04	WG1092315
tert-Butylbenzene	U		0.000236	0.00115	1	04/02/2018 03:04	WG1092315
Carbon disulfide	U		0.000254	0.00115	1	04/02/2018 03:04	WG1092315
Carbon tetrachloride	U		0.000376	0.00115	1	04/02/2018 03:04	WG1092315
Chlorobenzene	U		0.000243	0.00115	1	04/02/2018 03:04	WG1092315
Chlorodibromomethane	U		0.000428	0.00115	1	04/02/2018 03:04	WG1092315
Chloroethane	U		0.00109	0.00574	1	04/02/2018 03:04	WG1092315
Chloroform	U		0.000263	0.00574	1	04/02/2018 03:04	WG1092315
Chloromethane	U		0.000430	0.00287	1	04/02/2018 03:04	WG1092315
2-Chlorotoluene	U		0.000345	0.00115	1	04/02/2018 03:04	WG1092315
4-Chlorotoluene	U		0.000275	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00574	1	04/02/2018 03:04	WG1092315
1,2-Dibromoethane	U		0.000393	0.00115	1	04/02/2018 03:04	WG1092315
Dibromomethane	U		0.000438	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dichlorobenzene	U		0.000350	0.00115	1	04/02/2018 03:04	WG1092315
1,3-Dichlorobenzene	U		0.000274	0.00115	1	04/02/2018 03:04	WG1092315
1,4-Dichlorobenzene	U		0.000259	0.00115	1	04/02/2018 03:04	WG1092315
Dichlorodifluoromethane	U		0.000818	0.00574	1	04/02/2018 03:04	WG1092315
1,1-Dichloroethane	U		0.000228	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dichloroethane	U		0.000304	0.00115	1	04/02/2018 03:04	WG1092315
1,1-Dichloroethene	U		0.000348	0.00115	1	04/02/2018 03:04	WG1092315
cis-1,2-Dichloroethene	0.00132		0.000270	0.00115	1	04/06/2018 05:40	WG1092315
trans-1,2-Dichloroethene	U		0.000303	0.00115	1	04/02/2018 03:04	WG1092315
1,2-Dichloropropane	U		0.000411	0.00115	1	04/02/2018 03:04	WG1092315
1,1-Dichloropropene	U		0.000364	0.00115	1	04/02/2018 03:04	WG1092315
1,3-Dichloropropane	U		0.000237	0.00115	1	04/02/2018 03:04	WG1092315
cis-1,3-Dichloropropene	U		0.000301	0.00115	1	04/02/2018 03:04	WG1092315
trans-1,3-Dichloropropene	U		0.000306	0.00115	1	04/02/2018 03:04	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000893	0.00287	1	04/02/2018 03:04	WG1092315
2,2-Dichloropropane	U		0.000320	0.00115	1	04/02/2018 03:04	WG1092315
Di-isopropyl ether	U		0.000285	0.00115	1	04/02/2018 03:04	WG1092315
Ethylbenzene	U		0.000341	0.00115	1	04/02/2018 03:04	WG1092315
Hexachloro-1,3-butadiene	U		0.000392	0.00115	1	04/02/2018 03:04	WG1092315
2-Hexanone	U		0.00157	0.0115	1	04/02/2018 03:04	WG1092315
n-Hexane	U		0.000333	0.0115	1	04/02/2018 03:04	WG1092315
Iodomethane	U		0.00290	0.0115	1	04/02/2018 03:04	WG1092315
Isopropylbenzene	U		0.000279	0.00115	1	04/02/2018 03:04	WG1092315
p-Isopropyltoluene	U		0.000234	0.00115	1	04/02/2018 03:04	WG1092315
2-Butanone (MEK)	U		0.00537	0.0115	1	04/02/2018 03:04	WG1092315
Methylene Chloride	U		0.00115	0.00574	1	04/02/2018 03:04	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	04/02/2018 03:04	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 15:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	04/02/2018 03:04	WG1092315
Naphthalene	U		0.00115	0.00574	1	04/02/2018 03:04	WG1092315
n-Propylbenzene	U		0.000236	0.00115	1	04/02/2018 03:04	WG1092315
Styrene	U		0.000268	0.00115	1	04/02/2018 03:04	WG1092315
1,1,1-Tetrachloroethane	U		0.000303	0.00115	1	04/02/2018 03:04	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	04/02/2018 03:04	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000419	0.00115	1	04/02/2018 03:04	WG1092315
Tetrachloroethene	0.00419		0.000317	0.00115	1	04/02/2018 03:04	WG1092315
Toluene	U		0.000498	0.00574	1	04/02/2018 03:04	WG1092315
1,2,3-Trichlorobenzene	U		0.000351	0.00115	1	04/02/2018 03:04	WG1092315
1,2,4-Trichlorobenzene	U		0.000445	0.00115	1	04/02/2018 03:04	WG1092315
1,1,1-Trichloroethane	U		0.000328	0.00115	1	04/02/2018 03:04	WG1092315
1,1,2-Trichloroethane	U		0.000318	0.00115	1	04/02/2018 03:04	WG1092315
Trichloroethene	U		0.000320	0.00115	1	04/02/2018 03:04	WG1092315
Trichlorofluoromethane	U		0.000438	0.00574	1	04/02/2018 03:04	WG1092315
1,2,3-Trichloropropane	U		0.000850	0.00287	1	04/02/2018 03:04	WG1092315
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/02/2018 03:04	WG1092315
1,2,3-Trimethylbenzene	U		0.000329	0.00115	1	04/02/2018 03:04	WG1092315
1,3,5-Trimethylbenzene	U		0.000305	0.00115	1	04/02/2018 03:04	WG1092315
Vinyl acetate	U		0.00274	0.0115	1	04/02/2018 03:04	WG1092315
Vinyl chloride	U		0.000334	0.00115	1	04/02/2018 03:04	WG1092315
Xylenes, Total	U		0.000801	0.00344	1	04/02/2018 03:04	WG1092315
(S) Toluene-d8	103			80.0-120		04/02/2018 03:04	WG1092315
(S) Toluene-d8	103			80.0-120		04/06/2018 05:40	WG1092315
(S) Dibromofluoromethane	99.9			74.0-131		04/06/2018 05:40	WG1092315
(S) Dibromofluoromethane	105			74.0-131		04/02/2018 03:04	WG1092315
(S) 4-Bromofluorobenzene	101			64.0-132		04/02/2018 03:04	WG1092315
(S) 4-Bromofluorobenzene	96.0			64.0-132		04/06/2018 05:40	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.3		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0121	J	0.0116	0.0579	1	04/06/2018 06:01	WG1092315
Acrylonitrile	U		0.00207	0.0116	1	04/06/2018 06:01	WG1092315
Benzene	U		0.000313	0.00116	1	04/06/2018 06:01	WG1092315
Bromobenzene	U		0.000329	0.00116	1	04/06/2018 06:01	WG1092315
Bromodichloromethane	U		0.000294	0.00116	1	04/06/2018 06:01	WG1092315
Bromochloromethane	U		0.000452	0.00579	1	04/06/2018 06:01	WG1092315
Bromoform	U		0.000491	0.00116	1	04/06/2018 06:01	WG1092315
Bromomethane	U		0.00155	0.00579	1	04/06/2018 06:01	WG1092315
n-Butylbenzene	U		0.000299	0.00116	1	04/06/2018 06:01	WG1092315
sec-Butylbenzene	U		0.000233	0.00116	1	04/06/2018 06:01	WG1092315
tert-Butylbenzene	U		0.000239	0.00116	1	04/06/2018 06:01	WG1092315
Carbon disulfide	U		0.000256	0.00116	1	04/06/2018 06:01	WG1092315
Carbon tetrachloride	U		0.000380	0.00116	1	04/06/2018 06:01	WG1092315
Chlorobenzene	U		0.000246	0.00116	1	04/06/2018 06:01	WG1092315
Chlorodibromomethane	U		0.000432	0.00116	1	04/06/2018 06:01	WG1092315
Chloroethane	U		0.00110	0.00579	1	04/06/2018 06:01	WG1092315
Chloroform	U		0.000265	0.00579	1	04/06/2018 06:01	WG1092315
Chloromethane	U		0.000435	0.00290	1	04/06/2018 06:01	WG1092315
2-Chlorotoluene	U		0.000349	0.00116	1	04/06/2018 06:01	WG1092315
4-Chlorotoluene	U		0.000278	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00579	1	04/06/2018 06:01	WG1092315
1,2-Dibromoethane	U		0.000397	0.00116	1	04/06/2018 06:01	WG1092315
Dibromomethane	U		0.000443	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dichlorobenzene	U		0.000353	0.00116	1	04/06/2018 06:01	WG1092315
1,3-Dichlorobenzene	U		0.000277	0.00116	1	04/06/2018 06:01	WG1092315
1,4-Dichlorobenzene	U		0.000262	0.00116	1	04/06/2018 06:01	WG1092315
Dichlorodifluoromethane	U		0.000826	0.00579	1	04/06/2018 06:01	WG1092315
1,1-Dichloroethane	U		0.000231	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dichloroethane	U		0.000307	0.00116	1	04/06/2018 06:01	WG1092315
1,1-Dichloroethene	U		0.000351	0.00116	1	04/06/2018 06:01	WG1092315
cis-1,2-Dichloroethene	0.00502		0.000272	0.00116	1	04/06/2018 06:01	WG1092315
trans-1,2-Dichloroethene	U		0.000306	0.00116	1	04/06/2018 06:01	WG1092315
1,2-Dichloropropane	U		0.000415	0.00116	1	04/06/2018 06:01	WG1092315
1,1-Dichloropropene	U		0.000367	0.00116	1	04/06/2018 06:01	WG1092315
1,3-Dichloropropane	U		0.000240	0.00116	1	04/06/2018 06:01	WG1092315
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	04/06/2018 06:01	WG1092315
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	04/06/2018 06:01	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000902	0.00290	1	04/06/2018 06:01	WG1092315
2,2-Dichloropropane	U		0.000323	0.00116	1	04/06/2018 06:01	WG1092315
Di-isopropyl ether	U		0.000287	0.00116	1	04/06/2018 06:01	WG1092315
Ethylbenzene	U		0.000344	0.00116	1	04/06/2018 06:01	WG1092315
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	04/06/2018 06:01	WG1092315
2-Hexanone	U		0.00159	0.0116	1	04/06/2018 06:01	WG1092315
n-Hexane	U		0.000336	0.0116	1	04/06/2018 06:01	WG1092315
Iodomethane	U		0.00293	0.0116	1	04/06/2018 06:01	WG1092315
Isopropylbenzene	U		0.000282	0.00116	1	04/06/2018 06:01	WG1092315
p-Isopropyltoluene	U		0.000236	0.00116	1	04/06/2018 06:01	WG1092315
2-Butanone (MEK)	U		0.00542	0.0116	1	04/06/2018 06:01	WG1092315
Methylene Chloride	U		0.00116	0.00579	1	04/06/2018 06:01	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	04/06/2018 06:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 15:55

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/06/2018 06:01	WG1092315
Naphthalene	U		0.00116	0.00579	1	04/06/2018 06:01	WG1092315
n-Propylbenzene	U		0.000239	0.00116	1	04/06/2018 06:01	WG1092315
Styrene	U		0.000271	0.00116	1	04/06/2018 06:01	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	04/06/2018 06:01	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000423	0.00116	1	04/06/2018 06:01	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000423	0.00116	1	04/06/2018 06:01	WG1092315
Tetrachloroethene	0.0317		0.000320	0.00116	1	04/06/2018 06:01	WG1092315
Toluene	U		0.000503	0.00579	1	04/06/2018 06:01	WG1092315
1,2,3-Trichlorobenzene	U		0.000355	0.00116	1	04/06/2018 06:01	WG1092315
1,2,4-Trichlorobenzene	U		0.000450	0.00116	1	04/06/2018 06:01	WG1092315
1,1,1-Trichloroethane	U		0.000331	0.00116	1	04/06/2018 06:01	WG1092315
1,1,2-Trichloroethane	U		0.000321	0.00116	1	04/06/2018 06:01	WG1092315
Trichloroethene	0.00188		0.000323	0.00116	1	04/06/2018 06:01	WG1092315
Trichlorofluoromethane	U		0.000443	0.00579	1	04/06/2018 06:01	WG1092315
1,2,3-Trichloropropane	U		0.000859	0.00290	1	04/06/2018 06:01	WG1092315
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	04/06/2018 06:01	WG1092315
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	04/06/2018 06:01	WG1092315
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	04/06/2018 06:01	WG1092315
Vinyl acetate	U		0.00277	0.0116	1	04/06/2018 06:01	WG1092315
Vinyl chloride	0.000458	J	0.000337	0.00116	1	04/06/2018 06:01	WG1092315
Xylenes, Total	U		0.000809	0.00348	1	04/06/2018 06:01	WG1092315
(S) Toluene-d8	105			80.0-120		04/06/2018 06:01	WG1092315
(S) Dibromofluoromethane	99.0			74.0-131		04/06/2018 06:01	WG1092315
(S) 4-Bromofluorobenzene	98.0			64.0-132		04/06/2018 06:01	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.6		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0108	0.0540	1	04/02/2018 03:46	WG1092315
Acrylonitrile	U		0.00193	0.0108	1	04/02/2018 03:46	WG1092315
Benzene	U		0.000292	0.00108	1	04/02/2018 03:46	WG1092315
Bromobenzene	U		0.000307	0.00108	1	04/02/2018 03:46	WG1092315
Bromodichloromethane	U		0.000274	0.00108	1	04/02/2018 03:46	WG1092315
Bromochloromethane	U		0.000421	0.00540	1	04/02/2018 03:46	WG1092315
Bromoform	U		0.000458	0.00108	1	04/02/2018 03:46	WG1092315
Bromomethane	U		0.00145	0.00540	1	04/02/2018 03:46	WG1092315
n-Butylbenzene	U		0.000279	0.00108	1	04/02/2018 03:46	WG1092315
sec-Butylbenzene	U		0.000217	0.00108	1	04/02/2018 03:46	WG1092315
tert-Butylbenzene	U		0.000222	0.00108	1	04/02/2018 03:46	WG1092315
Carbon disulfide	U		0.000239	0.00108	1	04/02/2018 03:46	WG1092315
Carbon tetrachloride	U		0.000354	0.00108	1	04/02/2018 03:46	WG1092315
Chlorobenzene	U		0.000229	0.00108	1	04/02/2018 03:46	WG1092315
Chlorodibromomethane	U		0.000403	0.00108	1	04/02/2018 03:46	WG1092315
Chloroethane	U		0.00102	0.00540	1	04/02/2018 03:46	WG1092315
Chloroform	U		0.000247	0.00540	1	04/02/2018 03:46	WG1092315
Chloromethane	U		0.000405	0.00270	1	04/02/2018 03:46	WG1092315
2-Chlorotoluene	U		0.000325	0.00108	1	04/02/2018 03:46	WG1092315
4-Chlorotoluene	U		0.000259	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00540	1	04/02/2018 03:46	WG1092315
1,2-Dibromoethane	U		0.000370	0.00108	1	04/02/2018 03:46	WG1092315
Dibromomethane	U		0.000413	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dichlorobenzene	U		0.000329	0.00108	1	04/02/2018 03:46	WG1092315
1,3-Dichlorobenzene	U		0.000258	0.00108	1	04/02/2018 03:46	WG1092315
1,4-Dichlorobenzene	U		0.000244	0.00108	1	04/02/2018 03:46	WG1092315
Dichlorodifluoromethane	U		0.000770	0.00540	1	04/02/2018 03:46	WG1092315
1,1-Dichloroethane	U		0.000215	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dichloroethane	U		0.000286	0.00108	1	04/02/2018 03:46	WG1092315
1,1-Dichloroethene	U		0.000327	0.00108	1	04/02/2018 03:46	WG1092315
cis-1,2-Dichloroethene	0.00265		0.000254	0.00108	1	04/02/2018 03:46	WG1092315
trans-1,2-Dichloroethene	U		0.000285	0.00108	1	04/02/2018 03:46	WG1092315
1,2-Dichloropropane	U		0.000387	0.00108	1	04/02/2018 03:46	WG1092315
1,1-Dichloropropene	U		0.000342	0.00108	1	04/02/2018 03:46	WG1092315
1,3-Dichloropropane	U		0.000224	0.00108	1	04/02/2018 03:46	WG1092315
cis-1,3-Dichloropropene	U		0.000283	0.00108	1	04/02/2018 03:46	WG1092315
trans-1,3-Dichloropropene	U		0.000288	0.00108	1	04/02/2018 03:46	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000840	0.00270	1	04/02/2018 03:46	WG1092315
2,2-Dichloropropane	U		0.000301	0.00108	1	04/02/2018 03:46	WG1092315
Di-isopropyl ether	U		0.000268	0.00108	1	04/02/2018 03:46	WG1092315
Ethylbenzene	U		0.000321	0.00108	1	04/02/2018 03:46	WG1092315
Hexachloro-1,3-butadiene	U		0.000369	0.00108	1	04/02/2018 03:46	WG1092315
2-Hexanone	U		0.00148	0.0108	1	04/02/2018 03:46	WG1092315
n-Hexane	0.000509	U B J	0.000313	0.0108	1	04/02/2018 03:46	WG1092315
Iodomethane	U		0.00273	0.0108	1	04/02/2018 03:46	WG1092315
Isopropylbenzene	U		0.000262	0.00108	1	04/02/2018 03:46	WG1092315
p-Isopropyltoluene	U		0.000220	0.00108	1	04/02/2018 03:46	WG1092315
2-Butanone (MEK)	U		0.00505	0.0108	1	04/02/2018 03:46	WG1092315
Methylene Chloride	U		0.00108	0.00540	1	04/02/2018 03:46	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00203	0.0108	1	04/02/2018 03:46	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 16:03

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000229	0.00108	1	04/02/2018 03:46	WG1092315
Naphthalene	U		0.00108	0.00540	1	04/02/2018 03:46	WG1092315
n-Propylbenzene	U		0.000222	0.00108	1	04/02/2018 03:46	WG1092315
Styrene	U		0.000253	0.00108	1	04/02/2018 03:46	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000285	0.00108	1	04/02/2018 03:46	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000394	0.00108	1	04/02/2018 03:46	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000394	0.00108	1	04/02/2018 03:46	WG1092315
Tetrachloroethene	0.00746		0.000298	0.00108	1	04/02/2018 03:46	WG1092315
Toluene	U		0.000469	0.00540	1	04/02/2018 03:46	WG1092315
1,2,3-Trichlorobenzene	U		0.000330	0.00108	1	04/02/2018 03:46	WG1092315
1,2,4-Trichlorobenzene	U		0.000419	0.00108	1	04/02/2018 03:46	WG1092315
1,1,1-Trichloroethane	U		0.000309	0.00108	1	04/02/2018 03:46	WG1092315
1,1,2-Trichloroethane	U		0.000299	0.00108	1	04/02/2018 03:46	WG1092315
Trichloroethene	0.000868	J ↓	0.000301	0.00108	1	04/02/2018 03:46	WG1092315
Trichlorofluoromethane	U		0.000413	0.00540	1	04/02/2018 03:46	WG1092315
1,2,3-Trichloropropane	U		0.000800	0.00270	1	04/02/2018 03:46	WG1092315
1,2,4-Trimethylbenzene	U		0.000228	0.00108	1	04/02/2018 03:46	WG1092315
1,2,3-Trimethylbenzene	U		0.000310	0.00108	1	04/02/2018 03:46	WG1092315
1,3,5-Trimethylbenzene	U		0.000287	0.00108	1	04/02/2018 03:46	WG1092315
Vinyl acetate	U		0.00258	0.0108	1	04/02/2018 03:46	WG1092315
Vinyl chloride	0.000458	J ↓	0.000314	0.00108	1	04/02/2018 03:46	WG1092315
Xylenes, Total	U		0.000754	0.00324	1	04/02/2018 03:46	WG1092315
(S) Toluene-d8	99.0			80.0-120		04/02/2018 03:46	WG1092315
(S) Dibromofluoromethane	106			74.0-131		04/02/2018 03:46	WG1092315
(S) 4-Bromofluorobenzene	100			64.0-132		04/02/2018 03:46	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.4		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0121	J	0.0113	0.0566	1	04/02/2018 04:07	WG1092315
Acrylonitrile	U		0.00203	0.0113	1	04/02/2018 04:07	WG1092315
Benzene	U		0.000306	0.00113	1	04/02/2018 04:07	WG1092315
Bromobenzene	U		0.000321	0.00113	1	04/02/2018 04:07	WG1092315
Bromodichloromethane	U		0.000287	0.00113	1	04/02/2018 04:07	WG1092315
Bromochloromethane	U		0.000441	0.00566	1	04/02/2018 04:07	WG1092315
Bromoform	U		0.000480	0.00113	1	04/02/2018 04:07	WG1092315
Bromomethane	U		0.00152	0.00566	1	04/02/2018 04:07	WG1092315
n-Butylbenzene	U		0.000292	0.00113	1	04/02/2018 04:07	WG1092315
sec-Butylbenzene	U		0.000227	0.00113	1	04/02/2018 04:07	WG1092315
tert-Butylbenzene	U		0.000233	0.00113	1	04/02/2018 04:07	WG1092315
Carbon disulfide	U		0.000250	0.00113	1	04/02/2018 04:07	WG1092315
Carbon tetrachloride	U		0.000371	0.00113	1	04/02/2018 04:07	WG1092315
Chlorobenzene	U		0.000240	0.00113	1	04/02/2018 04:07	WG1092315
Chlorodibromomethane	U		0.000422	0.00113	1	04/02/2018 04:07	WG1092315
Chloroethane	U		0.00107	0.00566	1	04/02/2018 04:07	WG1092315
Chloroform	U		0.000259	0.00566	1	04/02/2018 04:07	WG1092315
Chloromethane	U		0.000424	0.00283	1	04/02/2018 04:07	WG1092315
2-Chlorotoluene	U		0.000341	0.00113	1	04/02/2018 04:07	WG1092315
4-Chlorotoluene	U		0.000272	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00566	1	04/02/2018 04:07	WG1092315
1,2-Dibromoethane	U		0.000388	0.00113	1	04/02/2018 04:07	WG1092315
Dibromomethane	U		0.000432	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dichlorobenzene	U		0.000345	0.00113	1	04/02/2018 04:07	WG1092315
1,3-Dichlorobenzene	U		0.000270	0.00113	1	04/02/2018 04:07	WG1092315
1,4-Dichlorobenzene	U		0.000256	0.00113	1	04/02/2018 04:07	WG1092315
Dichlorodifluoromethane	U		0.000807	0.00566	1	04/02/2018 04:07	WG1092315
1,1-Dichloroethane	U		0.000225	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dichloroethane	U		0.000300	0.00113	1	04/02/2018 04:07	WG1092315
1,1-Dichloroethene	U		0.000343	0.00113	1	04/02/2018 04:07	WG1092315
cis-1,2-Dichloroethene	0.00148		0.000266	0.00113	1	04/02/2018 04:07	WG1092315
trans-1,2-Dichloroethene	U		0.000299	0.00113	1	04/02/2018 04:07	WG1092315
1,2-Dichloropropane	U		0.000405	0.00113	1	04/02/2018 04:07	WG1092315
1,1-Dichloropropene	U		0.000359	0.00113	1	04/02/2018 04:07	WG1092315
1,3-Dichloropropane	U		0.000234	0.00113	1	04/02/2018 04:07	WG1092315
cis-1,3-Dichloropropene	U		0.000296	0.00113	1	04/02/2018 04:07	WG1092315
trans-1,3-Dichloropropene	U		0.000302	0.00113	1	04/02/2018 04:07	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000880	0.00283	1	04/02/2018 04:07	WG1092315
2,2-Dichloropropane	U		0.000316	0.00113	1	04/02/2018 04:07	WG1092315
Di-isopropyl ether	U		0.000281	0.00113	1	04/02/2018 04:07	WG1092315
Ethylbenzene	U		0.000336	0.00113	1	04/02/2018 04:07	WG1092315
Hexachloro-1,3-butadiene	U		0.000387	0.00113	1	04/02/2018 04:07	WG1092315
2-Hexanone	U		0.00155	0.0113	1	04/02/2018 04:07	WG1092315
n-Hexane	0.000403	U	0.000328	0.0113	1	04/02/2018 04:07	WG1092315
Iodomethane	U		0.00286	0.0113	1	04/02/2018 04:07	WG1092315
Isopropylbenzene	U		0.000275	0.00113	1	04/02/2018 04:07	WG1092315
p-Isopropyltoluene	U		0.000231	0.00113	1	04/02/2018 04:07	WG1092315
2-Butanone (MEK)	U		0.00530	0.0113	1	04/02/2018 04:07	WG1092315
Methylene Chloride	U		0.00113	0.00566	1	04/02/2018 04:07	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	04/02/2018 04:07	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 16:13

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/02/2018 04:07	WG1092315
Naphthalene	U		0.00113	0.00566	1	04/02/2018 04:07	WG1092315
n-Propylbenzene	U		0.000233	0.00113	1	04/02/2018 04:07	WG1092315
Styrene	U		0.000265	0.00113	1	04/02/2018 04:07	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/02/2018 04:07	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000413	0.00113	1	04/02/2018 04:07	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000413	0.00113	1	04/02/2018 04:07	WG1092315
Tetrachloroethene	0.00364		0.000312	0.00113	1	04/02/2018 04:07	WG1092315
Toluene	U		0.000491	0.00566	1	04/02/2018 04:07	WG1092315
1,2,3-Trichlorobenzene	U		0.000346	0.00113	1	04/02/2018 04:07	WG1092315
1,2,4-Trichlorobenzene	U		0.000439	0.00113	1	04/02/2018 04:07	WG1092315
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/02/2018 04:07	WG1092315
1,1,2-Trichloroethane	U		0.000313	0.00113	1	04/02/2018 04:07	WG1092315
Trichloroethene	0.000464	J ↓	0.000316	0.00113	1	04/02/2018 04:07	WG1092315
Trichlorofluoromethane	U		0.000432	0.00566	1	04/02/2018 04:07	WG1092315
1,2,3-Trichloropropane	U		0.000839	0.00283	1	04/02/2018 04:07	WG1092315
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/02/2018 04:07	WG1092315
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/02/2018 04:07	WG1092315
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	04/02/2018 04:07	WG1092315
Vinyl acetate	U		0.00270	0.0113	1	04/02/2018 04:07	WG1092315
Vinyl chloride	0.000466	J ↓	0.000329	0.00113	1	04/02/2018 04:07	WG1092315
Xylenes, Total	U		0.000790	0.00339	1	04/02/2018 04:07	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 04:07	WG1092315
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 04:07	WG1092315
(S) 4-Bromofluorobenzene	101			64.0-132		04/02/2018 04:07	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.1		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0659	J	0.0215	0.108	1.55	04/02/2018 04:28	WG1092315
Acrylonitrile	U		0.00384	0.0215	1.55	04/02/2018 04:28	WG1092315
Benzene	U		0.000580	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromobenzene	U		0.000610	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromodichloromethane	U		0.000547	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromochloromethane	U		0.000838	0.0108	1.55	04/02/2018 04:28	WG1092315
Bromoform	U		0.000912	0.00215	1.55	04/02/2018 04:28	WG1092315
Bromomethane	U		0.00289	0.0108	1.55	04/02/2018 04:28	WG1092315
n-Butylbenzene	U		0.000555	0.00215	1.55	04/02/2018 04:28	WG1092315
sec-Butylbenzene	U		0.000433	0.00215	1.55	04/02/2018 04:28	WG1092315
tert-Butylbenzene	U		0.000443	0.00215	1.55	04/02/2018 04:28	WG1092315
Carbon disulfide	0.00248		0.000474	0.00215	1.55	04/02/2018 04:28	WG1092315
Carbon tetrachloride	U		0.000705	0.00215	1.55	04/02/2018 04:28	WG1092315
Chlorobenzene	U		0.000456	0.00215	1.55	04/02/2018 04:28	WG1092315
Chlorodibromomethane	U		0.000802	0.00215	1.55	04/02/2018 04:28	WG1092315
Chloroethane	U		0.00204	0.0108	1.55	04/02/2018 04:28	WG1092315
Chloroform	U		0.000493	0.0108	1.55	04/02/2018 04:28	WG1092315
Chloromethane	U		0.000806	0.00538	1.55	04/02/2018 04:28	WG1092315
2-Chlorotoluene	U		0.000647	0.00215	1.55	04/02/2018 04:28	WG1092315
4-Chlorotoluene	U		0.000516	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00226	0.0108	1.55	04/02/2018 04:28	WG1092315
1,2-Dibromoethane	U		0.000738	0.00215	1.55	04/02/2018 04:28	WG1092315
Dibromomethane	U		0.000821	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dichlorobenzene	U		0.000656	0.00215	1.55	04/02/2018 04:28	WG1092315
1,3-Dichlorobenzene	U		0.000513	0.00215	1.55	04/02/2018 04:28	WG1092315
1,4-Dichlorobenzene	U		0.000486	0.00215	1.55	04/02/2018 04:28	WG1092315
Dichlorodifluoromethane	U		0.00153	0.0108	1.55	04/02/2018 04:28	WG1092315
1,1-Dichloroethane	U		0.000427	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dichloroethane	U		0.000570	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1-Dichloroethene	0.0259		0.000652	0.00215	1.55	04/02/2018 04:28	WG1092315
cis-1,2-Dichloroethene	4.73		0.0816	0.347	250	04/06/2018 06:22	WG1092315
trans-1,2-Dichloroethene	0.00437		0.000567	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2-Dichloropropane	U		0.000770	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1-Dichloropropene	U		0.000681	0.00215	1.55	04/02/2018 04:28	WG1092315
1,3-Dichloropropane	U		0.000445	0.00215	1.55	04/02/2018 04:28	WG1092315
cis-1,3-Dichloropropene	U		0.000563	0.00215	1.55	04/02/2018 04:28	WG1092315
trans-1,3-Dichloropropene	U		0.000574	0.00215	1.55	04/02/2018 04:28	WG1092315
trans-1,4-Dichloro-2-butene	U		0.00166	0.00538	1.55	04/02/2018 04:28	WG1092315
2,2-Dichloropropane	U		0.000599	0.00215	1.55	04/02/2018 04:28	WG1092315
Di-isopropyl ether	U		0.000533	0.00215	1.55	04/02/2018 04:28	WG1092315
Ethylbenzene	U		0.000638	0.00215	1.55	04/02/2018 04:28	WG1092315
Hexachloro-1,3-butadiene	U		0.000735	0.00215	1.55	04/02/2018 04:28	WG1092315
2-Hexanone	U		0.00294	0.0215	1.55	04/02/2018 04:28	WG1092315
n-Hexane	0.00113	U	0.000624	0.0215	1.55	04/02/2018 04:28	WG1092315
Iodomethane	U		0.00544	0.0215	1.55	04/02/2018 04:28	WG1092315
Isopropylbenzene	U		0.000523	0.00215	1.55	04/02/2018 04:28	WG1092315
p-Isopropyltoluene	U		0.000438	0.00215	1.55	04/02/2018 04:28	WG1092315
2-Butanone (MEK)	U		0.0101	0.0215	1.55	04/02/2018 04:28	WG1092315
Methylene Chloride	U		0.00215	0.0108	1.55	04/02/2018 04:28	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00404	0.0215	1.55	04/02/2018 04:28	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 08:13

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000456	0.00215	1.55	04/02/2018 04:28	WG1092315
Naphthalene	U		0.00215	0.0108	1.55	04/02/2018 04:28	WG1092315
n-Propylbenzene	U		0.000443	0.00215	1.55	04/02/2018 04:28	WG1092315
Styrene	U		0.000504	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000567	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000785	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000785	0.00215	1.55	04/02/2018 04:28	WG1092315
Tetrachloroethene	0.0737		0.000594	0.00215	1.55	04/02/2018 04:28	WG1092315
Toluene	U		0.000934	0.0108	1.55	04/02/2018 04:28	WG1092315
1,2,3-Trichlorobenzene	U		0.000658	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2,4-Trichlorobenzene	U		0.000834	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,1-Trichloroethane	U		0.000615	0.00215	1.55	04/02/2018 04:28	WG1092315
1,1,2-Trichloroethane	U		0.000595	0.00215	1.55	04/02/2018 04:28	WG1092315
Trichloroethene	0.145		0.000599	0.00215	1.55	04/02/2018 04:28	WG1092315
Trichlorofluoromethane	U		0.000821	0.0108	1.55	04/02/2018 04:28	WG1092315
1,2,3-Trichloropropane	U		0.00160	0.00538	1.55	04/02/2018 04:28	WG1092315
1,2,4-Trimethylbenzene	U		0.000454	0.00215	1.55	04/02/2018 04:28	WG1092315
1,2,3-Trimethylbenzene	U		0.000617	0.00215	1.55	04/02/2018 04:28	WG1092315
1,3,5-Trimethylbenzene	U		0.000572	0.00215	1.55	04/02/2018 04:28	WG1092315
Vinyl acetate	U		0.00513	0.0215	1.55	04/02/2018 04:28	WG1092315
Vinyl chloride	0.224	J	0.101	0.347	250	04/06/2018 06:22	WG1092315
Xylenes, Total	U		0.00150	0.00645	1.55	04/02/2018 04:28	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 04:28	WG1092315
(S) Toluene-d8	109			80.0-120		04/06/2018 06:22	WG1092315
(S) Dibromofluoromethane	106			74.0-131		04/02/2018 04:28	WG1092315
(S) Dibromofluoromethane	92.9			74.0-131		04/06/2018 06:22	WG1092315
(S) 4-Bromofluorobenzene	102			64.0-132		04/02/2018 04:28	WG1092315
(S) 4-Bromofluorobenzene	97.0			64.0-132		04/06/2018 06:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.9		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0113	0.0563	1	04/02/2018 05:22	WG1092315
Acrylonitrile	U		0.00201	0.0113	1	04/02/2018 05:22	WG1092315
Benzene	0.000419	J J	0.000304	0.00113	1	04/02/2018 05:22	WG1092315
Bromobenzene	U		0.000320	0.00113	1	04/02/2018 05:22	WG1092315
Bromodichloromethane	U		0.000286	0.00113	1	04/02/2018 05:22	WG1092315
Bromochloromethane	U		0.000439	0.00563	1	04/02/2018 05:22	WG1092315
Bromoform	U		0.000477	0.00113	1	04/02/2018 05:22	WG1092315
Bromomethane	U		0.00151	0.00563	1	04/02/2018 05:22	WG1092315
n-Butylbenzene	U		0.000290	0.00113	1	04/02/2018 05:22	WG1092315
sec-Butylbenzene	U		0.000226	0.00113	1	04/02/2018 05:22	WG1092315
tert-Butylbenzene	U		0.000232	0.00113	1	04/02/2018 05:22	WG1092315
Carbon disulfide	0.000730	J J	0.000249	0.00113	1	04/02/2018 05:22	WG1092315
Carbon tetrachloride	U		0.000369	0.00113	1	04/02/2018 05:22	WG1092315
Chlorobenzene	U		0.000239	0.00113	1	04/02/2018 05:22	WG1092315
Chlorodibromomethane	U		0.000420	0.00113	1	04/02/2018 05:22	WG1092315
Chloroethane	U		0.00106	0.00563	1	04/02/2018 05:22	WG1092315
Chloroform	U		0.000258	0.00563	1	04/02/2018 05:22	WG1092315
Chloromethane	U		0.000422	0.00281	1	04/02/2018 05:22	WG1092315
2-Chlorotoluene	U		0.000339	0.00113	1	04/02/2018 05:22	WG1092315
4-Chlorotoluene	U		0.000270	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00563	1	04/02/2018 05:22	WG1092315
1,2-Dibromoethane	U		0.000386	0.00113	1	04/02/2018 05:22	WG1092315
Dibromomethane	U		0.000430	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dichlorobenzene	U		0.000343	0.00113	1	04/02/2018 05:22	WG1092315
1,3-Dichlorobenzene	U		0.000269	0.00113	1	04/02/2018 05:22	WG1092315
1,4-Dichlorobenzene	U		0.000254	0.00113	1	04/02/2018 05:22	WG1092315
Dichlorodifluoromethane	U		0.000802	0.00563	1	04/02/2018 05:22	WG1092315
1,1-Dichloroethane	U		0.000224	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dichloroethane	U		0.000298	0.00113	1	04/02/2018 05:22	WG1092315
1,1-Dichloroethene	U		0.000341	0.00113	1	04/02/2018 05:22	WG1092315
cis-1,2-Dichloroethene	0.0564		0.000264	0.00113	1	04/02/2018 05:22	WG1092315
trans-1,2-Dichloroethene	U		0.000297	0.00113	1	04/02/2018 05:22	WG1092315
1,2-Dichloropropane	U		0.000403	0.00113	1	04/02/2018 05:22	WG1092315
1,1-Dichloropropene	U		0.000357	0.00113	1	04/02/2018 05:22	WG1092315
1,3-Dichloropropane	U		0.000233	0.00113	1	04/02/2018 05:22	WG1092315
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	04/02/2018 05:22	WG1092315
trans-1,3-Dichloropropene	U		0.000300	0.00113	1	04/02/2018 05:22	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000875	0.00281	1	04/02/2018 05:22	WG1092315
2,2-Dichloropropane	U		0.000314	0.00113	1	04/02/2018 05:22	WG1092315
Di-isopropyl ether	U		0.000279	0.00113	1	04/02/2018 05:22	WG1092315
Ethylbenzene	U		0.000334	0.00113	1	04/02/2018 05:22	WG1092315
Hexachloro-1,3-butadiene	U		0.000385	0.00113	1	04/02/2018 05:22	WG1092315
2-Hexanone	U		0.00154	0.0113	1	04/02/2018 05:22	WG1092315
n-Hexane	U		0.000326	0.0113	1	04/02/2018 05:22	WG1092315
Iodomethane	U		0.00285	0.0113	1	04/02/2018 05:22	WG1092315
Isopropylbenzene	U		0.000273	0.00113	1	04/02/2018 05:22	WG1092315
p-Isopropyltoluene	U		0.000230	0.00113	1	04/02/2018 05:22	WG1092315
2-Butanone (MEK)	U		0.00527	0.0113	1	04/02/2018 05:22	WG1092315
Methylene Chloride	U		0.00113	0.00563	1	04/02/2018 05:22	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	04/02/2018 05:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 08:37

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	04/02/2018 05:22	WG1092315
Naphthalene	U		0.00113	0.00563	1	04/02/2018 05:22	WG1092315
n-Propylbenzene	U		0.000232	0.00113	1	04/02/2018 05:22	WG1092315
Styrene	U		0.000263	0.00113	1	04/02/2018 05:22	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000297	0.00113	1	04/02/2018 05:22	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	04/02/2018 05:22	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00113	1	04/02/2018 05:22	WG1092315
Tetrachloroethene	0.00623		0.000311	0.00113	1	04/02/2018 05:22	WG1092315
Toluene	U		0.000488	0.00563	1	04/02/2018 05:22	WG1092315
1,2,3-Trichlorobenzene	U		0.000344	0.00113	1	04/02/2018 05:22	WG1092315
1,2,4-Trichlorobenzene	U		0.000437	0.00113	1	04/02/2018 05:22	WG1092315
1,1,1-Trichloroethane	U		0.000322	0.00113	1	04/02/2018 05:22	WG1092315
1,1,2-Trichloroethane	U		0.000312	0.00113	1	04/02/2018 05:22	WG1092315
Trichloroethene	0.00152		0.000314	0.00113	1	04/02/2018 05:22	WG1092315
Trichlorofluoromethane	U		0.000430	0.00563	1	04/02/2018 05:22	WG1092315
1,2,3-Trichloropropane	U		0.000834	0.00281	1	04/02/2018 05:22	WG1092315
1,2,4-Trimethylbenzene	U		0.000237	0.00113	1	04/02/2018 05:22	WG1092315
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	04/02/2018 05:22	WG1092315
1,3,5-Trimethylbenzene	U		0.000299	0.00113	1	04/02/2018 05:22	WG1092315
Vinyl acetate	U		0.00269	0.0113	1	04/02/2018 05:22	WG1092315
Vinyl chloride	0.0194		0.000327	0.00113	1	04/02/2018 05:22	WG1092315
Xylenes, Total	U		0.000785	0.00338	1	04/02/2018 05:22	WG1092315
(S) Toluene-d8	100			80.0-120		04/02/2018 05:22	WG1092315
(S) Dibromofluoromethane	98.7			74.0-131		04/02/2018 05:22	WG1092315
(S) 4-Bromofluorobenzene	106			64.0-132		04/02/2018 05:22	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.8		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0537	J	0.0111	0.0556	1	04/02/2018 05:43	WG1092315
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 05:43	WG1092315
Benzene	U		0.000301	0.00111	1	04/02/2018 05:43	WG1092315
Bromobenzene	U		0.000316	0.00111	1	04/02/2018 05:43	WG1092315
Bromodichloromethane	U		0.000283	0.00111	1	04/02/2018 05:43	WG1092315
Bromochloromethane	U		0.000434	0.00556	1	04/02/2018 05:43	WG1092315
Bromoform	U		0.000472	0.00111	1	04/02/2018 05:43	WG1092315
Bromomethane	U		0.00149	0.00556	1	04/02/2018 05:43	WG1092315
n-Butylbenzene	U		0.000287	0.00111	1	04/02/2018 05:43	WG1092315
sec-Butylbenzene	U		0.000224	0.00111	1	04/02/2018 05:43	WG1092315
tert-Butylbenzene	U		0.000229	0.00111	1	04/02/2018 05:43	WG1092315
Carbon disulfide	0.000820	J	0.000246	0.00111	1	04/02/2018 05:43	WG1092315
Carbon tetrachloride	U		0.000365	0.00111	1	04/02/2018 05:43	WG1092315
Chlorobenzene	U		0.000236	0.00111	1	04/02/2018 05:43	WG1092315
Chlorodibromomethane	U		0.000415	0.00111	1	04/02/2018 05:43	WG1092315
Chloroethane	U		0.00105	0.00556	1	04/02/2018 05:43	WG1092315
Chloroform	U		0.000255	0.00556	1	04/02/2018 05:43	WG1092315
Chloromethane	U		0.000417	0.00278	1	04/02/2018 05:43	WG1092315
2-Chlorotoluene	U		0.000335	0.00111	1	04/02/2018 05:43	WG1092315
4-Chlorotoluene	U		0.000267	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00556	1	04/02/2018 05:43	WG1092315
1,2-Dibromoethane	U		0.000382	0.00111	1	04/02/2018 05:43	WG1092315
Dibromomethane	U		0.000425	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dichlorobenzene	U		0.000339	0.00111	1	04/02/2018 05:43	WG1092315
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/02/2018 05:43	WG1092315
1,4-Dichlorobenzene	U		0.000252	0.00111	1	04/02/2018 05:43	WG1092315
Dichlorodifluoromethane	U		0.000794	0.00556	1	04/02/2018 05:43	WG1092315
1,1-Dichloroethane	U		0.000221	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dichloroethane	U		0.000295	0.00111	1	04/02/2018 05:43	WG1092315
1,1-Dichloroethene	U		0.000337	0.00111	1	04/02/2018 05:43	WG1092315
cis-1,2-Dichloroethene	0.107		0.000262	0.00111	1	04/02/2018 05:43	WG1092315
trans-1,2-Dichloroethene	U		0.000294	0.00111	1	04/02/2018 05:43	WG1092315
1,2-Dichloropropane	U		0.000398	0.00111	1	04/02/2018 05:43	WG1092315
1,1-Dichloropropene	U		0.000353	0.00111	1	04/02/2018 05:43	WG1092315
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 05:43	WG1092315
cis-1,3-Dichloropropene	U		0.000292	0.00111	1	04/02/2018 05:43	WG1092315
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/02/2018 05:43	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000866	0.00278	1	04/02/2018 05:43	WG1092315
2,2-Dichloropropane	U		0.000311	0.00111	1	04/02/2018 05:43	WG1092315
Di-isopropyl ether	U		0.000276	0.00111	1	04/02/2018 05:43	WG1092315
Ethylbenzene	U		0.000331	0.00111	1	04/02/2018 05:43	WG1092315
Hexachloro-1,3-butadiene	U		0.000381	0.00111	1	04/02/2018 05:43	WG1092315
2-Hexanone	U		0.00152	0.0111	1	04/02/2018 05:43	WG1092315
n-Hexane	U		0.000323	0.0111	1	04/02/2018 05:43	WG1092315
Iodomethane	U		0.00282	0.0111	1	04/02/2018 05:43	WG1092315
Isopropylbenzene	U		0.000270	0.00111	1	04/02/2018 05:43	WG1092315
p-Isopropyltoluene	U		0.000227	0.00111	1	04/02/2018 05:43	WG1092315
2-Butanone (MEK)	0.0178		0.00521	0.0111	1	04/02/2018 05:43	WG1092315
Methylene Chloride	U		0.00111	0.00556	1	04/02/2018 05:43	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 05:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 08:43

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/02/2018 05:43	WG1092315
Naphthalene	U		0.0011	0.00556	1	04/02/2018 05:43	WG1092315
n-Propylbenzene	U		0.000229	0.0011	1	04/02/2018 05:43	WG1092315
Styrene	U		0.000260	0.0011	1	04/02/2018 05:43	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000294	0.0011	1	04/02/2018 05:43	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/02/2018 05:43	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/02/2018 05:43	WG1092315
Tetrachloroethene	0.0149		0.000307	0.0011	1	04/02/2018 05:43	WG1092315
Toluene	U		0.000483	0.00556	1	04/02/2018 05:43	WG1092315
1,2,3-Trichlorobenzene	U		0.000341	0.0011	1	04/02/2018 05:43	WG1092315
1,2,4-Trichlorobenzene	U		0.000432	0.0011	1	04/02/2018 05:43	WG1092315
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/02/2018 05:43	WG1092315
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/02/2018 05:43	WG1092315
Trichloroethene	0.00287		0.000311	0.0011	1	04/02/2018 05:43	WG1092315
Trichlorofluoromethane	U		0.000425	0.00556	1	04/02/2018 05:43	WG1092315
1,2,3-Trichloropropane	U		0.000825	0.00278	1	04/02/2018 05:43	WG1092315
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/02/2018 05:43	WG1092315
1,2,3-Trimethylbenzene	U		0.000319	0.0011	1	04/02/2018 05:43	WG1092315
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/02/2018 05:43	WG1092315
Vinyl acetate	U		0.00266	0.011	1	04/02/2018 05:43	WG1092315
Vinyl chloride	0.0204		0.000324	0.0011	1	04/02/2018 05:43	WG1092315
Xylenes, Total	U		0.000777	0.00334	1	04/02/2018 05:43	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 05:43	WG1092315
(S) Dibromofluoromethane	98.9			74.0-131		04/02/2018 05:43	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 05:43	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0272	J J	0.0111	0.0556	1	04/02/2018 06:05	WG1092315
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 06:05	WG1092315
Benzene	U		0.000300	0.00111	1	04/02/2018 06:05	WG1092315
Bromobenzene	U		0.000316	0.00111	1	04/02/2018 06:05	WG1092315
Bromodichloromethane	U		0.000282	0.00111	1	04/02/2018 06:05	WG1092315
Bromochloromethane	U		0.000434	0.00556	1	04/02/2018 06:05	WG1092315
Bromoform	U		0.000471	0.00111	1	04/02/2018 06:05	WG1092315
Bromomethane	U		0.00149	0.00556	1	04/02/2018 06:05	WG1092315
n-Butylbenzene	U		0.000287	0.00111	1	04/02/2018 06:05	WG1092315
sec-Butylbenzene	U		0.000223	0.00111	1	04/02/2018 06:05	WG1092315
tert-Butylbenzene	U		0.000229	0.00111	1	04/02/2018 06:05	WG1092315
Carbon disulfide	0.000447	J J	0.000246	0.00111	1	04/02/2018 06:05	WG1092315
Carbon tetrachloride	U		0.000365	0.00111	1	04/02/2018 06:05	WG1092315
Chlorobenzene	U		0.000236	0.00111	1	04/02/2018 06:05	WG1092315
Chlorodibromomethane	U		0.000415	0.00111	1	04/02/2018 06:05	WG1092315
Chloroethane	U		0.00105	0.00556	1	04/02/2018 06:05	WG1092315
Chloroform	U		0.000255	0.00556	1	04/02/2018 06:05	WG1092315
Chloromethane	U		0.000417	0.00278	1	04/02/2018 06:05	WG1092315
2-Chlorotoluene	U		0.000335	0.00111	1	04/02/2018 06:05	WG1092315
4-Chlorotoluene	U		0.000267	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00556	1	04/02/2018 06:05	WG1092315
1,2-Dibromoethane	U		0.000381	0.00111	1	04/02/2018 06:05	WG1092315
Dibromomethane	U		0.000425	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dichlorobenzene	U		0.000339	0.00111	1	04/02/2018 06:05	WG1092315
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/02/2018 06:05	WG1092315
1,4-Dichlorobenzene	U		0.000251	0.00111	1	04/02/2018 06:05	WG1092315
Dichlorodifluoromethane	U		0.000793	0.00556	1	04/02/2018 06:05	WG1092315
1,1-Dichloroethane	U		0.000221	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dichloroethane	U		0.000295	0.00111	1	04/02/2018 06:05	WG1092315
1,1-Dichloroethene	U		0.000337	0.00111	1	04/02/2018 06:05	WG1092315
cis-1,2-Dichloroethene	0.00725		0.000261	0.00111	1	04/02/2018 06:05	WG1092315
trans-1,2-Dichloroethene	U		0.000293	0.00111	1	04/02/2018 06:05	WG1092315
1,2-Dichloropropane	U		0.000398	0.00111	1	04/02/2018 06:05	WG1092315
1,1-Dichloropropene	U		0.000352	0.00111	1	04/02/2018 06:05	WG1092315
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 06:05	WG1092315
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	04/02/2018 06:05	WG1092315
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/02/2018 06:05	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000865	0.00278	1	04/02/2018 06:05	WG1092315
2,2-Dichloropropane	U		0.000310	0.00111	1	04/02/2018 06:05	WG1092315
Di-isopropyl ether	U		0.000276	0.00111	1	04/02/2018 06:05	WG1092315
Ethylbenzene	U		0.000330	0.00111	1	04/02/2018 06:05	WG1092315
Hexachloro-1,3-butadiene	U		0.000380	0.00111	1	04/02/2018 06:05	WG1092315
2-Hexanone	U		0.00152	0.0111	1	04/02/2018 06:05	WG1092315
n-Hexane	U		0.000322	0.0111	1	04/02/2018 06:05	WG1092315
Iodomethane	U		0.00281	0.0111	1	04/02/2018 06:05	WG1092315
Isopropylbenzene	U		0.000270	0.00111	1	04/02/2018 06:05	WG1092315
p-Isopropyltoluene	U		0.000227	0.00111	1	04/02/2018 06:05	WG1092315
2-Butanone (MEK)	0.0126		0.00520	0.0111	1	04/02/2018 06:05	WG1092315
Methylene Chloride	U		0.00111	0.00556	1	04/02/2018 06:05	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 06:05	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 09:05

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/02/2018 06:05	WG1092315
Naphthalene	U		0.0011	0.00556	1	04/02/2018 06:05	WG1092315
n-Propylbenzene	U		0.000229	0.0011	1	04/02/2018 06:05	WG1092315
Styrene	U		0.000260	0.0011	1	04/02/2018 06:05	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000293	0.0011	1	04/02/2018 06:05	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/02/2018 06:05	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/02/2018 06:05	WG1092315
Tetrachloroethene	0.00112		0.000307	0.0011	1	04/02/2018 06:05	WG1092315
Toluene	U		0.000482	0.00556	1	04/02/2018 06:05	WG1092315
1,2,3-Trichlorobenzene	U		0.000340	0.0011	1	04/02/2018 06:05	WG1092315
1,2,4-Trichlorobenzene	U		0.000431	0.0011	1	04/02/2018 06:05	WG1092315
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/02/2018 06:05	WG1092315
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/02/2018 06:05	WG1092315
Trichloroethene	0.000720	J	0.000310	0.0011	1	04/02/2018 06:05	WG1092315
Trichlorofluoromethane	U		0.000425	0.00556	1	04/02/2018 06:05	WG1092315
1,2,3-Trichloropropane	U		0.000824	0.00278	1	04/02/2018 06:05	WG1092315
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/02/2018 06:05	WG1092315
1,2,3-Trimethylbenzene	U		0.000319	0.0011	1	04/02/2018 06:05	WG1092315
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/02/2018 06:05	WG1092315
Vinyl acetate	U		0.00266	0.011	1	04/02/2018 06:05	WG1092315
Vinyl chloride	0.00491		0.000323	0.0011	1	04/02/2018 06:05	WG1092315
Xylenes, Total	U		0.000776	0.00333	1	04/02/2018 06:05	WG1092315
(S) Toluene-d8	103			80.0-120		04/02/2018 06:05	WG1092315
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 06:05	WG1092315
(S) 4-Bromofluorobenzene	103			64.0-132		04/02/2018 06:05	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	04/04/2018 14:15	WG1093167

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0191	J J	0.0113	0.0567	1	04/06/2018 06:44	WG1092315
Acrylonitrile	U		0.00203	0.0113	1	04/06/2018 06:44	WG1092315
Benzene	U		0.000306	0.00113	1	04/06/2018 06:44	WG1092315
Bromobenzene	U		0.000322	0.00113	1	04/06/2018 06:44	WG1092315
Bromodichloromethane	U		0.000288	0.00113	1	04/06/2018 06:44	WG1092315
Bromochloromethane	U		0.000442	0.00567	1	04/06/2018 06:44	WG1092315
Bromoform	U		0.000481	0.00113	1	04/06/2018 06:44	WG1092315
Bromomethane	U		0.00152	0.00567	1	04/06/2018 06:44	WG1092315
n-Butylbenzene	U		0.000292	0.00113	1	04/06/2018 06:44	WG1092315
sec-Butylbenzene	U		0.000228	0.00113	1	04/06/2018 06:44	WG1092315
tert-Butylbenzene	U		0.000233	0.00113	1	04/06/2018 06:44	WG1092315
Carbon disulfide	0.000449	J J	0.000250	0.00113	1	04/06/2018 06:44	WG1092315
Carbon tetrachloride	U		0.000372	0.00113	1	04/06/2018 06:44	WG1092315
Chlorobenzene	U		0.000240	0.00113	1	04/06/2018 06:44	WG1092315
Chlorodibromomethane	U		0.000423	0.00113	1	04/06/2018 06:44	WG1092315
Chloroethane	U		0.00107	0.00567	1	04/06/2018 06:44	WG1092315
Chloroform	U		0.000260	0.00567	1	04/06/2018 06:44	WG1092315
Chloromethane	U		0.000425	0.00283	1	04/06/2018 06:44	WG1092315
2-Chlorotoluene	U		0.000341	0.00113	1	04/06/2018 06:44	WG1092315
4-Chlorotoluene	U		0.000272	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00567	1	04/06/2018 06:44	WG1092315
1,2-Dibromoethane	U		0.000389	0.00113	1	04/06/2018 06:44	WG1092315
Dibromomethane	U		0.000433	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dichlorobenzene	U		0.000346	0.00113	1	04/06/2018 06:44	WG1092315
1,3-Dichlorobenzene	U		0.000271	0.00113	1	04/06/2018 06:44	WG1092315
1,4-Dichlorobenzene	U		0.000256	0.00113	1	04/06/2018 06:44	WG1092315
Dichlorodifluoromethane	U		0.000808	0.00567	1	04/06/2018 06:44	WG1092315
1,1-Dichloroethane	U		0.000226	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dichloroethane	U		0.000300	0.00113	1	04/06/2018 06:44	WG1092315
1,1-Dichloroethene	U		0.000343	0.00113	1	04/06/2018 06:44	WG1092315
cis-1,2-Dichloroethene	0.0159		0.000266	0.00113	1	04/06/2018 06:44	WG1092315
trans-1,2-Dichloroethene	U		0.000299	0.00113	1	04/06/2018 06:44	WG1092315
1,2-Dichloropropane	U		0.000406	0.00113	1	04/06/2018 06:44	WG1092315
1,1-Dichloropropene	U		0.000359	0.00113	1	04/06/2018 06:44	WG1092315
1,3-Dichloropropane	U		0.000235	0.00113	1	04/06/2018 06:44	WG1092315
cis-1,3-Dichloropropene	U		0.000297	0.00113	1	04/06/2018 06:44	WG1092315
trans-1,3-Dichloropropene	U		0.000303	0.00113	1	04/06/2018 06:44	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000882	0.00283	1	04/06/2018 06:44	WG1092315
2,2-Dichloropropane	U		0.000316	0.00113	1	04/06/2018 06:44	WG1092315
Di-isopropyl ether	U		0.000281	0.00113	1	04/06/2018 06:44	WG1092315
Ethylbenzene	U		0.000337	0.00113	1	04/06/2018 06:44	WG1092315
Hexachloro-1,3-butadiene	U		0.000388	0.00113	1	04/06/2018 06:44	WG1092315
2-Hexanone	U		0.00155	0.0113	1	04/06/2018 06:44	WG1092315
n-Hexane	U		0.000329	0.0113	1	04/06/2018 06:44	WG1092315
Iodomethane	U		0.00287	0.0113	1	04/06/2018 06:44	WG1092315
Isopropylbenzene	U		0.000275	0.00113	1	04/06/2018 06:44	WG1092315
p-Isopropyltoluene	U		0.000231	0.00113	1	04/06/2018 06:44	WG1092315
2-Butanone (MEK)	U		0.00530	0.0113	1	04/06/2018 06:44	WG1092315
Methylene Chloride	U		0.00113	0.00567	1	04/06/2018 06:44	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00213	0.0113	1	04/06/2018 06:44	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 09:14

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/06/2018 06:44	WG1092315
Naphthalene	U		0.00113	0.00567	1	04/06/2018 06:44	WG1092315
n-Propylbenzene	U		0.000233	0.00113	1	04/06/2018 06:44	WG1092315
Styrene	U		0.000265	0.00113	1	04/06/2018 06:44	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/06/2018 06:44	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/06/2018 06:44	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	04/06/2018 06:44	WG1092315
Tetrachloroethene	0.00546		0.000313	0.00113	1	04/06/2018 06:44	WG1092315
Toluene	U		0.000492	0.00567	1	04/06/2018 06:44	WG1092315
1,2,3-Trichlorobenzene	U		0.000347	0.00113	1	04/06/2018 06:44	WG1092315
1,2,4-Trichlorobenzene	U		0.000440	0.00113	1	04/06/2018 06:44	WG1092315
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/06/2018 06:44	WG1092315
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/06/2018 06:44	WG1092315
Trichloroethene	0.00370		0.000316	0.00113	1	04/06/2018 06:44	WG1092315
Trichlorofluoromethane	U		0.000433	0.00567	1	04/06/2018 06:44	WG1092315
1,2,3-Trichloropropane	U		0.000840	0.00283	1	04/06/2018 06:44	WG1092315
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/06/2018 06:44	WG1092315
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/06/2018 06:44	WG1092315
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	04/06/2018 06:44	WG1092315
Vinyl acetate	U		0.00271	0.0113	1	04/06/2018 06:44	WG1092315
Vinyl chloride	0.0398		0.000330	0.00113	1	04/06/2018 06:44	WG1092315
Xylenes, Total	U		0.000791	0.00340	1	04/06/2018 06:44	WG1092315
<i>(S) Toluene-d8</i>	106			80.0-120		04/06/2018 06:44	WG1092315
<i>(S) Dibromofluoromethane</i>	103			74.0-131		04/06/2018 06:44	WG1092315
<i>(S) 4-Bromofluorobenzene</i>	98.3			64.0-132		04/06/2018 06:44	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.7		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0133	J	0.0113	0.0563	1	04/02/2018 06:47	WG1092315
Acrylonitrile	U		0.00202	0.0113	1	04/02/2018 06:47	WG1092315
Benzene	U		0.000304	0.00113	1	04/02/2018 06:47	WG1092315
Bromobenzene	U		0.000320	0.00113	1	04/02/2018 06:47	WG1092315
Bromodichloromethane	U		0.000286	0.00113	1	04/02/2018 06:47	WG1092315
Bromochloromethane	U		0.000440	0.00563	1	04/02/2018 06:47	WG1092315
Bromoform	U		0.000478	0.00113	1	04/02/2018 06:47	WG1092315
Bromomethane	U		0.00151	0.00563	1	04/02/2018 06:47	WG1092315
n-Butylbenzene	U		0.000291	0.00113	1	04/02/2018 06:47	WG1092315
sec-Butylbenzene	U		0.000227	0.00113	1	04/02/2018 06:47	WG1092315
tert-Butylbenzene	U		0.000232	0.00113	1	04/02/2018 06:47	WG1092315
Carbon disulfide	U		0.000249	0.00113	1	04/02/2018 06:47	WG1092315
Carbon tetrachloride	U		0.000370	0.00113	1	04/02/2018 06:47	WG1092315
Chlorobenzene	U		0.000239	0.00113	1	04/02/2018 06:47	WG1092315
Chlorodibromomethane	U		0.000420	0.00113	1	04/02/2018 06:47	WG1092315
Chloroethane	U		0.00107	0.00563	1	04/02/2018 06:47	WG1092315
Chloroform	U		0.000258	0.00563	1	04/02/2018 06:47	WG1092315
Chloromethane	U		0.000423	0.00282	1	04/02/2018 06:47	WG1092315
2-Chlorotoluene	U		0.000339	0.00113	1	04/02/2018 06:47	WG1092315
4-Chlorotoluene	U		0.000270	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00563	1	04/02/2018 06:47	WG1092315
1,2-Dibromoethane	U		0.000387	0.00113	1	04/02/2018 06:47	WG1092315
Dibromomethane	U		0.000431	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dichlorobenzene	U		0.000344	0.00113	1	04/02/2018 06:47	WG1092315
1,3-Dichlorobenzene	U		0.000269	0.00113	1	04/02/2018 06:47	WG1092315
1,4-Dichlorobenzene	U		0.000255	0.00113	1	04/02/2018 06:47	WG1092315
Dichlorodifluoromethane	U		0.000804	0.00563	1	04/02/2018 06:47	WG1092315
1,1-Dichloroethane	U		0.000224	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dichloroethane	U		0.000299	0.00113	1	04/02/2018 06:47	WG1092315
1,1-Dichloroethene	0.000632	J	0.000341	0.00113	1	04/02/2018 06:47	WG1092315
cis-1,2-Dichloroethene	0.0583		0.000265	0.00113	1	04/02/2018 06:47	WG1092315
trans-1,2-Dichloroethene	U		0.000298	0.00113	1	04/02/2018 06:47	WG1092315
1,2-Dichloropropane	U		0.000403	0.00113	1	04/02/2018 06:47	WG1092315
1,1-Dichloropropene	U		0.000357	0.00113	1	04/02/2018 06:47	WG1092315
1,3-Dichloropropane	U		0.000233	0.00113	1	04/02/2018 06:47	WG1092315
cis-1,3-Dichloropropene	U		0.000295	0.00113	1	04/02/2018 06:47	WG1092315
trans-1,3-Dichloropropene	U		0.000301	0.00113	1	04/02/2018 06:47	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000877	0.00282	1	04/02/2018 06:47	WG1092315
2,2-Dichloropropane	U		0.000314	0.00113	1	04/02/2018 06:47	WG1092315
Di-isopropyl ether	U		0.000279	0.00113	1	04/02/2018 06:47	WG1092315
Ethylbenzene	U		0.000335	0.00113	1	04/02/2018 06:47	WG1092315
Hexachloro-1,3-butadiene	U		0.000385	0.00113	1	04/02/2018 06:47	WG1092315
2-Hexanone	U		0.00154	0.0113	1	04/02/2018 06:47	WG1092315
n-Hexane	U		0.000327	0.0113	1	04/02/2018 06:47	WG1092315
Iodomethane	U		0.00285	0.0113	1	04/02/2018 06:47	WG1092315
Isopropylbenzene	U		0.000274	0.00113	1	04/02/2018 06:47	WG1092315
p-Isopropyltoluene	U		0.000230	0.00113	1	04/02/2018 06:47	WG1092315
2-Butanone (MEK)	U		0.00527	0.0113	1	04/02/2018 06:47	WG1092315
Methylene Chloride	U		0.00113	0.00563	1	04/02/2018 06:47	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00212	0.0113	1	04/02/2018 06:47	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 09:23

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	04/02/2018 06:47	WG1092315
Naphthalene	U		0.00113	0.00563	1	04/02/2018 06:47	WG1092315
n-Propylbenzene	U		0.000232	0.00113	1	04/02/2018 06:47	WG1092315
Styrene	U		0.000264	0.00113	1	04/02/2018 06:47	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000298	0.00113	1	04/02/2018 06:47	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	04/02/2018 06:47	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00113	1	04/02/2018 06:47	WG1092315
Tetrachloroethene	0.00226		0.000311	0.00113	1	04/02/2018 06:47	WG1092315
Toluene	U		0.000489	0.00563	1	04/02/2018 06:47	WG1092315
1,2,3-Trichlorobenzene	U		0.000345	0.00113	1	04/02/2018 06:47	WG1092315
1,2,4-Trichlorobenzene	U		0.000437	0.00113	1	04/02/2018 06:47	WG1092315
1,1,1-Trichloroethane	U		0.000322	0.00113	1	04/02/2018 06:47	WG1092315
1,1,2-Trichloroethane	U		0.000312	0.00113	1	04/02/2018 06:47	WG1092315
Trichloroethene	0.00313		0.000314	0.00113	1	04/02/2018 06:47	WG1092315
Trichlorofluoromethane	U		0.000431	0.00563	1	04/02/2018 06:47	WG1092315
1,2,3-Trichloropropane	U		0.000835	0.00282	1	04/02/2018 06:47	WG1092315
1,2,4-Trimethylbenzene	U		0.000238	0.00113	1	04/02/2018 06:47	WG1092315
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	04/02/2018 06:47	WG1092315
1,3,5-Trimethylbenzene	U		0.000300	0.00113	1	04/02/2018 06:47	WG1092315
Vinyl acetate	U		0.00269	0.0113	1	04/02/2018 06:47	WG1092315
Vinyl chloride	0.00776		0.000328	0.00113	1	04/02/2018 06:47	WG1092315
Xylenes, Total	U		0.000787	0.00338	1	04/02/2018 06:47	WG1092315
(S) Toluene-d8	99.5			80.0-120		04/02/2018 06:47	WG1092315
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 06:47	WG1092315
(S) 4-Bromofluorobenzene	103			64.0-132		04/02/2018 06:47	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.4		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0212	J J	0.0107	0.0536	1	04/02/2018 07:08	WG1092315
Acrylonitrile	U		0.00192	0.0107	1	04/02/2018 07:08	WG1092315
Benzene	0.000503	J J	0.000289	0.00107	1	04/02/2018 07:08	WG1092315
Bromobenzene	U		0.000304	0.00107	1	04/02/2018 07:08	WG1092315
Bromodichloromethane	U		0.000272	0.00107	1	04/02/2018 07:08	WG1092315
Bromochloromethane	U		0.000418	0.00536	1	04/02/2018 07:08	WG1092315
Bromoform	U		0.000454	0.00107	1	04/02/2018 07:08	WG1092315
Bromomethane	U		0.00144	0.00536	1	04/02/2018 07:08	WG1092315
n-Butylbenzene	U		0.000276	0.00107	1	04/02/2018 07:08	WG1092315
sec-Butylbenzene	U		0.000215	0.00107	1	04/02/2018 07:08	WG1092315
tert-Butylbenzene	U		0.000221	0.00107	1	04/02/2018 07:08	WG1092315
Carbon disulfide	0.000626	J J	0.000237	0.00107	1	04/02/2018 07:08	WG1092315
Carbon tetrachloride	U		0.000351	0.00107	1	04/02/2018 07:08	WG1092315
Chlorobenzene	U		0.000227	0.00107	1	04/02/2018 07:08	WG1092315
Chlorodibromomethane	U		0.000400	0.00107	1	04/02/2018 07:08	WG1092315
Chloroethane	U		0.00101	0.00536	1	04/02/2018 07:08	WG1092315
Chloroform	U		0.000245	0.00536	1	04/02/2018 07:08	WG1092315
Chloromethane	U		0.000402	0.00268	1	04/02/2018 07:08	WG1092315
2-Chlorotoluene	U		0.000322	0.00107	1	04/02/2018 07:08	WG1092315
4-Chlorotoluene	U		0.000257	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00112	0.00536	1	04/02/2018 07:08	WG1092315
1,2-Dibromoethane	U		0.000367	0.00107	1	04/02/2018 07:08	WG1092315
Dibromomethane	U		0.000409	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dichlorobenzene	U		0.000327	0.00107	1	04/02/2018 07:08	WG1092315
1,3-Dichlorobenzene	U		0.000256	0.00107	1	04/02/2018 07:08	WG1092315
1,4-Dichlorobenzene	U		0.000242	0.00107	1	04/02/2018 07:08	WG1092315
Dichlorodifluoromethane	U		0.000764	0.00536	1	04/02/2018 07:08	WG1092315
1,1-Dichloroethane	U		0.000213	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dichloroethane	U		0.000284	0.00107	1	04/02/2018 07:08	WG1092315
1,1-Dichloroethene	U		0.000325	0.00107	1	04/02/2018 07:08	WG1092315
cis-1,2-Dichloroethene	0.0180		0.000252	0.00107	1	04/02/2018 07:08	WG1092315
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	04/02/2018 07:08	WG1092315
1,2-Dichloropropane	U		0.000383	0.00107	1	04/02/2018 07:08	WG1092315
1,1-Dichloropropene	U		0.000340	0.00107	1	04/02/2018 07:08	WG1092315
1,3-Dichloropropane	U		0.000222	0.00107	1	04/02/2018 07:08	WG1092315
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	04/02/2018 07:08	WG1092315
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	04/02/2018 07:08	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000833	0.00268	1	04/02/2018 07:08	WG1092315
2,2-Dichloropropane	U		0.000299	0.00107	1	04/02/2018 07:08	WG1092315
Di-isopropyl ether	U		0.000266	0.00107	1	04/02/2018 07:08	WG1092315
Ethylbenzene	U		0.000318	0.00107	1	04/02/2018 07:08	WG1092315
Hexachloro-1,3-butadiene	U		0.000366	0.00107	1	04/02/2018 07:08	WG1092315
2-Hexanone	U		0.00147	0.0107	1	04/02/2018 07:08	WG1092315
n-Hexane	U		0.000311	0.0107	1	04/02/2018 07:08	WG1092315
Iodomethane	U		0.00271	0.0107	1	04/02/2018 07:08	WG1092315
Isopropylbenzene	U		0.000260	0.00107	1	04/02/2018 07:08	WG1092315
p-Isopropyltoluene	U		0.000219	0.00107	1	04/02/2018 07:08	WG1092315
2-Butanone (MEK)	0.00503	J J	0.00501	0.0107	1	04/02/2018 07:08	WG1092315
Methylene Chloride	U		0.00107	0.00536	1	04/02/2018 07:08	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00201	0.0107	1	04/02/2018 07:08	WG1092315

JC 4/25/18

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/29/18 09:34

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	04/02/2018 07:08	WG1092315
Naphthalene	U		0.00107	0.00536	1	04/02/2018 07:08	WG1092315
n-Propylbenzene	U		0.000221	0.00107	1	04/02/2018 07:08	WG1092315
Styrene	U		0.000251	0.00107	1	04/02/2018 07:08	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	04/02/2018 07:08	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000391	0.00107	1	04/02/2018 07:08	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000391	0.00107	1	04/02/2018 07:08	WG1092315
Tetrachloroethene	0.00176		0.000296	0.00107	1	04/02/2018 07:08	WG1092315
Toluene	U		0.000465	0.00536	1	04/02/2018 07:08	WG1092315
1,2,3-Trichlorobenzene	U		0.000328	0.00107	1	04/02/2018 07:08	WG1092315
1,2,4-Trichlorobenzene	U		0.000416	0.00107	1	04/02/2018 07:08	WG1092315
1,1,1-Trichloroethane	U		0.000306	0.00107	1	04/02/2018 07:08	WG1092315
1,1,2-Trichloroethane	U		0.000297	0.00107	1	04/02/2018 07:08	WG1092315
Trichloroethene	0.00181		0.000299	0.00107	1	04/02/2018 07:08	WG1092315
Trichlorofluoromethane	U		0.000409	0.00536	1	04/02/2018 07:08	WG1092315
1,2,3-Trichloropropane	U		0.000794	0.00268	1	04/02/2018 07:08	WG1092315
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	04/02/2018 07:08	WG1092315
1,2,3-Trimethylbenzene	U		0.000307	0.00107	1	04/02/2018 07:08	WG1092315
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	04/02/2018 07:08	WG1092315
Vinyl acetate	U		0.00256	0.0107	1	04/02/2018 07:08	WG1092315
Vinyl chloride	0.00999		0.000312	0.00107	1	04/02/2018 07:08	WG1092315
Xylenes, Total	U		0.000748	0.00321	1	04/02/2018 07:08	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 07:08	WG1092315
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 07:08	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 07:08	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis date / time	Batch
Total Solids	87.4		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Acetone	0.0207	J ↓	0.0114	0.0572	1	04/02/2018 07:29	WG1092315
Acrylonitrile	U		0.00205	0.0114	1	04/02/2018 07:29	WG1092315
Benzene	U		0.000309	0.00114	1	04/02/2018 07:29	WG1092315
Bromobenzene	U		0.000325	0.00114	1	04/02/2018 07:29	WG1092315
Bromodichloromethane	U		0.000291	0.00114	1	04/02/2018 07:29	WG1092315
Bromochloromethane	U		0.000446	0.00572	1	04/02/2018 07:29	WG1092315
Bromoform	U		0.000485	0.00114	1	04/02/2018 07:29	WG1092315
Bromomethane	U		0.00153	0.00572	1	04/02/2018 07:29	WG1092315
n-Butylbenzene	U		0.000295	0.00114	1	04/02/2018 07:29	WG1092315
sec-Butylbenzene	U		0.000230	0.00114	1	04/02/2018 07:29	WG1092315
tert-Butylbenzene	U		0.000236	0.00114	1	04/02/2018 07:29	WG1092315
Carbon disulfide	0.000633	J ↓	0.000253	0.00114	1	04/02/2018 07:29	WG1092315
Carbon tetrachloride	U		0.000375	0.00114	1	04/02/2018 07:29	WG1092315
Chlorobenzene	U		0.000243	0.00114	1	04/02/2018 07:29	WG1092315
Chlorodibromomethane	U		0.000427	0.00114	1	04/02/2018 07:29	WG1092315
Chloroethane	U		0.00108	0.00572	1	04/02/2018 07:29	WG1092315
Chloroform	U		0.000262	0.00572	1	04/02/2018 07:29	WG1092315
Chloromethane	U		0.000429	0.00286	1	04/02/2018 07:29	WG1092315
2-Chlorotoluene	U		0.000344	0.00114	1	04/02/2018 07:29	WG1092315
4-Chlorotoluene	U		0.000275	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00572	1	04/02/2018 07:29	WG1092315
1,2-Dibromoethane	U		0.000392	0.00114	1	04/02/2018 07:29	WG1092315
Dibromomethane	U		0.000437	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dichlorobenzene	U		0.000349	0.00114	1	04/02/2018 07:29	WG1092315
1,3-Dichlorobenzene	U		0.000273	0.00114	1	04/02/2018 07:29	WG1092315
1,4-Dichlorobenzene	U		0.000259	0.00114	1	04/02/2018 07:29	WG1092315
Dichlorodifluoromethane	U		0.000816	0.00572	1	04/02/2018 07:29	WG1092315
1,1-Dichloroethane	U		0.000228	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dichloroethane	U		0.000303	0.00114	1	04/02/2018 07:29	WG1092315
1,1-Dichloroethene	U		0.000347	0.00114	1	04/02/2018 07:29	WG1092315
cis-1,2-Dichloroethene	0.0101		0.000269	0.00114	1	04/02/2018 07:29	WG1092315
trans-1,2-Dichloroethene	U		0.000302	0.00114	1	04/02/2018 07:29	WG1092315
1,2-Dichloropropane	U		0.000410	0.00114	1	04/02/2018 07:29	WG1092315
1,1-Dichloropropene	U		0.000363	0.00114	1	04/02/2018 07:29	WG1092315
1,3-Dichloropropane	U		0.000237	0.00114	1	04/02/2018 07:29	WG1092315
cis-1,3-Dichloropropene	U		0.000300	0.00114	1	04/02/2018 07:29	WG1092315
trans-1,3-Dichloropropene	U		0.000305	0.00114	1	04/02/2018 07:29	WG1092315
trans-1,4-Dichloro-2-butene	U		0.000890	0.00286	1	04/02/2018 07:29	WG1092315
2,2-Dichloropropane	U		0.000319	0.00114	1	04/02/2018 07:29	WG1092315
Di-isopropyl ether	U		0.000284	0.00114	1	04/02/2018 07:29	WG1092315
Ethylbenzene	U		0.000340	0.00114	1	04/02/2018 07:29	WG1092315
Hexachloro-1,3-butadiene	U		0.000391	0.00114	1	04/02/2018 07:29	WG1092315
2-Hexanone	U		0.00157	0.0114	1	04/02/2018 07:29	WG1092315
n-Hexane	U		0.000332	0.0114	1	04/02/2018 07:29	WG1092315
Iodomethane	U		0.00289	0.0114	1	04/02/2018 07:29	WG1092315
Isopropylbenzene	U		0.000278	0.00114	1	04/02/2018 07:29	WG1092315
p-Isopropyltoluene	U		0.000233	0.00114	1	04/02/2018 07:29	WG1092315
2-Butanone (MEK)	0.00572	J ↓	0.00535	0.0114	1	04/02/2018 07:29	WG1092315
Methylene Chloride	U		0.00114	0.00572	1	04/02/2018 07:29	WG1092315
4-Methyl-2-pentanone (MIBK)	U		0.00215	0.0114	1	04/02/2018 07:29	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 09:42

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00114	1	04/02/2018 07:29	WG1092315
Naphthalene	U		0.00114	0.00572	1	04/02/2018 07:29	WG1092315
n-Propylbenzene	U		0.000236	0.00114	1	04/02/2018 07:29	WG1092315
Styrene	U		0.000268	0.00114	1	04/02/2018 07:29	WG1092315
1,1,1,2-Tetrachloroethane	U		0.000302	0.00114	1	04/02/2018 07:29	WG1092315
1,1,2,2-Tetrachloroethane	U		0.000418	0.00114	1	04/02/2018 07:29	WG1092315
1,1,2-Trichlorotrifluoroethane	U		0.000418	0.00114	1	04/02/2018 07:29	WG1092315
Tetrachloroethene	0.000656	J ↓	0.000316	0.00114	1	04/02/2018 07:29	WG1092315
Toluene	U		0.000497	0.00572	1	04/02/2018 07:29	WG1092315
1,2,3-Trichlorobenzene	U		0.000350	0.00114	1	04/02/2018 07:29	WG1092315
1,2,4-Trichlorobenzene	U		0.000444	0.00114	1	04/02/2018 07:29	WG1092315
1,1,1-Trichloroethane	U		0.000327	0.00114	1	04/02/2018 07:29	WG1092315
1,1,2-Trichloroethane	U		0.000317	0.00114	1	04/02/2018 07:29	WG1092315
Trichloroethene	0.000449	J ↓	0.000319	0.00114	1	04/02/2018 07:29	WG1092315
Trichlorofluoromethane	U		0.000437	0.00572	1	04/02/2018 07:29	WG1092315
1,2,3-Trichloropropane	U		0.000848	0.00286	1	04/02/2018 07:29	WG1092315
1,2,4-Trimethylbenzene	U		0.000241	0.00114	1	04/02/2018 07:29	WG1092315
1,2,3-Trimethylbenzene	U		0.000328	0.00114	1	04/02/2018 07:29	WG1092315
1,3,5-Trimethylbenzene	U		0.000304	0.00114	1	04/02/2018 07:29	WG1092315
Vinyl acetate	U		0.00273	0.0114	1	04/02/2018 07:29	WG1092315
Vinyl chloride	0.00929		0.000333	0.00114	1	04/02/2018 07:29	WG1092315
Xylenes, Total	U		0.000799	0.00343	1	04/02/2018 07:29	WG1092315
(S) Toluene-d8	101			80.0-120		04/02/2018 07:29	WG1092315
(S) Dibromofluoromethane	105			74.0-131		04/02/2018 07:29	WG1092315
(S) 4-Bromofluorobenzene	104			64.0-132		04/02/2018 07:29	WG1092315

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.0		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ	0.0118	0.0588	1	04/01/2018 23:39	WG1092317
Acrylonitrile	U		0.00211	0.0118	1	04/01/2018 23:39	WG1092317
Benzene	U		0.000318	0.00118	1	04/01/2018 23:39	WG1092317
Bromobenzene	U		0.000334	0.00118	1	04/01/2018 23:39	WG1092317
Bromodichloromethane	U		0.000299	0.00118	1	04/01/2018 23:39	WG1092317
Bromochloromethane	U		0.000459	0.00588	1	04/01/2018 23:39	WG1092317
Bromoform	U	UJ	0.000499	0.00118	1	04/01/2018 23:39	WG1092317
Bromomethane	U		0.00158	0.00588	1	04/01/2018 23:39	WG1092317
n-Butylbenzene	U		0.000303	0.00118	1	04/01/2018 23:39	WG1092317
sec-Butylbenzene	U		0.000236	0.00118	1	04/01/2018 23:39	WG1092317
tert-Butylbenzene	U		0.000242	0.00118	1	04/01/2018 23:39	WG1092317
Carbon disulfide	U		0.000260	0.00118	1	04/01/2018 23:39	WG1092317
Carbon tetrachloride	U		0.000386	0.00118	1	04/01/2018 23:39	WG1092317
Chlorobenzene	U		0.000249	0.00118	1	04/01/2018 23:39	WG1092317
Chlorodibromomethane	U		0.000439	0.00118	1	04/01/2018 23:39	WG1092317
Chloroethane	U		0.00111	0.00588	1	04/01/2018 23:39	WG1092317
Chloroform	U		0.000269	0.00588	1	04/01/2018 23:39	WG1092317
Chloromethane	U		0.000441	0.00294	1	04/01/2018 23:39	WG1092317
2-Chlorotoluene	U		0.000354	0.00118	1	04/01/2018 23:39	WG1092317
4-Chlorotoluene	U		0.000282	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00588	1	04/01/2018 23:39	WG1092317
1,2-Dibromoethane	U		0.000403	0.00118	1	04/01/2018 23:39	WG1092317
Dibromomethane	U		0.000449	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dichlorobenzene	U		0.000359	0.00118	1	04/01/2018 23:39	WG1092317
1,3-Dichlorobenzene	U		0.000281	0.00118	1	04/01/2018 23:39	WG1092317
1,4-Dichlorobenzene	U		0.000266	0.00118	1	04/01/2018 23:39	WG1092317
Dichlorodifluoromethane	U		0.000839	0.00588	1	04/01/2018 23:39	WG1092317
1,1-Dichloroethane	U		0.000234	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dichloroethane	U		0.000312	0.00118	1	04/01/2018 23:39	WG1092317
1,1-Dichloroethene	U		0.000356	0.00118	1	04/01/2018 23:39	WG1092317
cis-1,2-Dichloroethene	0.000656	J	0.000276	0.00118	1	04/01/2018 23:39	WG1092317
trans-1,2-Dichloroethene	U		0.000311	0.00118	1	04/01/2018 23:39	WG1092317
1,2-Dichloropropane	U		0.000421	0.00118	1	04/01/2018 23:39	WG1092317
1,1-Dichloropropene	U		0.000373	0.00118	1	04/01/2018 23:39	WG1092317
1,3-Dichloropropane	U		0.000244	0.00118	1	04/01/2018 23:39	WG1092317
cis-1,3-Dichloropropene	U		0.000308	0.00118	1	04/01/2018 23:39	WG1092317
trans-1,3-Dichloropropene	U		0.000314	0.00118	1	04/01/2018 23:39	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	0.000915	0.00294	1	04/01/2018 23:39	WG1092317
2,2-Dichloropropane	U		0.000328	0.00118	1	04/01/2018 23:39	WG1092317
Di-isopropyl ether	U	UJ	0.000292	0.00118	1	04/01/2018 23:39	WG1092317
Ethylbenzene	U		0.000349	0.00118	1	04/01/2018 23:39	WG1092317
Hexachloro-1,3-butadiene	U		0.000402	0.00118	1	04/01/2018 23:39	WG1092317
2-Hexanone	U		0.00161	0.0118	1	04/01/2018 23:39	WG1092317
n-Hexane	U		0.000341	0.0118	1	04/01/2018 23:39	WG1092317
Iodomethane	U		0.00298	0.0118	1	04/01/2018 23:39	WG1092317
Isopropylbenzene	U		0.000286	0.00118	1	04/01/2018 23:39	WG1092317
p-Isopropyltoluene	U		0.000240	0.00118	1	04/01/2018 23:39	WG1092317
2-Butanone (MEK)	U	UJ	0.00551	0.0118	1	04/01/2018 23:39	WG1092317
Methylene Chloride	U		0.00118	0.00588	1	04/01/2018 23:39	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0118	1	04/01/2018 23:39	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 10:08

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000249	0.00118	1	04/01/2018 23:39	WG1092317
Naphthalene	U		0.00118	0.00588	1	04/01/2018 23:39	WG1092317
n-Propylbenzene	U		0.000242	0.00118	1	04/01/2018 23:39	WG1092317
Styrene	U		0.000275	0.00118	1	04/01/2018 23:39	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000311	0.00118	1	04/01/2018 23:39	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000429	0.00118	1	04/01/2018 23:39	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000429	0.00118	1	04/01/2018 23:39	WG1092317
Tetrachloroethene	U		0.000325	0.00118	1	04/01/2018 23:39	WG1092317
Toluene	U		0.000511	0.00588	1	04/01/2018 23:39	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000360	0.00118	1	04/01/2018 23:39	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000456	0.00118	1	04/01/2018 23:39	WG1092317
1,1,1-Trichloroethane	U		0.000336	0.00118	1	04/01/2018 23:39	WG1092317
1,1,2-Trichloroethane	U		0.000326	0.00118	1	04/01/2018 23:39	WG1092317
Trichloroethene	U		0.000328	0.00118	1	04/01/2018 23:39	WG1092317
Trichlorofluoromethane	U		0.000449	0.00588	1	04/01/2018 23:39	WG1092317
1,2,3-Trichloropropane	U		0.000872	0.00294	1	04/01/2018 23:39	WG1092317
1,2,4-Trimethylbenzene	U		0.000248	0.00118	1	04/01/2018 23:39	WG1092317
1,2,3-Trimethylbenzene	U		0.000338	0.00118	1	04/01/2018 23:39	WG1092317
1,3,5-Trimethylbenzene	U		0.000313	0.00118	1	04/01/2018 23:39	WG1092317
Vinyl acetate	U	<u>UJ</u> <u>JO</u>	0.00281	0.0118	1	04/01/2018 23:39	WG1092317
Vinyl chloride	0.00151		0.000342	0.00118	1	04/01/2018 23:39	WG1092317
Xylenes, Total	U		0.000821	0.00353	1	04/01/2018 23:39	WG1092317
(S) Toluene-d8	103			80.0-120		04/01/2018 23:39	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/01/2018 23:39	WG1092317
(S) 4-Bromofluorobenzene	92.9			64.0-132		04/01/2018 23:39	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.7		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	U	UJ	JO	0.0113	0.0564	1	04/01/2018 23:59	WG1092317
Acrylonitrile	U			0.00202	0.0113	1	04/01/2018 23:59	WG1092317
Benzene	U			0.000304	0.00113	1	04/01/2018 23:59	WG1092317
Bromobenzene	U			0.000320	0.00113	1	04/01/2018 23:59	WG1092317
Bromodichloromethane	U			0.000286	0.00113	1	04/01/2018 23:59	WG1092317
Bromochloromethane	U			0.000440	0.00564	1	04/01/2018 23:59	WG1092317
Bromoform	U	UJ	JO	0.000478	0.00113	1	04/01/2018 23:59	WG1092317
Bromomethane	U			0.00151	0.00564	1	04/01/2018 23:59	WG1092317
n-Butylbenzene	U			0.000291	0.00113	1	04/01/2018 23:59	WG1092317
sec-Butylbenzene	U			0.000227	0.00113	1	04/01/2018 23:59	WG1092317
tert-Butylbenzene	U			0.000232	0.00113	1	04/01/2018 23:59	WG1092317
Carbon disulfide	0.000440	J	J	0.000249	0.00113	1	04/01/2018 23:59	WG1092317
Carbon tetrachloride	U			0.000370	0.00113	1	04/01/2018 23:59	WG1092317
Chlorobenzene	U			0.000239	0.00113	1	04/01/2018 23:59	WG1092317
Chlorodibromomethane	U			0.000420	0.00113	1	04/01/2018 23:59	WG1092317
Chloroethane	U			0.00107	0.00564	1	04/01/2018 23:59	WG1092317
Chloroform	U			0.000258	0.00564	1	04/01/2018 23:59	WG1092317
Chloromethane	U			0.000423	0.00282	1	04/01/2018 23:59	WG1092317
2-Chlorotoluene	U			0.000339	0.00113	1	04/01/2018 23:59	WG1092317
4-Chlorotoluene	U			0.000270	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dibromo-3-Chloropropane	U			0.00118	0.00564	1	04/01/2018 23:59	WG1092317
1,2-Dibromoethane	U			0.000387	0.00113	1	04/01/2018 23:59	WG1092317
Dibromomethane	U			0.000431	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dichlorobenzene	U			0.000344	0.00113	1	04/01/2018 23:59	WG1092317
1,3-Dichlorobenzene	U			0.000269	0.00113	1	04/01/2018 23:59	WG1092317
1,4-Dichlorobenzene	U			0.000255	0.00113	1	04/01/2018 23:59	WG1092317
Dichlorodifluoromethane	U			0.000804	0.00564	1	04/01/2018 23:59	WG1092317
1,1-Dichloroethane	U			0.000224	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dichloroethane	U			0.000299	0.00113	1	04/01/2018 23:59	WG1092317
1,1-Dichloroethene	U			0.000341	0.00113	1	04/01/2018 23:59	WG1092317
cis-1,2-Dichloroethene	0.000841	J	J	0.000265	0.00113	1	04/01/2018 23:59	WG1092317
trans-1,2-Dichloroethene	U			0.000298	0.00113	1	04/01/2018 23:59	WG1092317
1,2-Dichloropropane	U			0.000403	0.00113	1	04/01/2018 23:59	WG1092317
1,1-Dichloropropene	U			0.000357	0.00113	1	04/01/2018 23:59	WG1092317
1,3-Dichloropropane	U			0.000233	0.00113	1	04/01/2018 23:59	WG1092317
cis-1,3-Dichloropropene	U			0.000295	0.00113	1	04/01/2018 23:59	WG1092317
trans-1,3-Dichloropropene	U			0.000301	0.00113	1	04/01/2018 23:59	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	JO	0.000877	0.00282	1	04/01/2018 23:59	WG1092317
2,2-Dichloropropane	U			0.000314	0.00113	1	04/01/2018 23:59	WG1092317
Di-isopropyl ether	U	UJ	JO	0.000280	0.00113	1	04/01/2018 23:59	WG1092317
Ethylbenzene	U			0.000335	0.00113	1	04/01/2018 23:59	WG1092317
Hexachloro-1,3-butadiene	U			0.000385	0.00113	1	04/01/2018 23:59	WG1092317
2-Hexanone	U			0.00154	0.0113	1	04/01/2018 23:59	WG1092317
n-Hexane	U			0.000327	0.0113	1	04/01/2018 23:59	WG1092317
Iodomethane	U			0.00285	0.0113	1	04/01/2018 23:59	WG1092317
Isopropylbenzene	U			0.000274	0.00113	1	04/01/2018 23:59	WG1092317
p-Isopropyltoluene	U			0.000230	0.00113	1	04/01/2018 23:59	WG1092317
2-Butanone (MEK)	U	UJ	JO	0.00527	0.0113	1	04/01/2018 23:59	WG1092317
Methylene Chloride	U			0.00113	0.00564	1	04/01/2018 23:59	WG1092317
4-Methyl-2-pentanone (MIBK)	U			0.00212	0.0113	1	04/01/2018 23:59	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 10:15

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000239	0.00113	1	04/01/2018 23:59	WG1092317
Naphthalene	U		0.00113	0.00564	1	04/01/2018 23:59	WG1092317
n-Propylbenzene	U		0.000232	0.00113	1	04/01/2018 23:59	WG1092317
Styrene	U		0.000264	0.00113	1	04/01/2018 23:59	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000298	0.00113	1	04/01/2018 23:59	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000411	0.00113	1	04/01/2018 23:59	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000411	0.00113	1	04/01/2018 23:59	WG1092317
Tetrachloroethene	U		0.000311	0.00113	1	04/01/2018 23:59	WG1092317
Toluene	U		0.000489	0.00564	1	04/01/2018 23:59	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000345	0.00113	1	04/01/2018 23:59	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000437	0.00113	1	04/01/2018 23:59	WG1092317
1,1,1-Trichloroethane	U		0.000322	0.00113	1	04/01/2018 23:59	WG1092317
1,1,2-Trichloroethane	U		0.000312	0.00113	1	04/01/2018 23:59	WG1092317
Trichloroethene	U		0.000314	0.00113	1	04/01/2018 23:59	WG1092317
Trichlorofluoromethane	U		0.000431	0.00564	1	04/01/2018 23:59	WG1092317
1,2,3-Trichloropropane	U		0.000835	0.00282	1	04/01/2018 23:59	WG1092317
1,2,4-Trimethylbenzene	U		0.000238	0.00113	1	04/01/2018 23:59	WG1092317
1,2,3-Trimethylbenzene	U		0.000323	0.00113	1	04/01/2018 23:59	WG1092317
1,3,5-Trimethylbenzene	U		0.000300	0.00113	1	04/01/2018 23:59	WG1092317
Vinyl acetate	U	UJ J0	0.00269	0.0113	1	04/01/2018 23:59	WG1092317
Vinyl chloride	0.000623	J J	0.000328	0.00113	1	04/01/2018 23:59	WG1092317
Xylenes, Total	U		0.000787	0.00338	1	04/01/2018 23:59	WG1092317
(S) Toluene-d8	108			80.0-120		04/01/2018 23:59	WG1092317
(S) Dibromofluoromethane	98.9			74.0-131		04/01/2018 23:59	WG1092317
(S) 4-Bromofluorobenzene	91.7			64.0-132		04/01/2018 23:59	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.3		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	U	UJ	JO	0.0116	0.0579	1	04/02/2018 00:18	WG1092317
Acrylonitrile	U			0.00207	0.0116	1	04/02/2018 00:18	WG1092317
Benzene	U			0.000313	0.00116	1	04/02/2018 00:18	WG1092317
Bromobenzene	U			0.000329	0.00116	1	04/02/2018 00:18	WG1092317
Bromodichloromethane	U			0.000294	0.00116	1	04/02/2018 00:18	WG1092317
Bromochloromethane	U			0.000452	0.00579	1	04/02/2018 00:18	WG1092317
Bromoform	U	UJ	JO	0.000491	0.00116	1	04/02/2018 00:18	WG1092317
Bromomethane	U			0.00155	0.00579	1	04/02/2018 00:18	WG1092317
n-Butylbenzene	U			0.000299	0.00116	1	04/02/2018 00:18	WG1092317
sec-Butylbenzene	U			0.000233	0.00116	1	04/02/2018 00:18	WG1092317
tert-Butylbenzene	U			0.000239	0.00116	1	04/02/2018 00:18	WG1092317
Carbon disulfide	U			0.000256	0.00116	1	04/02/2018 00:18	WG1092317
Carbon tetrachloride	U			0.000380	0.00116	1	04/02/2018 00:18	WG1092317
Chlorobenzene	U			0.000246	0.00116	1	04/02/2018 00:18	WG1092317
Chlorodibromomethane	U			0.000432	0.00116	1	04/02/2018 00:18	WG1092317
Chloroethane	U			0.00110	0.00579	1	04/02/2018 00:18	WG1092317
Chloroform	U			0.000265	0.00579	1	04/02/2018 00:18	WG1092317
Chloromethane	U			0.000434	0.00290	1	04/02/2018 00:18	WG1092317
2-Chlorotoluene	U			0.000349	0.00116	1	04/02/2018 00:18	WG1092317
4-Chlorotoluene	U			0.000278	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dibromo-3-Chloropropane	U			0.00122	0.00579	1	04/02/2018 00:18	WG1092317
1,2-Dibromoethane	U			0.000397	0.00116	1	04/02/2018 00:18	WG1092317
Dibromomethane	U			0.000443	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dichlorobenzene	U			0.000353	0.00116	1	04/02/2018 00:18	WG1092317
1,3-Dichlorobenzene	U			0.000277	0.00116	1	04/02/2018 00:18	WG1092317
1,4-Dichlorobenzene	U			0.000262	0.00116	1	04/02/2018 00:18	WG1092317
Dichlorodifluoromethane	U			0.000826	0.00579	1	04/02/2018 00:18	WG1092317
1,1-Dichloroethane	U			0.000231	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dichloroethane	U			0.000307	0.00116	1	04/02/2018 00:18	WG1092317
1,1-Dichloroethene	U			0.000351	0.00116	1	04/02/2018 00:18	WG1092317
cis-1,2-Dichloroethene	0.000946	J	J	0.000272	0.00116	1	04/02/2018 00:18	WG1092317
trans-1,2-Dichloroethene	U			0.000306	0.00116	1	04/02/2018 00:18	WG1092317
1,2-Dichloropropane	U			0.000415	0.00116	1	04/02/2018 00:18	WG1092317
1,1-Dichloropropene	U			0.000367	0.00116	1	04/02/2018 00:18	WG1092317
1,3-Dichloropropane	U			0.000240	0.00116	1	04/02/2018 00:18	WG1092317
cis-1,3-Dichloropropene	U			0.000304	0.00116	1	04/02/2018 00:18	WG1092317
trans-1,3-Dichloropropene	U			0.000309	0.00116	1	04/02/2018 00:18	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	JO	0.000901	0.00290	1	04/02/2018 00:18	WG1092317
2,2-Dichloropropane	U			0.000323	0.00116	1	04/02/2018 00:18	WG1092317
Di-isopropyl ether	U	UJ	JO	0.000287	0.00116	1	04/02/2018 00:18	WG1092317
Ethylbenzene	U			0.000344	0.00116	1	04/02/2018 00:18	WG1092317
Hexachloro-1,3-butadiene	U			0.000396	0.00116	1	04/02/2018 00:18	WG1092317
2-Hexanone	U			0.00159	0.0116	1	04/02/2018 00:18	WG1092317
n-Hexane	0.000873	J	J	0.000336	0.0116	1	04/02/2018 00:18	WG1092317
Iodomethane	U			0.00293	0.0116	1	04/02/2018 00:18	WG1092317
Isopropylbenzene	U			0.000282	0.00116	1	04/02/2018 00:18	WG1092317
p-Isopropyltoluene	U			0.000236	0.00116	1	04/02/2018 00:18	WG1092317
2-Butanone (MEK)	U	UJ	JO	0.00542	0.0116	1	04/02/2018 00:18	WG1092317
Methylene Chloride	U			0.00116	0.00579	1	04/02/2018 00:18	WG1092317
4-Methyl-2-pentanone (MIBK)	U			0.00218	0.0116	1	04/02/2018 00:18	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 10:27

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/02/2018 00:18	WG1092317
Naphthalene	U		0.00116	0.00579	1	04/02/2018 00:18	WG1092317
n-Propylbenzene	U		0.000239	0.00116	1	04/02/2018 00:18	WG1092317
Styrene	U		0.000271	0.00116	1	04/02/2018 00:18	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000306	0.00116	1	04/02/2018 00:18	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000423	0.00116	1	04/02/2018 00:18	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000423	0.00116	1	04/02/2018 00:18	WG1092317
Tetrachloroethene	U		0.000320	0.00116	1	04/02/2018 00:18	WG1092317
Toluene	U		0.000503	0.00579	1	04/02/2018 00:18	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000355	0.00116	1	04/02/2018 00:18	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000450	0.00116	1	04/02/2018 00:18	WG1092317
1,1,1-Trichloroethane	U		0.000331	0.00116	1	04/02/2018 00:18	WG1092317
1,1,2-Trichloroethane	U		0.000321	0.00116	1	04/02/2018 00:18	WG1092317
Trichloroethene	U		0.000323	0.00116	1	04/02/2018 00:18	WG1092317
Trichlorofluoromethane	U		0.000443	0.00579	1	04/02/2018 00:18	WG1092317
1,2,3-Trichloropropane	U		0.000858	0.00290	1	04/02/2018 00:18	WG1092317
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	04/02/2018 00:18	WG1092317
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	04/02/2018 00:18	WG1092317
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	04/02/2018 00:18	WG1092317
Vinyl acetate	U	UJ J0	0.00277	0.0116	1	04/02/2018 00:18	WG1092317
Vinyl chloride	0.000863	J J	0.000337	0.00116	1	04/02/2018 00:18	WG1092317
Xylenes, Total	U		0.000809	0.00348	1	04/02/2018 00:18	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 00:18	WG1092317
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 00:18	WG1092317
(S) 4-Bromofluorobenzene	87.2			64.0-132		04/02/2018 00:18	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 10:45

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.2		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	U	UJ	JO	0.0113	0.0567	1	04/02/2018 00:38	WG1092317
Acrylonitrile	U			0.00203	0.0113	1	04/02/2018 00:38	WG1092317
Benzene	U			0.000306	0.00113	1	04/02/2018 00:38	WG1092317
Bromobenzene	U			0.000322	0.00113	1	04/02/2018 00:38	WG1092317
Bromodichloromethane	U			0.000288	0.00113	1	04/02/2018 00:38	WG1092317
Bromochloromethane	U			0.000442	0.00567	1	04/02/2018 00:38	WG1092317
Bromoform	U	UJ	JO	0.000481	0.00113	1	04/02/2018 00:38	WG1092317
Bromomethane	U			0.00152	0.00567	1	04/02/2018 00:38	WG1092317
n-Butylbenzene	U			0.000293	0.00113	1	04/02/2018 00:38	WG1092317
sec-Butylbenzene	U			0.000228	0.00113	1	04/02/2018 00:38	WG1092317
tert-Butylbenzene	U			0.000234	0.00113	1	04/02/2018 00:38	WG1092317
Carbon disulfide	U			0.000251	0.00113	1	04/02/2018 00:38	WG1092317
Carbon tetrachloride	U			0.000372	0.00113	1	04/02/2018 00:38	WG1092317
Chlorobenzene	U			0.000240	0.00113	1	04/02/2018 00:38	WG1092317
Chlorodibromomethane	U			0.000423	0.00113	1	04/02/2018 00:38	WG1092317
Chloroethane	U			0.00107	0.00567	1	04/02/2018 00:38	WG1092317
Chloroform	U			0.000260	0.00567	1	04/02/2018 00:38	WG1092317
Chloromethane	U			0.000425	0.00284	1	04/02/2018 00:38	WG1092317
2-Chlorotoluene	U			0.000341	0.00113	1	04/02/2018 00:38	WG1092317
4-Chlorotoluene	U			0.000272	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dibromo-3-Chloropropane	U			0.00119	0.00567	1	04/02/2018 00:38	WG1092317
1,2-Dibromoethane	U			0.000389	0.00113	1	04/02/2018 00:38	WG1092317
Dibromomethane	U			0.000433	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dichlorobenzene	U			0.000346	0.00113	1	04/02/2018 00:38	WG1092317
1,3-Dichlorobenzene	U			0.000271	0.00113	1	04/02/2018 00:38	WG1092317
1,4-Dichlorobenzene	U			0.000256	0.00113	1	04/02/2018 00:38	WG1092317
Dichlorodifluoromethane	U			0.000809	0.00567	1	04/02/2018 00:38	WG1092317
1,1-Dichloroethane	U			0.000226	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dichloroethane	U			0.000301	0.00113	1	04/02/2018 00:38	WG1092317
1,1-Dichloroethene	U			0.000344	0.00113	1	04/02/2018 00:38	WG1092317
cis-1,2-Dichloroethene	U			0.000266	0.00113	1	04/02/2018 00:38	WG1092317
trans-1,2-Dichloroethene	U			0.000299	0.00113	1	04/02/2018 00:38	WG1092317
1,2-Dichloropropane	U			0.000406	0.00113	1	04/02/2018 00:38	WG1092317
1,1-Dichloropropene	U			0.000359	0.00113	1	04/02/2018 00:38	WG1092317
1,3-Dichloropropane	U			0.000235	0.00113	1	04/02/2018 00:38	WG1092317
cis-1,3-Dichloropropene	U			0.000297	0.00113	1	04/02/2018 00:38	WG1092317
trans-1,3-Dichloropropene	U			0.000303	0.00113	1	04/02/2018 00:38	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	JO	0.000882	0.00284	1	04/02/2018 00:38	WG1092317
2,2-Dichloropropane	U			0.000316	0.00113	1	04/02/2018 00:38	WG1092317
Di-isopropyl ether	U	UJ	JO	0.000281	0.00113	1	04/02/2018 00:38	WG1092317
Ethylbenzene	U			0.000337	0.00113	1	04/02/2018 00:38	WG1092317
Hexachloro-1,3-butadiene	U			0.000388	0.00113	1	04/02/2018 00:38	WG1092317
2-Hexanone	U			0.00155	0.0113	1	04/02/2018 00:38	WG1092317
n-Hexane	U			0.000329	0.0113	1	04/02/2018 00:38	WG1092317
Iodomethane	U			0.00287	0.0113	1	04/02/2018 00:38	WG1092317
Isopropylbenzene	U			0.000276	0.00113	1	04/02/2018 00:38	WG1092317
p-Isopropyltoluene	U			0.000231	0.00113	1	04/02/2018 00:38	WG1092317
2-Butanone (MEK)	U	UJ	JO	0.00531	0.0113	1	04/02/2018 00:38	WG1092317 JC 4/25/18
Methylene Chloride	U			0.00113	0.00567	1	04/02/2018 00:38	WG1092317
4-Methyl-2-pentanone (MIBK)	U			0.00213	0.0113	1	04/02/2018 00:38	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 10:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/02/2018 00:38	WG1092317
Naphthalene	U		0.00113	0.00567	1	04/02/2018 00:38	WG1092317
n-Propylbenzene	U		0.000234	0.00113	1	04/02/2018 00:38	WG1092317
Styrene	U		0.000265	0.00113	1	04/02/2018 00:38	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/02/2018 00:38	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/02/2018 00:38	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	04/02/2018 00:38	WG1092317
Tetrachloroethene	U		0.000313	0.00113	1	04/02/2018 00:38	WG1092317
Toluene	U		0.000492	0.00567	1	04/02/2018 00:38	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000347	0.00113	1	04/02/2018 00:38	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000440	0.00113	1	04/02/2018 00:38	WG1092317
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/02/2018 00:38	WG1092317
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/02/2018 00:38	WG1092317
Trichloroethene	U		0.000316	0.00113	1	04/02/2018 00:38	WG1092317
Trichlorofluoromethane	U		0.000433	0.00567	1	04/02/2018 00:38	WG1092317
1,2,3-Trichloropropane	U		0.000840	0.00284	1	04/02/2018 00:38	WG1092317
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/02/2018 00:38	WG1092317
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/02/2018 00:38	WG1092317
1,3,5-Trimethylbenzene	U		0.000302	0.00113	1	04/02/2018 00:38	WG1092317
Vinyl acetate	U	<u>UJ</u> <u>JO</u>	0.00271	0.0113	1	04/02/2018 00:38	WG1092317
Vinyl chloride	U		0.000330	0.00113	1	04/02/2018 00:38	WG1092317
Xylenes, Total	U		0.000792	0.00340	1	04/02/2018 00:38	WG1092317
(S) Toluene-d8	105			80.0-120		04/02/2018 00:38	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 00:38	WG1092317
(S) 4-Bromofluorobenzene	89.1			64.0-132		04/02/2018 00:38	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	91.4		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ JO	0.0109	0.0547	1	04/02/2018 00:58	WG1092317
Acrylonitrile	U		0.00196	0.0109	1	04/02/2018 00:58	WG1092317
Benzene	U		0.000296	0.00109	1	04/02/2018 00:58	WG1092317
Bromobenzene	U		0.000311	0.00109	1	04/02/2018 00:58	WG1092317
Bromodichloromethane	U		0.000278	0.00109	1	04/02/2018 00:58	WG1092317
Bromochloromethane	U		0.000427	0.00547	1	04/02/2018 00:58	WG1092317
Bromoform	U	UJ JO	0.000464	0.00109	1	04/02/2018 00:58	WG1092317
Bromomethane	U		0.00147	0.00547	1	04/02/2018 00:58	WG1092317
n-Butylbenzene	U		0.000282	0.00109	1	04/02/2018 00:58	WG1092317
sec-Butylbenzene	U		0.000220	0.00109	1	04/02/2018 00:58	WG1092317
tert-Butylbenzene	U		0.000225	0.00109	1	04/02/2018 00:58	WG1092317
Carbon disulfide	U		0.000242	0.00109	1	04/02/2018 00:58	WG1092317
Carbon tetrachloride	U		0.000359	0.00109	1	04/02/2018 00:58	WG1092317
Chlorobenzene	U		0.000232	0.00109	1	04/02/2018 00:58	WG1092317
Chlorodibromomethane	U		0.000408	0.00109	1	04/02/2018 00:58	WG1092317
Chloroethane	U		0.00104	0.00547	1	04/02/2018 00:58	WG1092317
Chloroform	U		0.000251	0.00547	1	04/02/2018 00:58	WG1092317
Chloromethane	U		0.000410	0.00274	1	04/02/2018 00:58	WG1092317
2-Chlorotoluene	U		0.000329	0.00109	1	04/02/2018 00:58	WG1092317
4-Chlorotoluene	U		0.000263	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00115	0.00547	1	04/02/2018 00:58	WG1092317
1,2-Dibromoethane	U		0.000375	0.00109	1	04/02/2018 00:58	WG1092317
Dibromomethane	U		0.000418	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dichlorobenzene	U		0.000334	0.00109	1	04/02/2018 00:58	WG1092317
1,3-Dichlorobenzene	U		0.000262	0.00109	1	04/02/2018 00:58	WG1092317
1,4-Dichlorobenzene	U		0.000247	0.00109	1	04/02/2018 00:58	WG1092317
Dichlorodifluoromethane	U		0.000780	0.00547	1	04/02/2018 00:58	WG1092317
1,1-Dichloroethane	U		0.000218	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dichloroethane	U		0.000290	0.00109	1	04/02/2018 00:58	WG1092317
1,1-Dichloroethene	U		0.000332	0.00109	1	04/02/2018 00:58	WG1092317
cis-1,2-Dichloroethene	U		0.000257	0.00109	1	04/02/2018 00:58	WG1092317
trans-1,2-Dichloroethene	U		0.000289	0.00109	1	04/02/2018 00:58	WG1092317
1,2-Dichloropropane	U		0.000392	0.00109	1	04/02/2018 00:58	WG1092317
1,1-Dichloropropene	U		0.000347	0.00109	1	04/02/2018 00:58	WG1092317
1,3-Dichloropropane	U		0.000227	0.00109	1	04/02/2018 00:58	WG1092317
cis-1,3-Dichloropropene	U		0.000287	0.00109	1	04/02/2018 00:58	WG1092317
trans-1,3-Dichloropropene	U		0.000292	0.00109	1	04/02/2018 00:58	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ JO	0.000852	0.00274	1	04/02/2018 00:58	WG1092317
2,2-Dichloropropane	U		0.000305	0.00109	1	04/02/2018 00:58	WG1092317
Di-isopropyl ether	U	UJ JO	0.000271	0.00109	1	04/02/2018 00:58	WG1092317
Ethylbenzene	U		0.000325	0.00109	1	04/02/2018 00:58	WG1092317
Hexachloro-1,3-butadiene	U		0.000374	0.00109	1	04/02/2018 00:58	WG1092317
2-Hexanone	U		0.00150	0.0109	1	04/02/2018 00:58	WG1092317
n-Hexane	U		0.000317	0.0109	1	04/02/2018 00:58	WG1092317
Iodomethane	U		0.00277	0.0109	1	04/02/2018 00:58	WG1092317
Isopropylbenzene	U		0.000266	0.00109	1	04/02/2018 00:58	WG1092317
p-Isopropyltoluene	U		0.000223	0.00109	1	04/02/2018 00:58	WG1092317
2-Butanone (MEK)	U	UJ JO	0.00512	0.0109	1	04/02/2018 00:58	WG1092317
Methylene Chloride	U		0.00109	0.00547	1	04/02/2018 00:58	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00206	0.0109	1	04/02/2018 00:58	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 11:20

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000232	0.00109	1	04/02/2018 00:58	WG1092317
Naphthalene	U		0.00109	0.00547	1	04/02/2018 00:58	WG1092317
n-Propylbenzene	U		0.000225	0.00109	1	04/02/2018 00:58	WG1092317
Styrene	U		0.000256	0.00109	1	04/02/2018 00:58	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000289	0.00109	1	04/02/2018 00:58	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000399	0.00109	1	04/02/2018 00:58	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000399	0.00109	1	04/02/2018 00:58	WG1092317
Tetrachloroethene	0.000561	J J	0.000302	0.00109	1	04/02/2018 00:58	WG1092317
Toluene	U		0.000475	0.00547	1	04/02/2018 00:58	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000335	0.00109	1	04/02/2018 00:58	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000425	0.00109	1	04/02/2018 00:58	WG1092317
1,1,1-Trichloroethane	U		0.000313	0.00109	1	04/02/2018 00:58	WG1092317
1,1,2-Trichloroethane	U		0.000303	0.00109	1	04/02/2018 00:58	WG1092317
Trichloroethene	U		0.000305	0.00109	1	04/02/2018 00:58	WG1092317
Trichlorofluoromethane	U		0.000418	0.00547	1	04/02/2018 00:58	WG1092317
1,2,3-Trichloropropane	U		0.000811	0.00274	1	04/02/2018 00:58	WG1092317
1,2,4-Trimethylbenzene	U		0.000231	0.00109	1	04/02/2018 00:58	WG1092317
1,2,3-Trimethylbenzene	U		0.000314	0.00109	1	04/02/2018 00:58	WG1092317
1,3,5-Trimethylbenzene	U		0.000291	0.00109	1	04/02/2018 00:58	WG1092317
Vinyl acetate	U	UJ JO	0.00262	0.0109	1	04/02/2018 00:58	WG1092317
Vinyl chloride	U		0.000318	0.00109	1	04/02/2018 00:58	WG1092317
Xylenes, Total	U		0.000764	0.00328	1	04/02/2018 00:58	WG1092317
(S) Toluene-d8	105			80.0-120		04/02/2018 00:58	WG1092317
(S) Dibromofluoromethane	101			74.0-131		04/02/2018 00:58	WG1092317
(S) 4-Bromofluorobenzene	87.2			64.0-132		04/02/2018 00:58	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.2		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ JO	0.0107	0.0536	1	04/02/2018 01:17	WG1092317
Acrylonitrile	U		0.00192	0.0107	1	04/02/2018 01:17	WG1092317
Benzene	U		0.000290	0.00107	1	04/02/2018 01:17	WG1092317
Bromobenzene	U		0.000305	0.00107	1	04/02/2018 01:17	WG1092317
Bromodichloromethane	U		0.000272	0.00107	1	04/02/2018 01:17	WG1092317
Bromochloromethane	U		0.000418	0.00536	1	04/02/2018 01:17	WG1092317
Bromoform	U	UJ JO	0.000455	0.00107	1	04/02/2018 01:17	WG1092317
Bromomethane	U		0.00144	0.00536	1	04/02/2018 01:17	WG1092317
n-Butylbenzene	U		0.000277	0.00107	1	04/02/2018 01:17	WG1092317
sec-Butylbenzene	U		0.000216	0.00107	1	04/02/2018 01:17	WG1092317
tert-Butylbenzene	U		0.000221	0.00107	1	04/02/2018 01:17	WG1092317
Carbon disulfide	U		0.000237	0.00107	1	04/02/2018 01:17	WG1092317
Carbon tetrachloride	U		0.000352	0.00107	1	04/02/2018 01:17	WG1092317
Chlorobenzene	U		0.000227	0.00107	1	04/02/2018 01:17	WG1092317
Chlorodibromomethane	U		0.000400	0.00107	1	04/02/2018 01:17	WG1092317
Chloroethane	U		0.00101	0.00536	1	04/02/2018 01:17	WG1092317
Chloroform	U		0.000246	0.00536	1	04/02/2018 01:17	WG1092317
Chloromethane	U		0.000402	0.00268	1	04/02/2018 01:17	WG1092317
2-Chlorotoluene	U		0.000323	0.00107	1	04/02/2018 01:17	WG1092317
4-Chlorotoluene	U		0.000257	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00536	1	04/02/2018 01:17	WG1092317
1,2-Dibromoethane	U		0.000368	0.00107	1	04/02/2018 01:17	WG1092317
Dibromomethane	U		0.000410	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dichlorobenzene	U		0.000327	0.00107	1	04/02/2018 01:17	WG1092317
1,3-Dichlorobenzene	U		0.000256	0.00107	1	04/02/2018 01:17	WG1092317
1,4-Dichlorobenzene	U		0.000242	0.00107	1	04/02/2018 01:17	WG1092317
Dichlorodifluoromethane	U		0.000765	0.00536	1	04/02/2018 01:17	WG1092317
1,1-Dichloroethane	U		0.000213	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dichloroethane	U		0.000284	0.00107	1	04/02/2018 01:17	WG1092317
1,1-Dichloroethene	U		0.000325	0.00107	1	04/02/2018 01:17	WG1092317
cis-1,2-Dichloroethene	U		0.000252	0.00107	1	04/02/2018 01:17	WG1092317
trans-1,2-Dichloroethene	U		0.000283	0.00107	1	04/02/2018 01:17	WG1092317
1,2-Dichloropropane	U		0.000384	0.00107	1	04/02/2018 01:17	WG1092317
1,1-Dichloropropene	U		0.000340	0.00107	1	04/02/2018 01:17	WG1092317
1,3-Dichloropropane	U		0.000222	0.00107	1	04/02/2018 01:17	WG1092317
cis-1,3-Dichloropropene	U		0.000281	0.00107	1	04/02/2018 01:17	WG1092317
trans-1,3-Dichloropropene	U		0.000286	0.00107	1	04/02/2018 01:17	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ JO	0.000835	0.00268	1	04/02/2018 01:17	WG1092317
2,2-Dichloropropane	U		0.000299	0.00107	1	04/02/2018 01:17	WG1092317
Di-isopropyl ether	U	UJ JO	0.000266	0.00107	1	04/02/2018 01:17	WG1092317
Ethylbenzene	U		0.000319	0.00107	1	04/02/2018 01:17	WG1092317
Hexachloro-1,3-butadiene	U		0.000367	0.00107	1	04/02/2018 01:17	WG1092317
2-Hexanone	U		0.00147	0.0107	1	04/02/2018 01:17	WG1092317
n-Hexane	U		0.000311	0.0107	1	04/02/2018 01:17	WG1092317
Iodomethane	U		0.00271	0.0107	1	04/02/2018 01:17	WG1092317
Isopropylbenzene	U		0.000261	0.00107	1	04/02/2018 01:17	WG1092317
p-Isopropyltoluene	U		0.000219	0.00107	1	04/02/2018 01:17	WG1092317
2-Butanone (MEK)	U	UJ JO	0.00502	0.0107	1	04/02/2018 01:17	WG1092317
Methylene Chloride	U		0.00107	0.00536	1	04/02/2018 01:17	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0107	1	04/02/2018 01:17	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 11:45

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000227	0.00107	1	04/02/2018 01:17	WG1092317
Naphthalene	U		0.00107	0.00536	1	04/02/2018 01:17	WG1092317
n-Propylbenzene	U		0.000221	0.00107	1	04/02/2018 01:17	WG1092317
Styrene	U		0.000251	0.00107	1	04/02/2018 01:17	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000283	0.00107	1	04/02/2018 01:17	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000392	0.00107	1	04/02/2018 01:17	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00107	1	04/02/2018 01:17	WG1092317
Tetrachloroethene	U		0.000296	0.00107	1	04/02/2018 01:17	WG1092317
Toluene	U		0.000466	0.00536	1	04/02/2018 01:17	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000328	0.00107	1	04/02/2018 01:17	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000416	0.00107	1	04/02/2018 01:17	WG1092317
1,1,1-Trichloroethane	U		0.000307	0.00107	1	04/02/2018 01:17	WG1092317
1,1,2-Trichloroethane	U		0.000297	0.00107	1	04/02/2018 01:17	WG1092317
Trichloroethene	U		0.000299	0.00107	1	04/02/2018 01:17	WG1092317
Trichlorofluoromethane	U		0.000410	0.00536	1	04/02/2018 01:17	WG1092317
1,2,3-Trichloropropane	U		0.000795	0.00268	1	04/02/2018 01:17	WG1092317
1,2,4-Trimethylbenzene	U		0.000226	0.00107	1	04/02/2018 01:17	WG1092317
1,2,3-Trimethylbenzene	U		0.000308	0.00107	1	04/02/2018 01:17	WG1092317
1,3,5-Trimethylbenzene	U		0.000285	0.00107	1	04/02/2018 01:17	WG1092317
Vinyl acetate	U	<u>UJ</u> <u>JO</u>	0.00256	0.0107	1	04/02/2018 01:17	WG1092317
Vinyl chloride	U		0.000312	0.00107	1	04/02/2018 01:17	WG1092317
Xylenes, Total	U		0.000749	0.00322	1	04/02/2018 01:17	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 01:17	WG1092317
(S) Dibromofluoromethane	101			74.0-131		04/02/2018 01:17	WG1092317
(S) 4-Bromofluorobenzene	90.4			64.0-132		04/02/2018 01:17	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 12:05

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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.3		1	04/04/2018 13:45	WG1093168

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch	
	mg/kg		mg/kg	mg/kg		date / time		
Acetone	U	UJ	JO	0.0113	0.0566	1	04/02/2018 01:37	WG1092317
Acrylonitrile	U			0.00203	0.0113	1	04/02/2018 01:37	WG1092317
Benzene	U			0.000306	0.00113	1	04/02/2018 01:37	WG1092317
Bromobenzene	U			0.000322	0.00113	1	04/02/2018 01:37	WG1092317
Bromodichloromethane	U			0.000288	0.00113	1	04/02/2018 01:37	WG1092317
Bromochloromethane	U			0.000442	0.00566	1	04/02/2018 01:37	WG1092317
Bromoform	U	UJ	JO	0.000480	0.00113	1	04/02/2018 01:37	WG1092317
Bromomethane	U			0.00152	0.00566	1	04/02/2018 01:37	WG1092317
n-Butylbenzene	U			0.000292	0.00113	1	04/02/2018 01:37	WG1092317
sec-Butylbenzene	U			0.000228	0.00113	1	04/02/2018 01:37	WG1092317
tert-Butylbenzene	U			0.000233	0.00113	1	04/02/2018 01:37	WG1092317
Carbon disulfide	0.000332	J	J	0.000250	0.00113	1	04/02/2018 01:37	WG1092317
Carbon tetrachloride	U			0.000372	0.00113	1	04/02/2018 01:37	WG1092317
Chlorobenzene	U			0.000240	0.00113	1	04/02/2018 01:37	WG1092317
Chlorodibromomethane	U			0.000423	0.00113	1	04/02/2018 01:37	WG1092317
Chloroethane	U			0.00107	0.00566	1	04/02/2018 01:37	WG1092317
Chloroform	U			0.000259	0.00566	1	04/02/2018 01:37	WG1092317
Chloromethane	U			0.000425	0.00283	1	04/02/2018 01:37	WG1092317
2-Chlorotoluene	U			0.000341	0.00113	1	04/02/2018 01:37	WG1092317
4-Chlorotoluene	U			0.000272	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dibromo-3-Chloropropane	U			0.00119	0.00566	1	04/02/2018 01:37	WG1092317
1,2-Dibromoethane	U			0.000389	0.00113	1	04/02/2018 01:37	WG1092317
Dibromomethane	U			0.000433	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dichlorobenzene	U			0.000346	0.00113	1	04/02/2018 01:37	WG1092317
1,3-Dichlorobenzene	U			0.000271	0.00113	1	04/02/2018 01:37	WG1092317
1,4-Dichlorobenzene	U			0.000256	0.00113	1	04/02/2018 01:37	WG1092317
Dichlorodifluoromethane	U			0.000808	0.00566	1	04/02/2018 01:37	WG1092317
1,1-Dichloroethane	U			0.000225	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dichloroethane	U			0.000300	0.00113	1	04/02/2018 01:37	WG1092317
1,1-Dichloroethene	U			0.000343	0.00113	1	04/02/2018 01:37	WG1092317
cis-1,2-Dichloroethene	0.00421			0.000266	0.00113	1	04/02/2018 01:37	WG1092317
trans-1,2-Dichloroethene	U			0.000299	0.00113	1	04/02/2018 01:37	WG1092317
1,2-Dichloropropane	U			0.000406	0.00113	1	04/02/2018 01:37	WG1092317
1,1-Dichloropropene	U			0.000359	0.00113	1	04/02/2018 01:37	WG1092317
1,3-Dichloropropane	U			0.000235	0.00113	1	04/02/2018 01:37	WG1092317
cis-1,3-Dichloropropene	U			0.000297	0.00113	1	04/02/2018 01:37	WG1092317
trans-1,3-Dichloropropene	U			0.000302	0.00113	1	04/02/2018 01:37	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	JO	0.000881	0.00283	1	04/02/2018 01:37	WG1092317
2,2-Dichloropropane	U			0.000316	0.00113	1	04/02/2018 01:37	WG1092317
Di-isopropyl ether	U	UJ	JO	0.000281	0.00113	1	04/02/2018 01:37	WG1092317
Ethylbenzene	U			0.000336	0.00113	1	04/02/2018 01:37	WG1092317
Hexachloro-1,3-butadiene	U			0.000387	0.00113	1	04/02/2018 01:37	WG1092317
2-Hexanone	U			0.00155	0.0113	1	04/02/2018 01:37	WG1092317
n-Hexane	U			0.000329	0.0113	1	04/02/2018 01:37	WG1092317
Iodomethane	U			0.00287	0.0113	1	04/02/2018 01:37	WG1092317
Isopropylbenzene	U			0.000275	0.00113	1	04/02/2018 01:37	WG1092317
p-Isopropyltoluene	U			0.000231	0.00113	1	04/02/2018 01:37	WG1092317
2-Butanone (MEK)	U	UJ	JO	0.00530	0.0113	1	04/02/2018 01:37	WG1092317
Methylene Chloride	U			0.00113	0.00566	1	04/02/2018 01:37	WG1092317
4-Methyl-2-pentanone (MIBK)	U			0.00213	0.0113	1	04/02/2018 01:37	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 12:05

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000240	0.00113	1	04/02/2018 01:37	WG1092317
Naphthalene	U		0.00113	0.00566	1	04/02/2018 01:37	WG1092317
n-Propylbenzene	U		0.000233	0.00113	1	04/02/2018 01:37	WG1092317
Styrene	U		0.000265	0.00113	1	04/02/2018 01:37	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000299	0.00113	1	04/02/2018 01:37	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000414	0.00113	1	04/02/2018 01:37	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000414	0.00113	1	04/02/2018 01:37	WG1092317
Tetrachloroethene	U		0.000313	0.00113	1	04/02/2018 01:37	WG1092317
Toluene	U		0.000492	0.00566	1	04/02/2018 01:37	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000347	0.00113	1	04/02/2018 01:37	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000440	0.00113	1	04/02/2018 01:37	WG1092317
1,1,1-Trichloroethane	U		0.000324	0.00113	1	04/02/2018 01:37	WG1092317
1,1,2-Trichloroethane	U		0.000314	0.00113	1	04/02/2018 01:37	WG1092317
Trichloroethene	0.000486	<u>J</u> <u>J</u>	0.000316	0.00113	1	04/02/2018 01:37	WG1092317
Trichlorofluoromethane	U		0.000433	0.00566	1	04/02/2018 01:37	WG1092317
1,2,3-Trichloropropane	U		0.000839	0.00283	1	04/02/2018 01:37	WG1092317
1,2,4-Trimethylbenzene	U		0.000239	0.00113	1	04/02/2018 01:37	WG1092317
1,2,3-Trimethylbenzene	U		0.000325	0.00113	1	04/02/2018 01:37	WG1092317
1,3,5-Trimethylbenzene	U		0.000301	0.00113	1	04/02/2018 01:37	WG1092317
Vinyl acetate	U	<u>UJ</u> <u>JO</u>	0.00271	0.0113	1	04/02/2018 01:37	WG1092317
Vinyl chloride	U		0.000330	0.00113	1	04/02/2018 01:37	WG1092317
Xylenes, Total	U		0.000791	0.00340	1	04/02/2018 01:37	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 01:37	WG1092317
(S) Dibromofluoromethane	101			74.0-131		04/02/2018 01:37	WG1092317
(S) 4-Bromofluorobenzene	89.1			64.0-132		04/02/2018 01:37	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.2		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ JO	0.0111	0.0555	1	04/02/2018 01:57	WG1092317
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 01:57	WG1092317
Benzene	U		0.000299	0.00111	1	04/02/2018 01:57	WG1092317
Bromobenzene	U		0.000315	0.00111	1	04/02/2018 01:57	WG1092317
Bromodichloromethane	U		0.000282	0.00111	1	04/02/2018 01:57	WG1092317
Bromochloromethane	U		0.000433	0.00555	1	04/02/2018 01:57	WG1092317
Bromoform	U	UJ JO	0.000470	0.00111	1	04/02/2018 01:57	WG1092317
Bromomethane	U		0.00149	0.00555	1	04/02/2018 01:57	WG1092317
n-Butylbenzene	U		0.000286	0.00111	1	04/02/2018 01:57	WG1092317
sec-Butylbenzene	U		0.000223	0.00111	1	04/02/2018 01:57	WG1092317
tert-Butylbenzene	U		0.000228	0.00111	1	04/02/2018 01:57	WG1092317
Carbon disulfide	U		0.000245	0.00111	1	04/02/2018 01:57	WG1092317
Carbon tetrachloride	U		0.000364	0.00111	1	04/02/2018 01:57	WG1092317
Chlorobenzene	U		0.000235	0.00111	1	04/02/2018 01:57	WG1092317
Chlorodibromomethane	U		0.000414	0.00111	1	04/02/2018 01:57	WG1092317
Chloroethane	U		0.00105	0.00555	1	04/02/2018 01:57	WG1092317
Chloroform	U		0.000254	0.00555	1	04/02/2018 01:57	WG1092317
Chloromethane	U		0.000416	0.00277	1	04/02/2018 01:57	WG1092317
2-Chlorotoluene	U		0.000334	0.00111	1	04/02/2018 01:57	WG1092317
4-Chlorotoluene	U		0.000266	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00555	1	04/02/2018 01:57	WG1092317
1,2-Dibromoethane	U		0.000380	0.00111	1	04/02/2018 01:57	WG1092317
Dibromomethane	U		0.000424	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dichlorobenzene	U		0.000338	0.00111	1	04/02/2018 01:57	WG1092317
1,3-Dichlorobenzene	U		0.000265	0.00111	1	04/02/2018 01:57	WG1092317
1,4-Dichlorobenzene	U		0.000251	0.00111	1	04/02/2018 01:57	WG1092317
Dichlorodifluoromethane	U		0.000791	0.00555	1	04/02/2018 01:57	WG1092317
1,1-Dichloroethane	U		0.000221	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dichloroethane	U		0.000294	0.00111	1	04/02/2018 01:57	WG1092317
1,1-Dichloroethene	U		0.000336	0.00111	1	04/02/2018 01:57	WG1092317
cis-1,2-Dichloroethene	U		0.000261	0.00111	1	04/02/2018 01:57	WG1092317
trans-1,2-Dichloroethene	U		0.000293	0.00111	1	04/02/2018 01:57	WG1092317
1,2-Dichloropropane	U		0.000397	0.00111	1	04/02/2018 01:57	WG1092317
1,1-Dichloropropene	U		0.000352	0.00111	1	04/02/2018 01:57	WG1092317
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 01:57	WG1092317
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	04/02/2018 01:57	WG1092317
trans-1,3-Dichloropropene	U		0.000296	0.00111	1	04/02/2018 01:57	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ JO	0.000863	0.00277	1	04/02/2018 01:57	WG1092317
2,2-Dichloropropane	U		0.000309	0.00111	1	04/02/2018 01:57	WG1092317
Di-isopropyl ether	U	UJ JO	0.000275	0.00111	1	04/02/2018 01:57	WG1092317
Ethylbenzene	U		0.000329	0.00111	1	04/02/2018 01:57	WG1092317
Hexachloro-1,3-butadiene	U		0.000379	0.00111	1	04/02/2018 01:57	WG1092317
2-Hexanone	U		0.00152	0.0111	1	04/02/2018 01:57	WG1092317
n-Hexane	U		0.000322	0.0111	1	04/02/2018 01:57	WG1092317
Iodomethane	U		0.00281	0.0111	1	04/02/2018 01:57	WG1092317
Isopropylbenzene	U		0.000270	0.00111	1	04/02/2018 01:57	WG1092317
p-Isopropyltoluene	U		0.000226	0.00111	1	04/02/2018 01:57	WG1092317
2-Butanone (MEK)	U	UJ JO	0.00519	0.0111	1	04/02/2018 01:57	WG1092317
Methylene Chloride	U		0.00111	0.00555	1	04/02/2018 01:57	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 01:57	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 12:35

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000235	0.0011	1	04/02/2018 01:57	WG1092317
Naphthalene	U		0.0011	0.00555	1	04/02/2018 01:57	WG1092317
n-Propylbenzene	U		0.000228	0.0011	1	04/02/2018 01:57	WG1092317
Styrene	U		0.000260	0.0011	1	04/02/2018 01:57	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000293	0.0011	1	04/02/2018 01:57	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000405	0.0011	1	04/02/2018 01:57	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000405	0.0011	1	04/02/2018 01:57	WG1092317
Tetrachloroethene	U		0.000306	0.0011	1	04/02/2018 01:57	WG1092317
Toluene	U		0.000481	0.00555	1	04/02/2018 01:57	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000339	0.0011	1	04/02/2018 01:57	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000430	0.0011	1	04/02/2018 01:57	WG1092317
1,1,1-Trichloroethane	U		0.000317	0.0011	1	04/02/2018 01:57	WG1092317
1,1,2-Trichloroethane	U		0.000307	0.0011	1	04/02/2018 01:57	WG1092317
Trichloroethene	U		0.000309	0.0011	1	04/02/2018 01:57	WG1092317
Trichlorofluoromethane	U		0.000424	0.00555	1	04/02/2018 01:57	WG1092317
1,2,3-Trichloropropane	U		0.000822	0.00277	1	04/02/2018 01:57	WG1092317
1,2,4-Trimethylbenzene	U		0.000234	0.0011	1	04/02/2018 01:57	WG1092317
1,2,3-Trimethylbenzene	U		0.000318	0.0011	1	04/02/2018 01:57	WG1092317
1,3,5-Trimethylbenzene	U		0.000295	0.0011	1	04/02/2018 01:57	WG1092317
Vinyl acetate	U	<u>UJ</u> <u>JO</u>	0.00265	0.011	1	04/02/2018 01:57	WG1092317
Vinyl chloride	0.00767		0.000323	0.0011	1	04/02/2018 01:57	WG1092317
Xylenes, Total	U		0.000774	0.00333	1	04/02/2018 01:57	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 01:57	WG1092317
(S) Dibromofluoromethane	101			74.0-131		04/02/2018 01:57	WG1092317
(S) 4-Bromofluorobenzene	92.8			64.0-132		04/02/2018 01:57	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ JO	0.0114	0.0568	1	04/02/2018 02:16	WG1092317
Acrylonitrile	U		0.00203	0.0114	1	04/02/2018 02:16	WG1092317
Benzene	U		0.000307	0.00114	1	04/02/2018 02:16	WG1092317
Bromobenzene	U		0.000323	0.00114	1	04/02/2018 02:16	WG1092317
Bromodichloromethane	U		0.000289	0.00114	1	04/02/2018 02:16	WG1092317
Bromochloromethane	U		0.000443	0.00568	1	04/02/2018 02:16	WG1092317
Bromoform	U	UJ JO	0.000482	0.00114	1	04/02/2018 02:16	WG1092317
Bromomethane	U		0.00152	0.00568	1	04/02/2018 02:16	WG1092317
n-Butylbenzene	U		0.000293	0.00114	1	04/02/2018 02:16	WG1092317
sec-Butylbenzene	U		0.000228	0.00114	1	04/02/2018 02:16	WG1092317
tert-Butylbenzene	U		0.000234	0.00114	1	04/02/2018 02:16	WG1092317
Carbon disulfide	U		0.000251	0.00114	1	04/02/2018 02:16	WG1092317
Carbon tetrachloride	U		0.000373	0.00114	1	04/02/2018 02:16	WG1092317
Chlorobenzene	U		0.000241	0.00114	1	04/02/2018 02:16	WG1092317
Chlorodibromomethane	U		0.000424	0.00114	1	04/02/2018 02:16	WG1092317
Chloroethane	U		0.00108	0.00568	1	04/02/2018 02:16	WG1092317
Chloroform	U		0.000260	0.00568	1	04/02/2018 02:16	WG1092317
Chloromethane	U		0.000426	0.00284	1	04/02/2018 02:16	WG1092317
2-Chlorotoluene	U		0.000342	0.00114	1	04/02/2018 02:16	WG1092317
4-Chlorotoluene	U		0.000273	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00568	1	04/02/2018 02:16	WG1092317
1,2-Dibromoethane	U		0.000390	0.00114	1	04/02/2018 02:16	WG1092317
Dibromomethane	U		0.000434	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dichlorobenzene	U		0.000347	0.00114	1	04/02/2018 02:16	WG1092317
1,3-Dichlorobenzene	U		0.000272	0.00114	1	04/02/2018 02:16	WG1092317
1,4-Dichlorobenzene	U		0.000257	0.00114	1	04/02/2018 02:16	WG1092317
Dichlorodifluoromethane	U		0.000810	0.00568	1	04/02/2018 02:16	WG1092317
1,1-Dichloroethane	U		0.000226	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dichloroethane	U		0.000301	0.00114	1	04/02/2018 02:16	WG1092317
1,1-Dichloroethene	U		0.000344	0.00114	1	04/02/2018 02:16	WG1092317
cis-1,2-Dichloroethene	U		0.000267	0.00114	1	04/02/2018 02:16	WG1092317
trans-1,2-Dichloroethene	U		0.000300	0.00114	1	04/02/2018 02:16	WG1092317
1,2-Dichloropropane	U		0.000407	0.00114	1	04/02/2018 02:16	WG1092317
1,1-Dichloropropene	U		0.000360	0.00114	1	04/02/2018 02:16	WG1092317
1,3-Dichloropropane	U		0.000235	0.00114	1	04/02/2018 02:16	WG1092317
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	04/02/2018 02:16	WG1092317
trans-1,3-Dichloropropene	U		0.000303	0.00114	1	04/02/2018 02:16	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ JO	0.000884	0.00284	1	04/02/2018 02:16	WG1092317
2,2-Dichloropropane	U		0.000317	0.00114	1	04/02/2018 02:16	WG1092317
Di-isopropyl ether	U	UJ JO	0.000282	0.00114	1	04/02/2018 02:16	WG1092317
Ethylbenzene	U		0.000338	0.00114	1	04/02/2018 02:16	WG1092317
Hexachloro-1,3-butadiene	U		0.000389	0.00114	1	04/02/2018 02:16	WG1092317
2-Hexanone	U		0.00156	0.0114	1	04/02/2018 02:16	WG1092317
n-Hexane	U		0.000330	0.0114	1	04/02/2018 02:16	WG1092317 JC 4/25/18
Iodomethane	U		0.00288	0.0114	1	04/02/2018 02:16	WG1092317
Isopropylbenzene	U		0.000276	0.00114	1	04/02/2018 02:16	WG1092317
p-Isopropyltoluene	U		0.000232	0.00114	1	04/02/2018 02:16	WG1092317
2-Butanone (MEK)	U	UJ JO	0.00532	0.0114	1	04/02/2018 02:16	WG1092317
Methylene Chloride	U		0.00114	0.00568	1	04/02/2018 02:16	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	04/02/2018 02:16	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 03/27/18 13:15

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	04/02/2018 02:16	WG1092317
Naphthalene	U		0.00114	0.00568	1	04/02/2018 02:16	WG1092317
n-Propylbenzene	U		0.000234	0.00114	1	04/02/2018 02:16	WG1092317
Styrene	U		0.000266	0.00114	1	04/02/2018 02:16	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000300	0.00114	1	04/02/2018 02:16	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000415	0.00114	1	04/02/2018 02:16	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000415	0.00114	1	04/02/2018 02:16	WG1092317
Tetrachloroethene	U		0.000314	0.00114	1	04/02/2018 02:16	WG1092317
Toluene	U		0.000493	0.00568	1	04/02/2018 02:16	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000348	0.00114	1	04/02/2018 02:16	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000441	0.00114	1	04/02/2018 02:16	WG1092317
1,1,1-Trichloroethane	U		0.000325	0.00114	1	04/02/2018 02:16	WG1092317
1,1,2-Trichloroethane	U		0.000315	0.00114	1	04/02/2018 02:16	WG1092317
Trichloroethene	U		0.000317	0.00114	1	04/02/2018 02:16	WG1092317
Trichlorofluoromethane	U		0.000434	0.00568	1	04/02/2018 02:16	WG1092317
1,2,3-Trichloropropane	U		0.000842	0.00284	1	04/02/2018 02:16	WG1092317
1,2,4-Trimethylbenzene	U		0.000240	0.00114	1	04/02/2018 02:16	WG1092317
1,2,3-Trimethylbenzene	U		0.000326	0.00114	1	04/02/2018 02:16	WG1092317
1,3,5-Trimethylbenzene	U		0.000302	0.00114	1	04/02/2018 02:16	WG1092317
Vinyl acetate	U	UJ J0	0.00272	0.0114	1	04/02/2018 02:16	WG1092317
Vinyl chloride	0.000344	J J	0.000331	0.00114	1	04/02/2018 02:16	WG1092317
Xylenes, Total	U		0.000793	0.00341	1	04/02/2018 02:16	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 02:16	WG1092317
(S) Dibromofluoromethane	99.8			74.0-131		04/02/2018 02:16	WG1092317
(S) 4-Bromofluorobenzene	90.4			64.0-132		04/02/2018 02:16	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 13:40

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.8		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ	0.0111	0.0557	1	04/02/2018 02:36	WG1092317
Acrylonitrile	U		0.00199	0.0111	1	04/02/2018 02:36	WG1092317
Benzene	U		0.000301	0.00111	1	04/02/2018 02:36	WG1092317
Bromobenzene	U		0.000316	0.00111	1	04/02/2018 02:36	WG1092317
Bromodichloromethane	U		0.000283	0.00111	1	04/02/2018 02:36	WG1092317
Bromochloromethane	U		0.000434	0.00557	1	04/02/2018 02:36	WG1092317
Bromoform	U	UJ	0.000472	0.00111	1	04/02/2018 02:36	WG1092317
Bromomethane	U		0.00149	0.00557	1	04/02/2018 02:36	WG1092317
n-Butylbenzene	U		0.000287	0.00111	1	04/02/2018 02:36	WG1092317
sec-Butylbenzene	U		0.000224	0.00111	1	04/02/2018 02:36	WG1092317
tert-Butylbenzene	U		0.000229	0.00111	1	04/02/2018 02:36	WG1092317
Carbon disulfide	U		0.000246	0.00111	1	04/02/2018 02:36	WG1092317
Carbon tetrachloride	U		0.000365	0.00111	1	04/02/2018 02:36	WG1092317
Chlorobenzene	U		0.000236	0.00111	1	04/02/2018 02:36	WG1092317
Chlorodibromomethane	U		0.000415	0.00111	1	04/02/2018 02:36	WG1092317
Chloroethane	U		0.00105	0.00557	1	04/02/2018 02:36	WG1092317
Chloroform	U		0.000255	0.00557	1	04/02/2018 02:36	WG1092317
Chloromethane	U		0.000418	0.00278	1	04/02/2018 02:36	WG1092317
2-Chlorotoluene	U		0.000335	0.00111	1	04/02/2018 02:36	WG1092317
4-Chlorotoluene	U		0.000267	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00557	1	04/02/2018 02:36	WG1092317
1,2-Dibromoethane	U		0.000382	0.00111	1	04/02/2018 02:36	WG1092317
Dibromomethane	U		0.000425	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dichlorobenzene	U		0.000340	0.00111	1	04/02/2018 02:36	WG1092317
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/02/2018 02:36	WG1092317
1,4-Dichlorobenzene	U		0.000252	0.00111	1	04/02/2018 02:36	WG1092317
Dichlorodifluoromethane	U		0.000794	0.00557	1	04/02/2018 02:36	WG1092317
1,1-Dichloroethane	U		0.000222	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dichloroethane	U		0.000295	0.00111	1	04/02/2018 02:36	WG1092317
1,1-Dichloroethene	U		0.000337	0.00111	1	04/02/2018 02:36	WG1092317
cis-1,2-Dichloroethene	U		0.000262	0.00111	1	04/02/2018 02:36	WG1092317
trans-1,2-Dichloroethene	U		0.000294	0.00111	1	04/02/2018 02:36	WG1092317
1,2-Dichloropropane	U		0.000399	0.00111	1	04/02/2018 02:36	WG1092317
1,1-Dichloropropene	U		0.000353	0.00111	1	04/02/2018 02:36	WG1092317
1,3-Dichloropropane	U		0.000230	0.00111	1	04/02/2018 02:36	WG1092317
cis-1,3-Dichloropropene	U		0.000292	0.00111	1	04/02/2018 02:36	WG1092317
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/02/2018 02:36	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	0.000866	0.00278	1	04/02/2018 02:36	WG1092317
2,2-Dichloropropane	U		0.000311	0.00111	1	04/02/2018 02:36	WG1092317
Di-isopropyl ether	U	UJ	0.000276	0.00111	1	04/02/2018 02:36	WG1092317
Ethylbenzene	U		0.000331	0.00111	1	04/02/2018 02:36	WG1092317
Hexachloro-1,3-butadiene	U		0.000381	0.00111	1	04/02/2018 02:36	WG1092317
2-Hexanone	U		0.00153	0.0111	1	04/02/2018 02:36	WG1092317
n-Hexane	U		0.000323	0.0111	1	04/02/2018 02:36	WG1092317
Iodomethane	U		0.00282	0.0111	1	04/02/2018 02:36	WG1092317
Isopropylbenzene	U		0.000271	0.00111	1	04/02/2018 02:36	WG1092317
p-Isopropyltoluene	U		0.000227	0.00111	1	04/02/2018 02:36	WG1092317
2-Butanone (MEK)	U	UJ	0.00521	0.0111	1	04/02/2018 02:36	WG1092317
Methylene Chloride	U		0.00111	0.00557	1	04/02/2018 02:36	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/02/2018 02:36	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/27/18 13:40

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/02/2018 02:36	WG1092317
Naphthalene	U		0.0011	0.00557	1	04/02/2018 02:36	WG1092317
n-Propylbenzene	U		0.000229	0.0011	1	04/02/2018 02:36	WG1092317
Styrene	U		0.000261	0.0011	1	04/02/2018 02:36	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000294	0.0011	1	04/02/2018 02:36	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/02/2018 02:36	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/02/2018 02:36	WG1092317
Tetrachloroethene	U		0.000307	0.0011	1	04/02/2018 02:36	WG1092317
Toluene	U		0.000483	0.00557	1	04/02/2018 02:36	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000341	0.0011	1	04/02/2018 02:36	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000432	0.0011	1	04/02/2018 02:36	WG1092317
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/02/2018 02:36	WG1092317
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/02/2018 02:36	WG1092317
Trichloroethene	U		0.000311	0.0011	1	04/02/2018 02:36	WG1092317
Trichlorofluoromethane	U		0.000425	0.00557	1	04/02/2018 02:36	WG1092317
1,2,3-Trichloropropane	U		0.000825	0.00278	1	04/02/2018 02:36	WG1092317
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/02/2018 02:36	WG1092317
1,2,3-Trimethylbenzene	U		0.000320	0.0011	1	04/02/2018 02:36	WG1092317
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/02/2018 02:36	WG1092317
Vinyl acetate	U	UJ J0	0.00266	0.011	1	04/02/2018 02:36	WG1092317
Vinyl chloride	0.000902	J J	0.000324	0.0011	1	04/02/2018 02:36	WG1092317
Xylenes, Total	U		0.000777	0.00334	1	04/02/2018 02:36	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 02:36	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 02:36	WG1092317
(S) 4-Bromofluorobenzene	91.7			64.0-132		04/02/2018 02:36	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ	0.0110	0.0552	1	04/02/2018 02:55	WG1092317
Acrylonitrile	U		0.00197	0.0110	1	04/02/2018 02:55	WG1092317
Benzene	U		0.000298	0.00110	1	04/02/2018 02:55	WG1092317
Bromobenzene	U		0.000313	0.00110	1	04/02/2018 02:55	WG1092317
Bromodichloromethane	U		0.000280	0.00110	1	04/02/2018 02:55	WG1092317
Bromochloromethane	U		0.000430	0.00552	1	04/02/2018 02:55	WG1092317
Bromoform	U	UJ	0.000468	0.00110	1	04/02/2018 02:55	WG1092317
Bromomethane	U		0.00148	0.00552	1	04/02/2018 02:55	WG1092317
n-Butylbenzene	U		0.000285	0.00110	1	04/02/2018 02:55	WG1092317
sec-Butylbenzene	U		0.000222	0.00110	1	04/02/2018 02:55	WG1092317
tert-Butylbenzene	U		0.000227	0.00110	1	04/02/2018 02:55	WG1092317
Carbon disulfide	0.000314	J	0.000244	0.00110	1	04/02/2018 02:55	WG1092317
Carbon tetrachloride	U		0.000362	0.00110	1	04/02/2018 02:55	WG1092317
Chlorobenzene	U		0.000234	0.00110	1	04/02/2018 02:55	WG1092317
Chlorodibromomethane	U		0.000412	0.00110	1	04/02/2018 02:55	WG1092317
Chloroethane	U		0.00104	0.00552	1	04/02/2018 02:55	WG1092317
Chloroform	U		0.000253	0.00552	1	04/02/2018 02:55	WG1092317
Chloromethane	U		0.000414	0.00276	1	04/02/2018 02:55	WG1092317
2-Chlorotoluene	U		0.000332	0.00110	1	04/02/2018 02:55	WG1092317
4-Chlorotoluene	U		0.000265	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00552	1	04/02/2018 02:55	WG1092317
1,2-Dibromoethane	U		0.000378	0.00110	1	04/02/2018 02:55	WG1092317
Dibromomethane	U		0.000421	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dichlorobenzene	U		0.000337	0.00110	1	04/02/2018 02:55	WG1092317
1,3-Dichlorobenzene	U		0.000264	0.00110	1	04/02/2018 02:55	WG1092317
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/02/2018 02:55	WG1092317
Dichlorodifluoromethane	U		0.000787	0.00552	1	04/02/2018 02:55	WG1092317
1,1-Dichloroethane	U		0.000220	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dichloroethane	U		0.000292	0.00110	1	04/02/2018 02:55	WG1092317
1,1-Dichloroethene	U		0.000334	0.00110	1	04/02/2018 02:55	WG1092317
cis-1,2-Dichloroethene	0.000353	J	0.000259	0.00110	1	04/02/2018 02:55	WG1092317
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	04/02/2018 02:55	WG1092317
1,2-Dichloropropane	U		0.000395	0.00110	1	04/02/2018 02:55	WG1092317
1,1-Dichloropropene	U		0.000350	0.00110	1	04/02/2018 02:55	WG1092317
1,3-Dichloropropane	U		0.000228	0.00110	1	04/02/2018 02:55	WG1092317
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	04/02/2018 02:55	WG1092317
trans-1,3-Dichloropropene	U		0.000295	0.00110	1	04/02/2018 02:55	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	0.000858	0.00276	1	04/02/2018 02:55	WG1092317
2,2-Dichloropropane	U		0.000308	0.00110	1	04/02/2018 02:55	WG1092317
Di-isopropyl ether	U	UJ	0.000274	0.00110	1	04/02/2018 02:55	WG1092317
Ethylbenzene	U		0.000328	0.00110	1	04/02/2018 02:55	WG1092317
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	04/02/2018 02:55	WG1092317
2-Hexanone	U		0.00151	0.0110	1	04/02/2018 02:55	WG1092317
n-Hexane	U		0.000320	0.0110	1	04/02/2018 02:55	WG1092317
Iodomethane	U		0.00279	0.0110	1	04/02/2018 02:55	WG1092317
Isopropylbenzene	U		0.000268	0.00110	1	04/02/2018 02:55	WG1092317
p-Isopropyltoluene	U		0.000225	0.00110	1	04/02/2018 02:55	WG1092317
2-Butanone (MEK)	U	UJ	0.00516	0.0110	1	04/02/2018 02:55	WG1092317
Methylene Chloride	U		0.00110	0.00552	1	04/02/2018 02:55	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/02/2018 02:55	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:10

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	04/02/2018 02:55	WG1092317
Naphthalene	U		0.00110	0.00552	1	04/02/2018 02:55	WG1092317
n-Propylbenzene	U		0.000227	0.00110	1	04/02/2018 02:55	WG1092317
Styrene	U		0.000258	0.00110	1	04/02/2018 02:55	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	04/02/2018 02:55	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	04/02/2018 02:55	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	04/02/2018 02:55	WG1092317
Tetrachloroethene	U		0.000305	0.00110	1	04/02/2018 02:55	WG1092317
Toluene	U		0.000479	0.00552	1	04/02/2018 02:55	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000338	0.00110	1	04/02/2018 02:55	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000428	0.00110	1	04/02/2018 02:55	WG1092317
1,1,1-Trichloroethane	U		0.000316	0.00110	1	04/02/2018 02:55	WG1092317
1,1,2-Trichloroethane	U		0.000306	0.00110	1	04/02/2018 02:55	WG1092317
Trichloroethene	U		0.000308	0.00110	1	04/02/2018 02:55	WG1092317
Trichlorofluoromethane	U		0.000421	0.00552	1	04/02/2018 02:55	WG1092317
1,2,3-Trichloropropane	U		0.000818	0.00276	1	04/02/2018 02:55	WG1092317
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	04/02/2018 02:55	WG1092317
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	04/02/2018 02:55	WG1092317
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/02/2018 02:55	WG1092317
Vinyl acetate	U	<u>UJ</u> <u>JO</u>	0.00264	0.0110	1	04/02/2018 02:55	WG1092317
Vinyl chloride	0.00148		0.000321	0.00110	1	04/02/2018 02:55	WG1092317
Xylenes, Total	U		0.000770	0.00331	1	04/02/2018 02:55	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 02:55	WG1092317
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 02:55	WG1092317
(S) 4-Bromofluorobenzene	89.1			64.0-132		04/02/2018 02:55	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:35

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ JO	0.0120	0.0602	1	04/02/2018 03:15	WG1092317
Acrylonitrile	U		0.00216	0.0120	1	04/02/2018 03:15	WG1092317
Benzene	U		0.000325	0.00120	1	04/02/2018 03:15	WG1092317
Bromobenzene	U		0.000342	0.00120	1	04/02/2018 03:15	WG1092317
Bromodichloromethane	U		0.000306	0.00120	1	04/02/2018 03:15	WG1092317
Bromochloromethane	U		0.000470	0.00602	1	04/02/2018 03:15	WG1092317
Bromoform	U	UJ JO	0.000511	0.00120	1	04/02/2018 03:15	WG1092317
Bromomethane	U		0.00161	0.00602	1	04/02/2018 03:15	WG1092317
n-Butylbenzene	U		0.000311	0.00120	1	04/02/2018 03:15	WG1092317
sec-Butylbenzene	U		0.000242	0.00120	1	04/02/2018 03:15	WG1092317
tert-Butylbenzene	U		0.000248	0.00120	1	04/02/2018 03:15	WG1092317
Carbon disulfide	0.000436	J J	0.000266	0.00120	1	04/02/2018 03:15	WG1092317
Carbon tetrachloride	U		0.000395	0.00120	1	04/02/2018 03:15	WG1092317
Chlorobenzene	U		0.000255	0.00120	1	04/02/2018 03:15	WG1092317
Chlorodibromomethane	U		0.000449	0.00120	1	04/02/2018 03:15	WG1092317
Chloroethane	U		0.00114	0.00602	1	04/02/2018 03:15	WG1092317
Chloroform	U		0.000276	0.00602	1	04/02/2018 03:15	WG1092317
Chloromethane	U		0.000452	0.00301	1	04/02/2018 03:15	WG1092317
2-Chlorotoluene	U		0.000362	0.00120	1	04/02/2018 03:15	WG1092317
4-Chlorotoluene	U		0.000289	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00126	0.00602	1	04/02/2018 03:15	WG1092317
1,2-Dibromoethane	U		0.000413	0.00120	1	04/02/2018 03:15	WG1092317
Dibromomethane	U		0.000460	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dichlorobenzene	U		0.000367	0.00120	1	04/02/2018 03:15	WG1092317
1,3-Dichlorobenzene	U		0.000288	0.00120	1	04/02/2018 03:15	WG1092317
1,4-Dichlorobenzene	U		0.000272	0.00120	1	04/02/2018 03:15	WG1092317
Dichlorodifluoromethane	U		0.000859	0.00602	1	04/02/2018 03:15	WG1092317
1,1-Dichloroethane	U		0.000240	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dichloroethane	U		0.000319	0.00120	1	04/02/2018 03:15	WG1092317
1,1-Dichloroethene	U		0.000365	0.00120	1	04/02/2018 03:15	WG1092317
cis-1,2-Dichloroethene	0.000596	J J	0.000283	0.00120	1	04/02/2018 03:15	WG1092317
trans-1,2-Dichloroethene	U		0.000318	0.00120	1	04/02/2018 03:15	WG1092317
1,2-Dichloropropane	U		0.000431	0.00120	1	04/02/2018 03:15	WG1092317
1,1-Dichloropropene	U		0.000382	0.00120	1	04/02/2018 03:15	WG1092317
1,3-Dichloropropane	U		0.000249	0.00120	1	04/02/2018 03:15	WG1092317
cis-1,3-Dichloropropene	U		0.000316	0.00120	1	04/02/2018 03:15	WG1092317
trans-1,3-Dichloropropene	U		0.000322	0.00120	1	04/02/2018 03:15	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ JO	0.000937	0.00301	1	04/02/2018 03:15	WG1092317
2,2-Dichloropropane	U		0.000336	0.00120	1	04/02/2018 03:15	WG1092317
Di-isopropyl ether	U	UJ JO	0.000299	0.00120	1	04/02/2018 03:15	WG1092317
Ethylbenzene	U		0.000358	0.00120	1	04/02/2018 03:15	WG1092317
Hexachloro-1,3-butadiene	U		0.000412	0.00120	1	04/02/2018 03:15	WG1092317
2-Hexanone	U		0.00165	0.0120	1	04/02/2018 03:15	WG1092317
n-Hexane	U		0.000349	0.0120	1	04/02/2018 03:15	WG1092317
Iodomethane	U		0.00305	0.0120	1	04/02/2018 03:15	WG1092317
Isopropylbenzene	U		0.000293	0.00120	1	04/02/2018 03:15	WG1092317
p-Isopropyltoluene	U		0.000246	0.00120	1	04/02/2018 03:15	WG1092317
2-Butanone (MEK)	U	UJ JO	0.00564	0.0120	1	04/02/2018 03:15	WG1092317
Methylene Chloride	U		0.00120	0.00602	1	04/02/2018 03:15	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00226	0.0120	1	04/02/2018 03:15	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 11:35

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000255	0.00120	1	04/02/2018 03:15	WG1092317
Naphthalene	U		0.00120	0.00602	1	04/02/2018 03:15	WG1092317
n-Propylbenzene	U		0.000248	0.00120	1	04/02/2018 03:15	WG1092317
Styrene	U		0.000282	0.00120	1	04/02/2018 03:15	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000318	0.00120	1	04/02/2018 03:15	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000440	0.00120	1	04/02/2018 03:15	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000440	0.00120	1	04/02/2018 03:15	WG1092317
Tetrachloroethene	0.000799	J J	0.000332	0.00120	1	04/02/2018 03:15	WG1092317
Toluene	U		0.000523	0.00602	1	04/02/2018 03:15	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000369	0.00120	1	04/02/2018 03:15	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000467	0.00120	1	04/02/2018 03:15	WG1092317
1,1,1-Trichloroethane	U		0.000344	0.00120	1	04/02/2018 03:15	WG1092317
1,1,2-Trichloroethane	U		0.000334	0.00120	1	04/02/2018 03:15	WG1092317
Trichloroethene	U		0.000336	0.00120	1	04/02/2018 03:15	WG1092317
Trichlorofluoromethane	U		0.000460	0.00602	1	04/02/2018 03:15	WG1092317
1,2,3-Trichloropropane	U		0.000892	0.00301	1	04/02/2018 03:15	WG1092317
1,2,4-Trimethylbenzene	U		0.000254	0.00120	1	04/02/2018 03:15	WG1092317
1,2,3-Trimethylbenzene	U		0.000346	0.00120	1	04/02/2018 03:15	WG1092317
1,3,5-Trimethylbenzene	U		0.000320	0.00120	1	04/02/2018 03:15	WG1092317
Vinyl acetate	U	UJ JO	0.00288	0.0120	1	04/02/2018 03:15	WG1092317
Vinyl chloride	0.00176		0.000350	0.00120	1	04/02/2018 03:15	WG1092317
Xylenes, Total	U		0.000841	0.00361	1	04/02/2018 03:15	WG1092317
(S) Toluene-d8	106			80.0-120		04/02/2018 03:15	WG1092317
(S) Dibromofluoromethane	102			74.0-131		04/02/2018 03:15	WG1092317
(S) 4-Bromofluorobenzene	87.4			64.0-132		04/02/2018 03:15	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 12:57

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ JO	0.0118	0.0588	1	04/02/2018 03:34	WG1092317
Acrylonitrile	U		0.00211	0.0118	1	04/02/2018 03:34	WG1092317
Benzene	U		0.000318	0.00118	1	04/02/2018 03:34	WG1092317
Bromobenzene	U		0.000334	0.00118	1	04/02/2018 03:34	WG1092317
Bromodichloromethane	U		0.000299	0.00118	1	04/02/2018 03:34	WG1092317
Bromochloromethane	U		0.000459	0.00588	1	04/02/2018 03:34	WG1092317
Bromoform	U	UJ JO	0.000499	0.00118	1	04/02/2018 03:34	WG1092317
Bromomethane	U		0.00158	0.00588	1	04/02/2018 03:34	WG1092317
n-Butylbenzene	U		0.000304	0.00118	1	04/02/2018 03:34	WG1092317
sec-Butylbenzene	U		0.000237	0.00118	1	04/02/2018 03:34	WG1092317
tert-Butylbenzene	U		0.000242	0.00118	1	04/02/2018 03:34	WG1092317
Carbon disulfide	0.000319	J J	0.000260	0.00118	1	04/02/2018 03:34	WG1092317
Carbon tetrachloride	U		0.000386	0.00118	1	04/02/2018 03:34	WG1092317
Chlorobenzene	U		0.000249	0.00118	1	04/02/2018 03:34	WG1092317
Chlorodibromomethane	U		0.000439	0.00118	1	04/02/2018 03:34	WG1092317
Chloroethane	U		0.00111	0.00588	1	04/02/2018 03:34	WG1092317
Chloroform	U		0.000269	0.00588	1	04/02/2018 03:34	WG1092317
Chloromethane	U		0.000441	0.00294	1	04/02/2018 03:34	WG1092317
2-Chlorotoluene	U		0.000354	0.00118	1	04/02/2018 03:34	WG1092317
4-Chlorotoluene	U		0.000282	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00124	0.00588	1	04/02/2018 03:34	WG1092317
1,2-Dibromoethane	U		0.000404	0.00118	1	04/02/2018 03:34	WG1092317
Dibromomethane	U		0.000450	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dichlorobenzene	U		0.000359	0.00118	1	04/02/2018 03:34	WG1092317
1,3-Dichlorobenzene	U		0.000281	0.00118	1	04/02/2018 03:34	WG1092317
1,4-Dichlorobenzene	U		0.000266	0.00118	1	04/02/2018 03:34	WG1092317
Dichlorodifluoromethane	U		0.000839	0.00588	1	04/02/2018 03:34	WG1092317
1,1-Dichloroethane	U		0.000234	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dichloroethane	U		0.000312	0.00118	1	04/02/2018 03:34	WG1092317
1,1-Dichloroethene	U		0.000357	0.00118	1	04/02/2018 03:34	WG1092317
cis-1,2-Dichloroethene	0.000773	J J	0.000277	0.00118	1	04/02/2018 03:34	WG1092317
trans-1,2-Dichloroethene	U		0.000311	0.00118	1	04/02/2018 03:34	WG1092317
1,2-Dichloropropane	U		0.000421	0.00118	1	04/02/2018 03:34	WG1092317
1,1-Dichloropropene	U		0.000373	0.00118	1	04/02/2018 03:34	WG1092317
1,3-Dichloropropane	U		0.000244	0.00118	1	04/02/2018 03:34	WG1092317
cis-1,3-Dichloropropene	U		0.000308	0.00118	1	04/02/2018 03:34	WG1092317
trans-1,3-Dichloropropene	U		0.000314	0.00118	1	04/02/2018 03:34	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ JO	0.000916	0.00294	1	04/02/2018 03:34	WG1092317
2,2-Dichloropropane	U		0.000328	0.00118	1	04/02/2018 03:34	WG1092317
Di-isopropyl ether	U	UJ JO	0.000292	0.00118	1	04/02/2018 03:34	WG1092317
Ethylbenzene	U		0.000350	0.00118	1	04/02/2018 03:34	WG1092317
Hexachloro-1,3-butadiene	U		0.000402	0.00118	1	04/02/2018 03:34	WG1092317
2-Hexanone	U		0.00161	0.0118	1	04/02/2018 03:34	WG1092317
n-Hexane	U		0.000341	0.0118	1	04/02/2018 03:34	WG1092317
Iodomethane	U		0.00298	0.0118	1	04/02/2018 03:34	WG1092317
Isopropylbenzene	U		0.000286	0.00118	1	04/02/2018 03:34	WG1092317
p-Isopropyltoluene	U		0.000240	0.00118	1	04/02/2018 03:34	WG1092317
2-Butanone (MEK)	U	UJ JO	0.00551	0.0118	1	04/02/2018 03:34	WG1092317
Methylene Chloride	U		0.00118	0.00588	1	04/02/2018 03:34	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0118	1	04/02/2018 03:34	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/28/18 12:57

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000249	0.00118	1	04/02/2018 03:34	WG1092317
Naphthalene	U		0.00118	0.00588	1	04/02/2018 03:34	WG1092317
n-Propylbenzene	U		0.000242	0.00118	1	04/02/2018 03:34	WG1092317
Styrene	U		0.000275	0.00118	1	04/02/2018 03:34	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000311	0.00118	1	04/02/2018 03:34	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000430	0.00118	1	04/02/2018 03:34	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000430	0.00118	1	04/02/2018 03:34	WG1092317
Tetrachloroethene	0.00254		0.000325	0.00118	1	04/02/2018 03:34	WG1092317
Toluene	U		0.000511	0.00588	1	04/02/2018 03:34	WG1092317
1,2,3-Trichlorobenzene	U	<u>J4</u>	0.000360	0.00118	1	04/02/2018 03:34	WG1092317
1,2,4-Trichlorobenzene	U	<u>J4</u>	0.000457	0.00118	1	04/02/2018 03:34	WG1092317
1,1,1-Trichloroethane	U		0.000337	0.00118	1	04/02/2018 03:34	WG1092317
1,1,2-Trichloroethane	U		0.000326	0.00118	1	04/02/2018 03:34	WG1092317
Trichloroethene	U		0.000328	0.00118	1	04/02/2018 03:34	WG1092317
Trichlorofluoromethane	U		0.000450	0.00588	1	04/02/2018 03:34	WG1092317
1,2,3-Trichloropropane	U		0.000872	0.00294	1	04/02/2018 03:34	WG1092317
1,2,4-Trimethylbenzene	U		0.000248	0.00118	1	04/02/2018 03:34	WG1092317
1,2,3-Trimethylbenzene	U		0.000338	0.00118	1	04/02/2018 03:34	WG1092317
1,3,5-Trimethylbenzene	U		0.000313	0.00118	1	04/02/2018 03:34	WG1092317
Vinyl acetate	U	<u>UJ</u> <u>JO</u>	0.00281	0.0118	1	04/02/2018 03:34	WG1092317
Vinyl chloride	0.00311		0.000342	0.00118	1	04/02/2018 03:34	WG1092317
Xylenes, Total	U		0.000821	0.00353	1	04/02/2018 03:34	WG1092317
(S) Toluene-d8	104			80.0-120		04/02/2018 03:34	WG1092317
(S) Dibromofluoromethane	103			74.0-131		04/02/2018 03:34	WG1092317
(S) 4-Bromofluorobenzene	88.6			64.0-132		04/02/2018 03:34	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 10:19

L981889

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.0		1	04/04/2018 13:30	WG1093170

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U	UJ	0.0115	0.0574	1	04/02/2018 03:54	WG1092317
Acrylonitrile	U		0.00206	0.0115	1	04/02/2018 03:54	WG1092317
Benzene	U		0.000310	0.00115	1	04/02/2018 03:54	WG1092317
Bromobenzene	U		0.000326	0.00115	1	04/02/2018 03:54	WG1092317
Bromodichloromethane	U		0.000292	0.00115	1	04/02/2018 03:54	WG1092317
Bromochloromethane	U		0.000448	0.00574	1	04/02/2018 03:54	WG1092317
Bromoform	U	UJ	0.000487	0.00115	1	04/02/2018 03:54	WG1092317
Bromomethane	U		0.00154	0.00574	1	04/02/2018 03:54	WG1092317
n-Butylbenzene	U		0.000296	0.00115	1	04/02/2018 03:54	WG1092317
sec-Butylbenzene	U		0.000231	0.00115	1	04/02/2018 03:54	WG1092317
tert-Butylbenzene	U		0.000237	0.00115	1	04/02/2018 03:54	WG1092317
Carbon disulfide	U		0.000254	0.00115	1	04/02/2018 03:54	WG1092317
Carbon tetrachloride	U		0.000377	0.00115	1	04/02/2018 03:54	WG1092317
Chlorobenzene	U		0.000244	0.00115	1	04/02/2018 03:54	WG1092317
Chlorodibromomethane	U		0.000428	0.00115	1	04/02/2018 03:54	WG1092317
Chloroethane	U		0.00109	0.00574	1	04/02/2018 03:54	WG1092317
Chloroform	U		0.000263	0.00574	1	04/02/2018 03:54	WG1092317
Chloromethane	U		0.000431	0.00287	1	04/02/2018 03:54	WG1092317
2-Chlorotoluene	U		0.000346	0.00115	1	04/02/2018 03:54	WG1092317
4-Chlorotoluene	U		0.000276	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00574	1	04/02/2018 03:54	WG1092317
1,2-Dibromoethane	U		0.000394	0.00115	1	04/02/2018 03:54	WG1092317
Dibromomethane	U		0.000439	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dichlorobenzene	U		0.000350	0.00115	1	04/02/2018 03:54	WG1092317
1,3-Dichlorobenzene	U		0.000275	0.00115	1	04/02/2018 03:54	WG1092317
1,4-Dichlorobenzene	U		0.000260	0.00115	1	04/02/2018 03:54	WG1092317
Dichlorodifluoromethane	U		0.000819	0.00574	1	04/02/2018 03:54	WG1092317
1,1-Dichloroethane	U		0.000229	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dichloroethane	U		0.000304	0.00115	1	04/02/2018 03:54	WG1092317
1,1-Dichloroethene	U		0.000348	0.00115	1	04/02/2018 03:54	WG1092317
cis-1,2-Dichloroethene	U		0.000270	0.00115	1	04/02/2018 03:54	WG1092317
trans-1,2-Dichloroethene	U		0.000303	0.00115	1	04/02/2018 03:54	WG1092317
1,2-Dichloropropane	U		0.000411	0.00115	1	04/02/2018 03:54	WG1092317
1,1-Dichloropropene	U		0.000364	0.00115	1	04/02/2018 03:54	WG1092317
1,3-Dichloropropane	U		0.000238	0.00115	1	04/02/2018 03:54	WG1092317
cis-1,3-Dichloropropene	U		0.000301	0.00115	1	04/02/2018 03:54	WG1092317
trans-1,3-Dichloropropene	U		0.000307	0.00115	1	04/02/2018 03:54	WG1092317
trans-1,4-Dichloro-2-butene	U	UJ	0.000894	0.00287	1	04/02/2018 03:54	WG1092317
2,2-Dichloropropane	U		0.000321	0.00115	1	04/02/2018 03:54	WG1092317
Di-isopropyl ether	U	UJ	0.000285	0.00115	1	04/02/2018 03:54	WG1092317
Ethylbenzene	U		0.000341	0.00115	1	04/02/2018 03:54	WG1092317
Hexachloro-1,3-butadiene	U		0.000393	0.00115	1	04/02/2018 03:54	WG1092317
2-Hexanone	U		0.00157	0.0115	1	04/02/2018 03:54	WG1092317
n-Hexane	U		0.000333	0.0115	1	04/02/2018 03:54	WG1092317
Iodomethane	U		0.00291	0.0115	1	04/02/2018 03:54	WG1092317
Isopropylbenzene	U		0.000279	0.00115	1	04/02/2018 03:54	WG1092317
p-Isopropyltoluene	U		0.000234	0.00115	1	04/02/2018 03:54	WG1092317
2-Butanone (MEK)	U	UJ	0.00538	0.0115	1	04/02/2018 03:54	WG1092317
Methylene Chloride	U		0.00115	0.00574	1	04/02/2018 03:54	WG1092317
4-Methyl-2-pentanone (MIBK)	U		0.00216	0.0115	1	04/02/2018 03:54	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 10:19

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000244	0.00115	1	04/02/2018 03:54	WG1092317
Naphthalene	U		0.00115	0.00574	1	04/02/2018 03:54	WG1092317
n-Propylbenzene	U		0.000237	0.00115	1	04/02/2018 03:54	WG1092317
Styrene	U		0.000269	0.00115	1	04/02/2018 03:54	WG1092317
1,1,1,2-Tetrachloroethane	U		0.000303	0.00115	1	04/02/2018 03:54	WG1092317
1,1,2,2-Tetrachloroethane	U		0.000419	0.00115	1	04/02/2018 03:54	WG1092317
1,1,2-Trichlorotrifluoroethane	U		0.000419	0.00115	1	04/02/2018 03:54	WG1092317
Tetrachloroethene	0.000648	J J	0.000317	0.00115	1	04/02/2018 03:54	WG1092317
Toluene	U		0.000499	0.00574	1	04/02/2018 03:54	WG1092317
1,2,3-Trichlorobenzene	U	J4	0.000352	0.00115	1	04/02/2018 03:54	WG1092317
1,2,4-Trichlorobenzene	U	J4	0.000446	0.00115	1	04/02/2018 03:54	WG1092317
1,1,1-Trichloroethane	U		0.000329	0.00115	1	04/02/2018 03:54	WG1092317
1,1,2-Trichloroethane	U		0.000318	0.00115	1	04/02/2018 03:54	WG1092317
Trichloroethene	U		0.000321	0.00115	1	04/02/2018 03:54	WG1092317
Trichlorofluoromethane	U		0.000439	0.00574	1	04/02/2018 03:54	WG1092317
1,2,3-Trichloropropane	U		0.000851	0.00287	1	04/02/2018 03:54	WG1092317
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/02/2018 03:54	WG1092317
1,2,3-Trimethylbenzene	U		0.000330	0.00115	1	04/02/2018 03:54	WG1092317
1,3,5-Trimethylbenzene	U		0.000306	0.00115	1	04/02/2018 03:54	WG1092317
Vinyl acetate	U	UJ JO	0.00275	0.0115	1	04/02/2018 03:54	WG1092317
Vinyl chloride	U		0.000334	0.00115	1	04/02/2018 03:54	WG1092317
Xylenes, Total	U		0.000802	0.00345	1	04/02/2018 03:54	WG1092317
(S) Toluene-d8	105			80.0-120		04/02/2018 03:54	WG1092317
(S) Dibromofluoromethane	104			74.0-131		04/02/2018 03:54	WG1092317
(S) 4-Bromofluorobenzene	88.3			64.0-132		04/02/2018 03:54	WG1092317

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 00:00

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	03/31/2018 18:45	WG1092115
Acrylonitrile	U	UJ JO	0.873	5.00	1	03/31/2018 18:45	WG1092115
Benzene	U		0.0896	0.500	1	03/31/2018 18:45	WG1092115
Bromobenzene	U		0.133	0.500	1	03/31/2018 18:45	WG1092115
Bromodichloromethane	U		0.0800	0.500	1	03/31/2018 18:45	WG1092115
Bromochloromethane	U		0.145	0.500	1	03/31/2018 18:45	WG1092115
Bromoform	U		0.186	0.500	1	03/31/2018 18:45	WG1092115
Bromomethane	U		0.157	2.50	1	03/31/2018 18:45	WG1092115
n-Butylbenzene	U		0.143	0.500	1	03/31/2018 18:45	WG1092115
sec-Butylbenzene	U		0.134	0.500	1	03/31/2018 18:45	WG1092115
tert-Butylbenzene	U		0.183	0.500	1	03/31/2018 18:45	WG1092115
Carbon disulfide	U		0.101	0.500	1	03/31/2018 18:45	WG1092115
Carbon tetrachloride	U		0.159	0.500	1	03/31/2018 18:45	WG1092115
Chlorobenzene	U		0.140	0.500	1	03/31/2018 18:45	WG1092115
Chlorodibromomethane	U		0.128	0.500	1	03/31/2018 18:45	WG1092115
Chloroethane	U		0.141	2.50	1	03/31/2018 18:45	WG1092115
Chloroform	U		0.0860	0.500	1	03/31/2018 18:45	WG1092115
Chloromethane	U		0.153	1.25	1	03/31/2018 18:45	WG1092115
2-Chlorotoluene	U		0.111	0.500	1	03/31/2018 18:45	WG1092115
4-Chlorotoluene	U		0.0972	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	03/31/2018 18:45	WG1092115
1,2-Dibromoethane	U		0.193	0.500	1	03/31/2018 18:45	WG1092115
Dibromomethane	U		0.117	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dichlorobenzene	U		0.101	0.500	1	03/31/2018 18:45	WG1092115
1,3-Dichlorobenzene	U		0.130	0.500	1	03/31/2018 18:45	WG1092115
1,4-Dichlorobenzene	U		0.121	0.500	1	03/31/2018 18:45	WG1092115
Dichlorodifluoromethane	U		0.127	2.50	1	03/31/2018 18:45	WG1092115
1,1-Dichloroethane	U		0.114	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dichloroethane	U		0.108	0.500	1	03/31/2018 18:45	WG1092115
1,1-Dichloroethene	U		0.188	0.500	1	03/31/2018 18:45	WG1092115
cis-1,2-Dichloroethene	U	UJ JO	0.0933	0.500	1	03/31/2018 18:45	WG1092115
trans-1,2-Dichloroethene	U		0.152	0.500	1	03/31/2018 18:45	WG1092115
1,2-Dichloropropane	U		0.190	0.500	1	03/31/2018 18:45	WG1092115
1,1-Dichloropropene	U		0.128	0.500	1	03/31/2018 18:45	WG1092115
1,3-Dichloropropane	U		0.147	1.00	1	03/31/2018 18:45	WG1092115
cis-1,3-Dichloropropene	U		0.0976	0.500	1	03/31/2018 18:45	WG1092115
trans-1,3-Dichloropropene	U		0.222	0.500	1	03/31/2018 18:45	WG1092115
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	03/31/2018 18:45	WG1092115
2,2-Dichloropropane	U		0.0929	0.500	1	03/31/2018 18:45	WG1092115
Di-isopropyl ether	U		0.0924	0.500	1	03/31/2018 18:45	WG1092115
Ethylbenzene	U		0.158	0.500	1	03/31/2018 18:45	WG1092115
Hexachloro-1,3-butadiene	U		0.157	1.00	1	03/31/2018 18:45	WG1092115
2-Hexanone	U		0.757	5.00	1	03/31/2018 18:45	WG1092115
n-Hexane	U		0.305	5.00	1	03/31/2018 18:45	WG1092115
Iodomethane	U		0.377	10.0	1	03/31/2018 18:45	WG1092115
Isopropylbenzene	U		0.126	0.500	1	03/31/2018 18:45	WG1092115
p-Isopropyltoluene	U		0.138	0.500	1	03/31/2018 18:45	WG1092115
2-Butanone (MEK)	U		1.28	5.00	1	03/31/2018 18:45	WG1092115
Methylene Chloride	U		1.07	2.50	1	03/31/2018 18:45	WG1092115
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	03/31/2018 18:45	WG1092115
Methyl tert-butyl ether	U		0.102	0.500	1	03/31/2018 18:45	WG1092115
Naphthalene	U		0.174	2.50	1	03/31/2018 18:45	WG1092115
n-Propylbenzene	U		0.162	0.500	1	03/31/2018 18:45	WG1092115
Styrene	U		0.117	0.500	1	03/31/2018 18:45	WG1092115
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	03/31/2018 18:45	WG1092115
1,1,2,2-Tetrachloroethane	U	UJ JO	0.130	0.500	1	03/31/2018 18:45	WG1092115

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 03/29/18 00:00

L981889

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	03/31/2018 18:45	WG1092115
Tetrachloroethene	U		0.199	0.500	1	03/31/2018 18:45	WG1092115
Toluene	U		0.412	0.500	1	03/31/2018 18:45	WG1092115
1,2,3-Trichlorobenzene	U		0.164	0.500	1	03/31/2018 18:45	WG1092115
1,2,4-Trichlorobenzene	U		0.355	0.500	1	03/31/2018 18:45	WG1092115
1,1,1-Trichloroethane	U		0.0940	0.500	1	03/31/2018 18:45	WG1092115
1,1,2-Trichloroethane	U		0.186	0.500	1	03/31/2018 18:45	WG1092115
Trichloroethene	U		0.153	0.500	1	03/31/2018 18:45	WG1092115
Trichlorofluoromethane	U	J4	0.130	2.50	1	03/31/2018 18:45	WG1092115
1,2,3-Trichloropropane	U		0.247	2.50	1	03/31/2018 18:45	WG1092115
1,2,4-Trimethylbenzene	U		0.123	0.500	1	03/31/2018 18:45	WG1092115
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	03/31/2018 18:45	WG1092115
1,3,5-Trimethylbenzene	U		0.124	0.500	1	03/31/2018 18:45	WG1092115
Vinyl acetate	U		0.645	5.00	1	03/31/2018 18:45	WG1092115
Vinyl chloride	U		0.118	0.500	1	03/31/2018 18:45	WG1092115
Xylenes, Total	U		0.316	1.50	1	03/31/2018 18:45	WG1092115
(S) Toluene-d8	98.4			80.0-120		03/31/2018 18:45	WG1092115
(S) Dibromofluoromethane	102			76.0-123		03/31/2018 18:45	WG1092115
(S) 4-Bromofluorobenzene	95.7			80.0-120		03/31/2018 18:45	WG1092115

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18

April 10, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L982616
Samples Received: 04/03/2018
Project Number: 1413.001.05.304
Description: American Linen Project

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161










Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-147-10 L982616-01 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 09:45
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094352	1	04/07/18 12:57	04/07/18 13:06	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 09:45	04/05/18 03:16	RAS

1 Cp

2 Tc

3 Ss

MW-147-20 L982616-02 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 10:05
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094352	1	04/07/18 12:57	04/07/18 13:06	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 10:05	04/05/18 03:37	RAS

4 Cn

5 Sr

6 Qc

MW-147-30 L982616-03 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 10:20
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094352	1	04/07/18 12:57	04/07/18 13:06	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 10:20	04/05/18 03:58	RAS

7 Gl

8 Al

9 Sc

MW-147-40 L982616-04 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 10:35
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094352	1	04/07/18 12:57	04/07/18 13:06	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 10:35	04/05/18 04:20	RAS

MW-147-50 L982616-05 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 11:00
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094352	1	04/07/18 12:57	04/07/18 13:06	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 11:00	04/05/18 04:41	RAS

MW-147-60 L982616-06 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 11:20
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094356	1	04/06/18 11:15	04/06/18 11:25	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 11:20	04/05/18 05:02	RAS

MW-147-70 L982616-07 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 11:45
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094356	1	04/06/18 11:15	04/06/18 11:25	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 11:45	04/05/18 05:23	RAS



MW-147-80 L982616-08 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 12:09
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094356	1	04/06/18 11:15	04/06/18 11:25	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 12:09	04/05/18 05:45	RAS

¹ Cp

² Tc

³ Ss

TRIP BLANK L982616-09 GW

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 00:00
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093766	1	04/04/18 20:36	04/04/18 20:36	BMB

⁴ Cn

⁵ Sr

⁶ Qc

MW-901-10 L982616-10 Solid

Collected by Rachel McLaughlin
 Collected date/time 04/02/18 14:00
 Received date/time 04/03/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1094356	1	04/06/18 11:15	04/06/18 11:25	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1093771	1	04/02/18 14:00	04/10/18 12:03	JAH

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.1		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0111	J	0.0109	0.0543	1	04/05/2018 03:16	WG1093771
Acrylonitrile	U		0.00194	0.0109	1	04/05/2018 03:16	WG1093771
Benzene	0.000566	J	0.000293	0.00109	1	04/05/2018 03:16	WG1093771
Bromobenzene	U		0.000308	0.00109	1	04/05/2018 03:16	WG1093771
Bromodichloromethane	U		0.000276	0.00109	1	04/05/2018 03:16	WG1093771
Bromochloromethane	U		0.000424	0.00543	1	04/05/2018 03:16	WG1093771
Bromoform	U		0.000460	0.00109	1	04/05/2018 03:16	WG1093771
Bromomethane	U		0.00146	0.00543	1	04/05/2018 03:16	WG1093771
n-Butylbenzene	U		0.000280	0.00109	1	04/05/2018 03:16	WG1093771
sec-Butylbenzene	U		0.000218	0.00109	1	04/05/2018 03:16	WG1093771
tert-Butylbenzene	U		0.000224	0.00109	1	04/05/2018 03:16	WG1093771
Carbon disulfide	0.000653	J	0.000240	0.00109	1	04/05/2018 03:16	WG1093771
Carbon tetrachloride	U		0.000356	0.00109	1	04/05/2018 03:16	WG1093771
Chlorobenzene	U		0.000230	0.00109	1	04/05/2018 03:16	WG1093771
Chlorodibromomethane	U		0.000405	0.00109	1	04/05/2018 03:16	WG1093771
Chloroethane	U		0.00103	0.00543	1	04/05/2018 03:16	WG1093771
Chloroform	U		0.000249	0.00543	1	04/05/2018 03:16	WG1093771
Chloromethane	U		0.000407	0.00271	1	04/05/2018 03:16	WG1093771
2-Chlorotoluene	U		0.000327	0.00109	1	04/05/2018 03:16	WG1093771
4-Chlorotoluene	U		0.000261	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00543	1	04/05/2018 03:16	WG1093771
1,2-Dibromoethane	U		0.000372	0.00109	1	04/05/2018 03:16	WG1093771
Dibromomethane	U		0.000415	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dichlorobenzene	U		0.000331	0.00109	1	04/05/2018 03:16	WG1093771
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/05/2018 03:16	WG1093771
1,4-Dichlorobenzene	U		0.000245	0.00109	1	04/05/2018 03:16	WG1093771
Dichlorodifluoromethane	U		0.000774	0.00543	1	04/05/2018 03:16	WG1093771
1,1-Dichloroethane	U		0.000216	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dichloroethane	U		0.000288	0.00109	1	04/05/2018 03:16	WG1093771
1,1-Dichloroethene	U		0.000329	0.00109	1	04/05/2018 03:16	WG1093771
cis-1,2-Dichloroethene	U		0.000255	0.00109	1	04/05/2018 03:16	WG1093771
trans-1,2-Dichloroethene	U		0.000287	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dichloropropane	U		0.000389	0.00109	1	04/05/2018 03:16	WG1093771
1,1-Dichloropropene	U		0.000344	0.00109	1	04/05/2018 03:16	WG1093771
1,3-Dichloropropane	U		0.000225	0.00109	1	04/05/2018 03:16	WG1093771
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/05/2018 03:16	WG1093771
trans-1,3-Dichloropropene	U		0.000290	0.00109	1	04/05/2018 03:16	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000845	0.00271	1	04/05/2018 03:16	WG1093771
2,2-Dichloropropane	U		0.000303	0.00109	1	04/05/2018 03:16	WG1093771
Di-isopropyl ether	U		0.000269	0.00109	1	04/05/2018 03:16	WG1093771
Ethylbenzene	U		0.000323	0.00109	1	04/05/2018 03:16	WG1093771
Hexachloro-1,3-butadiene	U		0.000371	0.00109	1	04/05/2018 03:16	WG1093771
2-Hexanone	U		0.00149	0.0109	1	04/05/2018 03:16	WG1093771
n-Hexane	U		0.000315	0.0109	1	04/05/2018 03:16	WG1093771
Iodomethane	U		0.00275	0.0109	1	04/05/2018 03:16	WG1093771
Isopropylbenzene	U		0.000264	0.00109	1	04/05/2018 03:16	WG1093771
p-Isopropyltoluene	U		0.000222	0.00109	1	04/05/2018 03:16	WG1093771
2-Butanone (MEK)	U		0.00508	0.0109	1	04/05/2018 03:16	WG1093771
Methylene Chloride	U		0.00109	0.00543	1	04/05/2018 03:16	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0109	1	04/05/2018 03:16	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 09:45

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00109	1	04/05/2018 03:16	WG1093771
Naphthalene	U		0.00109	0.00543	1	04/05/2018 03:16	WG1093771
n-Propylbenzene	U		0.000224	0.00109	1	04/05/2018 03:16	WG1093771
Styrene	U		0.000254	0.00109	1	04/05/2018 03:16	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/05/2018 03:16	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000396	0.00109	1	04/05/2018 03:16	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00109	1	04/05/2018 03:16	WG1093771
Tetrachloroethene	0.000697	J	0.000300	0.00109	1	04/05/2018 03:16	WG1093771
Toluene	U		0.000471	0.00543	1	04/05/2018 03:16	WG1093771
1,2,3-Trichlorobenzene	U		0.000332	0.00109	1	04/05/2018 03:16	WG1093771
1,2,4-Trichlorobenzene	U		0.000421	0.00109	1	04/05/2018 03:16	WG1093771
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/05/2018 03:16	WG1093771
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/05/2018 03:16	WG1093771
Trichloroethene	U		0.000303	0.00109	1	04/05/2018 03:16	WG1093771
Trichlorofluoromethane	U		0.000415	0.00543	1	04/05/2018 03:16	WG1093771
1,2,3-Trichloropropane	U		0.000805	0.00271	1	04/05/2018 03:16	WG1093771
1,2,4-Trimethylbenzene	U		0.000229	0.00109	1	04/05/2018 03:16	WG1093771
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/05/2018 03:16	WG1093771
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/05/2018 03:16	WG1093771
Vinyl acetate	U		0.00260	0.0109	1	04/05/2018 03:16	WG1093771
Vinyl chloride	U		0.000316	0.00109	1	04/05/2018 03:16	WG1093771
Xylenes, Total	U		0.000758	0.00326	1	04/05/2018 03:16	WG1093771
(S) Toluene-d8	102			80.0-120		04/05/2018 03:16	WG1093771
(S) Dibromofluoromethane	100			74.0-131		04/05/2018 03:16	WG1093771
(S) 4-Bromofluorobenzene	102			64.0-132		04/05/2018 03:16	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 10:05

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.5		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0108	0.0540	1	04/05/2018 03:37	WG1093771
Acrylonitrile	U		0.00193	0.0108	1	04/05/2018 03:37	WG1093771
Benzene	U		0.000292	0.00108	1	04/05/2018 03:37	WG1093771
Bromobenzene	U		0.000307	0.00108	1	04/05/2018 03:37	WG1093771
Bromodichloromethane	U		0.000275	0.00108	1	04/05/2018 03:37	WG1093771
Bromochloromethane	U		0.000421	0.00540	1	04/05/2018 03:37	WG1093771
Bromoform	U		0.000458	0.00108	1	04/05/2018 03:37	WG1093771
Bromomethane	U		0.00145	0.00540	1	04/05/2018 03:37	WG1093771
n-Butylbenzene	U		0.000279	0.00108	1	04/05/2018 03:37	WG1093771
sec-Butylbenzene	U		0.000217	0.00108	1	04/05/2018 03:37	WG1093771
tert-Butylbenzene	U		0.000223	0.00108	1	04/05/2018 03:37	WG1093771
Carbon disulfide	0.00140		0.000239	0.00108	1	04/05/2018 03:37	WG1093771
Carbon tetrachloride	U		0.000354	0.00108	1	04/05/2018 03:37	WG1093771
Chlorobenzene	U		0.000229	0.00108	1	04/05/2018 03:37	WG1093771
Chlorodibromomethane	U		0.000403	0.00108	1	04/05/2018 03:37	WG1093771
Chloroethane	U		0.00102	0.00540	1	04/05/2018 03:37	WG1093771
Chloroform	U		0.000247	0.00540	1	04/05/2018 03:37	WG1093771
Chloromethane	U		0.000405	0.00270	1	04/05/2018 03:37	WG1093771
2-Chlorotoluene	U		0.000325	0.00108	1	04/05/2018 03:37	WG1093771
4-Chlorotoluene	U		0.000259	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00540	1	04/05/2018 03:37	WG1093771
1,2-Dibromoethane	U		0.000371	0.00108	1	04/05/2018 03:37	WG1093771
Dibromomethane	U		0.000413	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dichlorobenzene	U		0.000330	0.00108	1	04/05/2018 03:37	WG1093771
1,3-Dichlorobenzene	U		0.000258	0.00108	1	04/05/2018 03:37	WG1093771
1,4-Dichlorobenzene	U		0.000244	0.00108	1	04/05/2018 03:37	WG1093771
Dichlorodifluoromethane	U		0.000771	0.00540	1	04/05/2018 03:37	WG1093771
1,1-Dichloroethane	U		0.000215	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dichloroethane	U		0.000286	0.00108	1	04/05/2018 03:37	WG1093771
1,1-Dichloroethene	U		0.000327	0.00108	1	04/05/2018 03:37	WG1093771
cis-1,2-Dichloroethene	U		0.000254	0.00108	1	04/05/2018 03:37	WG1093771
trans-1,2-Dichloroethene	U		0.000285	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dichloropropane	U		0.000387	0.00108	1	04/05/2018 03:37	WG1093771
1,1-Dichloropropene	U		0.000343	0.00108	1	04/05/2018 03:37	WG1093771
1,3-Dichloropropane	U		0.000224	0.00108	1	04/05/2018 03:37	WG1093771
cis-1,3-Dichloropropene	U		0.000283	0.00108	1	04/05/2018 03:37	WG1093771
trans-1,3-Dichloropropene	U		0.000289	0.00108	1	04/05/2018 03:37	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000841	0.00270	1	04/05/2018 03:37	WG1093771
2,2-Dichloropropane	U		0.000302	0.00108	1	04/05/2018 03:37	WG1093771
Di-isopropyl ether	U		0.000268	0.00108	1	04/05/2018 03:37	WG1093771
Ethylbenzene	U		0.000321	0.00108	1	04/05/2018 03:37	WG1093771
Hexachloro-1,3-butadiene	U		0.000370	0.00108	1	04/05/2018 03:37	WG1093771
2-Hexanone	U		0.00148	0.0108	1	04/05/2018 03:37	WG1093771
n-Hexane	U		0.000313	0.0108	1	04/05/2018 03:37	WG1093771
Iodomethane	U		0.00273	0.0108	1	04/05/2018 03:37	WG1093771
Isopropylbenzene	U		0.000263	0.00108	1	04/05/2018 03:37	WG1093771
p-Isopropyltoluene	U		0.000220	0.00108	1	04/05/2018 03:37	WG1093771
2-Butanone (MEK)	U		0.00506	0.0108	1	04/05/2018 03:37	WG1093771
Methylene Chloride	U		0.00108	0.00540	1	04/05/2018 03:37	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00203	0.0108	1	04/05/2018 03:37	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 10:05

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000229	0.00108	1	04/05/2018 03:37	WG1093771
Naphthalene	U		0.00108	0.00540	1	04/05/2018 03:37	WG1093771
n-Propylbenzene	U		0.000223	0.00108	1	04/05/2018 03:37	WG1093771
Styrene	U		0.000253	0.00108	1	04/05/2018 03:37	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000285	0.00108	1	04/05/2018 03:37	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000394	0.00108	1	04/05/2018 03:37	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000394	0.00108	1	04/05/2018 03:37	WG1093771
Tetrachloroethene	0.000759	J	0.000298	0.00108	1	04/05/2018 03:37	WG1093771
Toluene	U		0.000469	0.00540	1	04/05/2018 03:37	WG1093771
1,2,3-Trichlorobenzene	U		0.000331	0.00108	1	04/05/2018 03:37	WG1093771
1,2,4-Trichlorobenzene	U		0.000419	0.00108	1	04/05/2018 03:37	WG1093771
1,1,1-Trichloroethane	U		0.000309	0.00108	1	04/05/2018 03:37	WG1093771
1,1,2-Trichloroethane	U		0.000299	0.00108	1	04/05/2018 03:37	WG1093771
Trichloroethene	U		0.000302	0.00108	1	04/05/2018 03:37	WG1093771
Trichlorofluoromethane	U		0.000413	0.00540	1	04/05/2018 03:37	WG1093771
1,2,3-Trichloropropane	U		0.000801	0.00270	1	04/05/2018 03:37	WG1093771
1,2,4-Trimethylbenzene	U		0.000228	0.00108	1	04/05/2018 03:37	WG1093771
1,2,3-Trimethylbenzene	U		0.000310	0.00108	1	04/05/2018 03:37	WG1093771
1,3,5-Trimethylbenzene	U		0.000287	0.00108	1	04/05/2018 03:37	WG1093771
Vinyl acetate	U		0.00258	0.0108	1	04/05/2018 03:37	WG1093771
Vinyl chloride	U		0.000314	0.00108	1	04/05/2018 03:37	WG1093771
Xylenes, Total	U		0.000754	0.00324	1	04/05/2018 03:37	WG1093771
(S) Toluene-d8	101			80.0-120		04/05/2018 03:37	WG1093771
(S) Dibromofluoromethane	101			74.0-131		04/05/2018 03:37	WG1093771
(S) 4-Bromofluorobenzene	99.1			64.0-132		04/05/2018 03:37	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 10:20

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0558	1	04/05/2018 03:58	WG1093771
Acrylonitrile	U		0.00200	0.0112	1	04/05/2018 03:58	WG1093771
Benzene	U		0.000301	0.00112	1	04/05/2018 03:58	WG1093771
Bromobenzene	U		0.000317	0.00112	1	04/05/2018 03:58	WG1093771
Bromodichloromethane	U		0.000284	0.00112	1	04/05/2018 03:58	WG1093771
Bromochloromethane	U		0.000435	0.00558	1	04/05/2018 03:58	WG1093771
Bromoform	U		0.000473	0.00112	1	04/05/2018 03:58	WG1093771
Bromomethane	U		0.00150	0.00558	1	04/05/2018 03:58	WG1093771
n-Butylbenzene	U		0.000288	0.00112	1	04/05/2018 03:58	WG1093771
sec-Butylbenzene	U		0.000224	0.00112	1	04/05/2018 03:58	WG1093771
tert-Butylbenzene	U		0.000230	0.00112	1	04/05/2018 03:58	WG1093771
Carbon disulfide	U		0.000247	0.00112	1	04/05/2018 03:58	WG1093771
Carbon tetrachloride	U		0.000366	0.00112	1	04/05/2018 03:58	WG1093771
Chlorobenzene	U		0.000237	0.00112	1	04/05/2018 03:58	WG1093771
Chlorodibromomethane	U		0.000416	0.00112	1	04/05/2018 03:58	WG1093771
Chloroethane	U		0.00106	0.00558	1	04/05/2018 03:58	WG1093771
Chloroform	U		0.000256	0.00558	1	04/05/2018 03:58	WG1093771
Chloromethane	U		0.000419	0.00279	1	04/05/2018 03:58	WG1093771
2-Chlorotoluene	U		0.000336	0.00112	1	04/05/2018 03:58	WG1093771
4-Chlorotoluene	U		0.000268	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00558	1	04/05/2018 03:58	WG1093771
1,2-Dibromoethane	U		0.000383	0.00112	1	04/05/2018 03:58	WG1093771
Dibromomethane	U		0.000427	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dichlorobenzene	U		0.000341	0.00112	1	04/05/2018 03:58	WG1093771
1,3-Dichlorobenzene	U		0.000267	0.00112	1	04/05/2018 03:58	WG1093771
1,4-Dichlorobenzene	U		0.000252	0.00112	1	04/05/2018 03:58	WG1093771
Dichlorodifluoromethane	U		0.000796	0.00558	1	04/05/2018 03:58	WG1093771
1,1-Dichloroethane	U		0.000222	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dichloroethane	U		0.000296	0.00112	1	04/05/2018 03:58	WG1093771
1,1-Dichloroethene	U		0.000338	0.00112	1	04/05/2018 03:58	WG1093771
cis-1,2-Dichloroethene	0.00239		0.000262	0.00112	1	04/05/2018 03:58	WG1093771
trans-1,2-Dichloroethene	U		0.000295	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dichloropropane	U		0.000400	0.00112	1	04/05/2018 03:58	WG1093771
1,1-Dichloropropene	U		0.000354	0.00112	1	04/05/2018 03:58	WG1093771
1,3-Dichloropropane	U		0.000231	0.00112	1	04/05/2018 03:58	WG1093771
cis-1,3-Dichloropropene	U		0.000293	0.00112	1	04/05/2018 03:58	WG1093771
trans-1,3-Dichloropropene	U		0.000298	0.00112	1	04/05/2018 03:58	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000869	0.00279	1	04/05/2018 03:58	WG1093771
2,2-Dichloropropane	U		0.000312	0.00112	1	04/05/2018 03:58	WG1093771
Di-isopropyl ether	U		0.000277	0.00112	1	04/05/2018 03:58	WG1093771
Ethylbenzene	U		0.000332	0.00112	1	04/05/2018 03:58	WG1093771
Hexachloro-1,3-butadiene	U		0.000382	0.00112	1	04/05/2018 03:58	WG1093771
2-Hexanone	U		0.00153	0.0112	1	04/05/2018 03:58	WG1093771
n-Hexane	U		0.000324	0.0112	1	04/05/2018 03:58	WG1093771
Iodomethane	U		0.00282	0.0112	1	04/05/2018 03:58	WG1093771
Isopropylbenzene	U		0.000271	0.00112	1	04/05/2018 03:58	WG1093771
p-Isopropyltoluene	U		0.000228	0.00112	1	04/05/2018 03:58	WG1093771
2-Butanone (MEK)	U		0.00523	0.0112	1	04/05/2018 03:58	WG1093771
Methylene Chloride	U		0.00112	0.00558	1	04/05/2018 03:58	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	04/05/2018 03:58	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 10:20

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/05/2018 03:58	WG1093771
Naphthalene	U		0.00112	0.00558	1	04/05/2018 03:58	WG1093771
n-Propylbenzene	U		0.000230	0.00112	1	04/05/2018 03:58	WG1093771
Styrene	U		0.000261	0.00112	1	04/05/2018 03:58	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/05/2018 03:58	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000408	0.00112	1	04/05/2018 03:58	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000408	0.00112	1	04/05/2018 03:58	WG1093771
Tetrachloroethene	0.0238		0.000308	0.00112	1	04/05/2018 03:58	WG1093771
Toluene	U		0.000485	0.00558	1	04/05/2018 03:58	WG1093771
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/05/2018 03:58	WG1093771
1,2,4-Trichlorobenzene	U		0.000433	0.00112	1	04/05/2018 03:58	WG1093771
1,1,1-Trichloroethane	U		0.000319	0.00112	1	04/05/2018 03:58	WG1093771
1,1,2-Trichloroethane	U		0.000309	0.00112	1	04/05/2018 03:58	WG1093771
Trichloroethene	0.00330		0.000312	0.00112	1	04/05/2018 03:58	WG1093771
Trichlorofluoromethane	U		0.000427	0.00558	1	04/05/2018 03:58	WG1093771
1,2,3-Trichloropropane	U		0.000827	0.00279	1	04/05/2018 03:58	WG1093771
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/05/2018 03:58	WG1093771
1,2,3-Trimethylbenzene	U		0.000320	0.00112	1	04/05/2018 03:58	WG1093771
1,3,5-Trimethylbenzene	U		0.000297	0.00112	1	04/05/2018 03:58	WG1093771
Vinyl acetate	U		0.00267	0.0112	1	04/05/2018 03:58	WG1093771
Vinyl chloride	U		0.000325	0.00112	1	04/05/2018 03:58	WG1093771
Xylenes, Total	U		0.000779	0.00335	1	04/05/2018 03:58	WG1093771
(S) Toluene-d8	100			80.0-120		04/05/2018 03:58	WG1093771
(S) Dibromofluoromethane	104			74.0-131		04/05/2018 03:58	WG1093771
(S) 4-Bromofluorobenzene	98.1			64.0-132		04/05/2018 03:58	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 10:35

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0113	J	0.0110	0.0552	1	04/05/2018 04:20	WG1093771
Acrylonitrile	U		0.00198	0.0110	1	04/05/2018 04:20	WG1093771
Benzene	U		0.000298	0.00110	1	04/05/2018 04:20	WG1093771
Bromobenzene	U		0.000313	0.00110	1	04/05/2018 04:20	WG1093771
Bromodichloromethane	U		0.000280	0.00110	1	04/05/2018 04:20	WG1093771
Bromochloromethane	U		0.000430	0.00552	1	04/05/2018 04:20	WG1093771
Bromoform	U		0.000468	0.00110	1	04/05/2018 04:20	WG1093771
Bromomethane	U		0.00148	0.00552	1	04/05/2018 04:20	WG1093771
n-Butylbenzene	U		0.000285	0.00110	1	04/05/2018 04:20	WG1093771
sec-Butylbenzene	U		0.000222	0.00110	1	04/05/2018 04:20	WG1093771
tert-Butylbenzene	U		0.000227	0.00110	1	04/05/2018 04:20	WG1093771
Carbon disulfide	0.000405	J	0.000244	0.00110	1	04/05/2018 04:20	WG1093771
Carbon tetrachloride	U		0.000362	0.00110	1	04/05/2018 04:20	WG1093771
Chlorobenzene	U		0.000234	0.00110	1	04/05/2018 04:20	WG1093771
Chlorodibromomethane	U		0.000412	0.00110	1	04/05/2018 04:20	WG1093771
Chloroethane	U		0.00104	0.00552	1	04/05/2018 04:20	WG1093771
Chloroform	U		0.000253	0.00552	1	04/05/2018 04:20	WG1093771
Chloromethane	U		0.000414	0.00276	1	04/05/2018 04:20	WG1093771
2-Chlorotoluene	U		0.000332	0.00110	1	04/05/2018 04:20	WG1093771
4-Chlorotoluene	U		0.000265	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00552	1	04/05/2018 04:20	WG1093771
1,2-Dibromoethane	U		0.000378	0.00110	1	04/05/2018 04:20	WG1093771
Dibromomethane	U		0.000421	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dichlorobenzene	U		0.000337	0.00110	1	04/05/2018 04:20	WG1093771
1,3-Dichlorobenzene	U		0.000264	0.00110	1	04/05/2018 04:20	WG1093771
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/05/2018 04:20	WG1093771
Dichlorodifluoromethane	U		0.000787	0.00552	1	04/05/2018 04:20	WG1093771
1,1-Dichloroethane	U		0.000220	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dichloroethane	U		0.000292	0.00110	1	04/05/2018 04:20	WG1093771
1,1-Dichloroethene	U		0.000334	0.00110	1	04/05/2018 04:20	WG1093771
cis-1,2-Dichloroethene	0.00488		0.000259	0.00110	1	04/05/2018 04:20	WG1093771
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dichloropropane	U		0.000395	0.00110	1	04/05/2018 04:20	WG1093771
1,1-Dichloropropene	U		0.000350	0.00110	1	04/05/2018 04:20	WG1093771
1,3-Dichloropropane	U		0.000228	0.00110	1	04/05/2018 04:20	WG1093771
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	04/05/2018 04:20	WG1093771
trans-1,3-Dichloropropene	U		0.000295	0.00110	1	04/05/2018 04:20	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000858	0.00276	1	04/05/2018 04:20	WG1093771
2,2-Dichloropropane	U		0.000308	0.00110	1	04/05/2018 04:20	WG1093771
Di-isopropyl ether	U		0.000274	0.00110	1	04/05/2018 04:20	WG1093771
Ethylbenzene	U		0.000328	0.00110	1	04/05/2018 04:20	WG1093771
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	04/05/2018 04:20	WG1093771
2-Hexanone	U		0.00151	0.0110	1	04/05/2018 04:20	WG1093771
n-Hexane	U		0.000320	0.0110	1	04/05/2018 04:20	WG1093771
Iodomethane	U		0.00279	0.0110	1	04/05/2018 04:20	WG1093771
Isopropylbenzene	U		0.000268	0.00110	1	04/05/2018 04:20	WG1093771
p-Isopropyltoluene	U		0.000225	0.00110	1	04/05/2018 04:20	WG1093771
2-Butanone (MEK)	0.00707	J	0.00516	0.0110	1	04/05/2018 04:20	WG1093771
Methylene Chloride	U		0.00110	0.00552	1	04/05/2018 04:20	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/05/2018 04:20	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 10:35

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	04/05/2018 04:20	WG1093771
Naphthalene	U		0.00110	0.00552	1	04/05/2018 04:20	WG1093771
n-Propylbenzene	U		0.000227	0.00110	1	04/05/2018 04:20	WG1093771
Styrene	U		0.000258	0.00110	1	04/05/2018 04:20	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	04/05/2018 04:20	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	04/05/2018 04:20	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	04/05/2018 04:20	WG1093771
Tetrachloroethene	0.0146		0.000305	0.00110	1	04/05/2018 04:20	WG1093771
Toluene	U		0.000479	0.00552	1	04/05/2018 04:20	WG1093771
1,2,3-Trichlorobenzene	U		0.000338	0.00110	1	04/05/2018 04:20	WG1093771
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	04/05/2018 04:20	WG1093771
1,1,1-Trichloroethane	U		0.000316	0.00110	1	04/05/2018 04:20	WG1093771
1,1,2-Trichloroethane	U		0.000306	0.00110	1	04/05/2018 04:20	WG1093771
Trichloroethene	0.00118		0.000308	0.00110	1	04/05/2018 04:20	WG1093771
Trichlorofluoromethane	U		0.000421	0.00552	1	04/05/2018 04:20	WG1093771
1,2,3-Trichloropropane	U		0.000818	0.00276	1	04/05/2018 04:20	WG1093771
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	04/05/2018 04:20	WG1093771
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	04/05/2018 04:20	WG1093771
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/05/2018 04:20	WG1093771
Vinyl acetate	U		0.00264	0.0110	1	04/05/2018 04:20	WG1093771
Vinyl chloride	0.0615		0.000321	0.00110	1	04/05/2018 04:20	WG1093771
Xylenes, Total	U		0.000770	0.00331	1	04/05/2018 04:20	WG1093771
<i>(S) Toluene-d8</i>	100			80.0-120		04/05/2018 04:20	WG1093771
<i>(S) Dibromofluoromethane</i>	104			74.0-131		04/05/2018 04:20	WG1093771
<i>(S) 4-Bromofluorobenzene</i>	99.5			64.0-132		04/05/2018 04:20	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 11:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.3		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0121	J	0.0111	0.0554	1	04/05/2018 04:41	WG1093771
Acrylonitrile	U		0.00198	0.0111	1	04/05/2018 04:41	WG1093771
Benzene	U		0.000299	0.00111	1	04/05/2018 04:41	WG1093771
Bromobenzene	U		0.000315	0.00111	1	04/05/2018 04:41	WG1093771
Bromodichloromethane	U		0.000281	0.00111	1	04/05/2018 04:41	WG1093771
Bromochloromethane	U		0.000432	0.00554	1	04/05/2018 04:41	WG1093771
Bromoform	U		0.000470	0.00111	1	04/05/2018 04:41	WG1093771
Bromomethane	U		0.00148	0.00554	1	04/05/2018 04:41	WG1093771
n-Butylbenzene	U		0.000286	0.00111	1	04/05/2018 04:41	WG1093771
sec-Butylbenzene	U		0.000223	0.00111	1	04/05/2018 04:41	WG1093771
tert-Butylbenzene	U		0.000228	0.00111	1	04/05/2018 04:41	WG1093771
Carbon disulfide	U		0.000245	0.00111	1	04/05/2018 04:41	WG1093771
Carbon tetrachloride	U		0.000363	0.00111	1	04/05/2018 04:41	WG1093771
Chlorobenzene	U		0.000235	0.00111	1	04/05/2018 04:41	WG1093771
Chlorodibromomethane	U		0.000413	0.00111	1	04/05/2018 04:41	WG1093771
Chloroethane	U		0.00105	0.00554	1	04/05/2018 04:41	WG1093771
Chloroform	U		0.000254	0.00554	1	04/05/2018 04:41	WG1093771
Chloromethane	U		0.000415	0.00277	1	04/05/2018 04:41	WG1093771
2-Chlorotoluene	U		0.000333	0.00111	1	04/05/2018 04:41	WG1093771
4-Chlorotoluene	U		0.000266	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00554	1	04/05/2018 04:41	WG1093771
1,2-Dibromoethane	U		0.000380	0.00111	1	04/05/2018 04:41	WG1093771
Dibromomethane	U		0.000423	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dichlorobenzene	U		0.000338	0.00111	1	04/05/2018 04:41	WG1093771
1,3-Dichlorobenzene	U		0.000265	0.00111	1	04/05/2018 04:41	WG1093771
1,4-Dichlorobenzene	U		0.000250	0.00111	1	04/05/2018 04:41	WG1093771
Dichlorodifluoromethane	U		0.000790	0.00554	1	04/05/2018 04:41	WG1093771
1,1-Dichloroethane	U		0.000220	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dichloroethane	U		0.000294	0.00111	1	04/05/2018 04:41	WG1093771
1,1-Dichloroethene	U		0.000336	0.00111	1	04/05/2018 04:41	WG1093771
cis-1,2-Dichloroethene	0.00432		0.000260	0.00111	1	04/05/2018 04:41	WG1093771
trans-1,2-Dichloroethene	U		0.000292	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dichloropropane	U		0.000397	0.00111	1	04/05/2018 04:41	WG1093771
1,1-Dichloropropene	U		0.000351	0.00111	1	04/05/2018 04:41	WG1093771
1,3-Dichloropropane	U		0.000229	0.00111	1	04/05/2018 04:41	WG1093771
cis-1,3-Dichloropropene	U		0.000290	0.00111	1	04/05/2018 04:41	WG1093771
trans-1,3-Dichloropropene	U		0.000296	0.00111	1	04/05/2018 04:41	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000862	0.00277	1	04/05/2018 04:41	WG1093771
2,2-Dichloropropane	U		0.000309	0.00111	1	04/05/2018 04:41	WG1093771
Di-isopropyl ether	U		0.000275	0.00111	1	04/05/2018 04:41	WG1093771
Ethylbenzene	U		0.000329	0.00111	1	04/05/2018 04:41	WG1093771
Hexachloro-1,3-butadiene	U		0.000379	0.00111	1	04/05/2018 04:41	WG1093771
2-Hexanone	U		0.00152	0.0111	1	04/05/2018 04:41	WG1093771
n-Hexane	U		0.000321	0.0111	1	04/05/2018 04:41	WG1093771
Iodomethane	U		0.00280	0.0111	1	04/05/2018 04:41	WG1093771
Isopropylbenzene	U		0.000269	0.00111	1	04/05/2018 04:41	WG1093771
p-Isopropyltoluene	U		0.000226	0.00111	1	04/05/2018 04:41	WG1093771
2-Butanone (MEK)	U		0.00518	0.0111	1	04/05/2018 04:41	WG1093771
Methylene Chloride	U		0.00111	0.00554	1	04/05/2018 04:41	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00208	0.0111	1	04/05/2018 04:41	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 11:00

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000235	0.0011	1	04/05/2018 04:41	WG1093771
Naphthalene	U		0.0011	0.00554	1	04/05/2018 04:41	WG1093771
n-Propylbenzene	U		0.000228	0.0011	1	04/05/2018 04:41	WG1093771
Styrene	U		0.000259	0.0011	1	04/05/2018 04:41	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000292	0.0011	1	04/05/2018 04:41	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000404	0.0011	1	04/05/2018 04:41	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000404	0.0011	1	04/05/2018 04:41	WG1093771
Tetrachloroethene	0.00175		0.000306	0.0011	1	04/05/2018 04:41	WG1093771
Toluene	U		0.000481	0.00554	1	04/05/2018 04:41	WG1093771
1,2,3-Trichlorobenzene	U		0.000339	0.0011	1	04/05/2018 04:41	WG1093771
1,2,4-Trichlorobenzene	U		0.000430	0.0011	1	04/05/2018 04:41	WG1093771
1,1,1-Trichloroethane	U		0.000317	0.0011	1	04/05/2018 04:41	WG1093771
1,1,2-Trichloroethane	U		0.000307	0.0011	1	04/05/2018 04:41	WG1093771
Trichloroethene	0.00105	J	0.000309	0.0011	1	04/05/2018 04:41	WG1093771
Trichlorofluoromethane	U		0.000423	0.00554	1	04/05/2018 04:41	WG1093771
1,2,3-Trichloropropane	U		0.000821	0.00277	1	04/05/2018 04:41	WG1093771
1,2,4-Trimethylbenzene	U		0.000234	0.0011	1	04/05/2018 04:41	WG1093771
1,2,3-Trimethylbenzene	U		0.000318	0.0011	1	04/05/2018 04:41	WG1093771
1,3,5-Trimethylbenzene	U		0.000295	0.0011	1	04/05/2018 04:41	WG1093771
Vinyl acetate	U		0.00265	0.011	1	04/05/2018 04:41	WG1093771
Vinyl chloride	0.00322		0.000322	0.0011	1	04/05/2018 04:41	WG1093771
Xylenes, Total	U		0.000773	0.00332	1	04/05/2018 04:41	WG1093771
(S) Toluene-d8	102			80.0-120		04/05/2018 04:41	WG1093771
(S) Dibromofluoromethane	99.1			74.0-131		04/05/2018 04:41	WG1093771
(S) 4-Bromofluorobenzene	105			64.0-132		04/05/2018 04:41	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 11:20

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0145	J	0.0108	0.0538	1	04/05/2018 05:02	WG1093771
Acrylonitrile	U		0.00192	0.0108	1	04/05/2018 05:02	WG1093771
Benzene	U		0.000290	0.00108	1	04/05/2018 05:02	WG1093771
Bromobenzene	U		0.000305	0.00108	1	04/05/2018 05:02	WG1093771
Bromodichloromethane	U		0.000273	0.00108	1	04/05/2018 05:02	WG1093771
Bromochloromethane	U		0.000419	0.00538	1	04/05/2018 05:02	WG1093771
Bromoform	U		0.000456	0.00108	1	04/05/2018 05:02	WG1093771
Bromomethane	U		0.00144	0.00538	1	04/05/2018 05:02	WG1093771
n-Butylbenzene	U		0.000277	0.00108	1	04/05/2018 05:02	WG1093771
sec-Butylbenzene	U		0.000216	0.00108	1	04/05/2018 05:02	WG1093771
tert-Butylbenzene	U		0.000221	0.00108	1	04/05/2018 05:02	WG1093771
Carbon disulfide	U		0.000238	0.00108	1	04/05/2018 05:02	WG1093771
Carbon tetrachloride	U		0.000353	0.00108	1	04/05/2018 05:02	WG1093771
Chlorobenzene	U		0.000228	0.00108	1	04/05/2018 05:02	WG1093771
Chlorodibromomethane	U		0.000401	0.00108	1	04/05/2018 05:02	WG1093771
Chloroethane	U		0.00102	0.00538	1	04/05/2018 05:02	WG1093771
Chloroform	U		0.000246	0.00538	1	04/05/2018 05:02	WG1093771
Chloromethane	U		0.000403	0.00269	1	04/05/2018 05:02	WG1093771
2-Chlorotoluene	U		0.000324	0.00108	1	04/05/2018 05:02	WG1093771
4-Chlorotoluene	U		0.000258	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00538	1	04/05/2018 05:02	WG1093771
1,2-Dibromoethane	U		0.000369	0.00108	1	04/05/2018 05:02	WG1093771
Dibromomethane	U		0.000411	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dichlorobenzene	U		0.000328	0.00108	1	04/05/2018 05:02	WG1093771
1,3-Dichlorobenzene	U		0.000257	0.00108	1	04/05/2018 05:02	WG1093771
1,4-Dichlorobenzene	U		0.000243	0.00108	1	04/05/2018 05:02	WG1093771
Dichlorodifluoromethane	U		0.000767	0.00538	1	04/05/2018 05:02	WG1093771
1,1-Dichloroethane	U		0.000214	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dichloroethane	U		0.000285	0.00108	1	04/05/2018 05:02	WG1093771
1,1-Dichloroethene	U		0.000326	0.00108	1	04/05/2018 05:02	WG1093771
cis-1,2-Dichloroethene	0.000696	J	0.000253	0.00108	1	04/05/2018 05:02	WG1093771
trans-1,2-Dichloroethene	U		0.000284	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dichloropropane	U		0.000385	0.00108	1	04/05/2018 05:02	WG1093771
1,1-Dichloropropene	U		0.000341	0.00108	1	04/05/2018 05:02	WG1093771
1,3-Dichloropropane	U		0.000223	0.00108	1	04/05/2018 05:02	WG1093771
cis-1,3-Dichloropropene	U		0.000282	0.00108	1	04/05/2018 05:02	WG1093771
trans-1,3-Dichloropropene	U		0.000287	0.00108	1	04/05/2018 05:02	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000837	0.00269	1	04/05/2018 05:02	WG1093771
2,2-Dichloropropane	U		0.000300	0.00108	1	04/05/2018 05:02	WG1093771
Di-isopropyl ether	U		0.000267	0.00108	1	04/05/2018 05:02	WG1093771
Ethylbenzene	U		0.000319	0.00108	1	04/05/2018 05:02	WG1093771
Hexachloro-1,3-butadiene	U		0.000368	0.00108	1	04/05/2018 05:02	WG1093771
2-Hexanone	U		0.00147	0.0108	1	04/05/2018 05:02	WG1093771
n-Hexane	U		0.000312	0.0108	1	04/05/2018 05:02	WG1093771
Iodomethane	U		0.00272	0.0108	1	04/05/2018 05:02	WG1093771
Isopropylbenzene	U		0.000261	0.00108	1	04/05/2018 05:02	WG1093771
p-Isopropyltoluene	U		0.000219	0.00108	1	04/05/2018 05:02	WG1093771
2-Butanone (MEK)	U		0.00503	0.0108	1	04/05/2018 05:02	WG1093771
Methylene Chloride	U		0.00108	0.00538	1	04/05/2018 05:02	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0108	1	04/05/2018 05:02	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 11:20

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00108	1	04/05/2018 05:02	WG1093771
Naphthalene	U		0.00108	0.00538	1	04/05/2018 05:02	WG1093771
n-Propylbenzene	U		0.000221	0.00108	1	04/05/2018 05:02	WG1093771
Styrene	U		0.000252	0.00108	1	04/05/2018 05:02	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000284	0.00108	1	04/05/2018 05:02	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000392	0.00108	1	04/05/2018 05:02	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00108	1	04/05/2018 05:02	WG1093771
Tetrachloroethene	0.000607	J	0.000297	0.00108	1	04/05/2018 05:02	WG1093771
Toluene	U		0.000467	0.00538	1	04/05/2018 05:02	WG1093771
1,2,3-Trichlorobenzene	U		0.000329	0.00108	1	04/05/2018 05:02	WG1093771
1,2,4-Trichlorobenzene	U		0.000417	0.00108	1	04/05/2018 05:02	WG1093771
1,1,1-Trichloroethane	U		0.000308	0.00108	1	04/05/2018 05:02	WG1093771
1,1,2-Trichloroethane	U		0.000298	0.00108	1	04/05/2018 05:02	WG1093771
Trichloroethene	U		0.000300	0.00108	1	04/05/2018 05:02	WG1093771
Trichlorofluoromethane	U		0.000411	0.00538	1	04/05/2018 05:02	WG1093771
1,2,3-Trichloropropane	U		0.000797	0.00269	1	04/05/2018 05:02	WG1093771
1,2,4-Trimethylbenzene	U		0.000227	0.00108	1	04/05/2018 05:02	WG1093771
1,2,3-Trimethylbenzene	U		0.000309	0.00108	1	04/05/2018 05:02	WG1093771
1,3,5-Trimethylbenzene	U		0.000286	0.00108	1	04/05/2018 05:02	WG1093771
Vinyl acetate	U		0.00257	0.0108	1	04/05/2018 05:02	WG1093771
Vinyl chloride	U		0.000313	0.00108	1	04/05/2018 05:02	WG1093771
Xylenes, Total	U		0.000751	0.00323	1	04/05/2018 05:02	WG1093771
(S) Toluene-d8	98.3			80.0-120		04/05/2018 05:02	WG1093771
(S) Dibromofluoromethane	104			74.0-131		04/05/2018 05:02	WG1093771
(S) 4-Bromofluorobenzene	102			64.0-132		04/05/2018 05:02	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 11:45

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0560	1	04/05/2018 05:23	WG1093771
Acrylonitrile	U		0.00200	0.0112	1	04/05/2018 05:23	WG1093771
Benzene	U		0.000302	0.00112	1	04/05/2018 05:23	WG1093771
Bromobenzene	U		0.000318	0.00112	1	04/05/2018 05:23	WG1093771
Bromodichloromethane	U		0.000284	0.00112	1	04/05/2018 05:23	WG1093771
Bromochloromethane	U		0.000436	0.00560	1	04/05/2018 05:23	WG1093771
Bromoform	U		0.000475	0.00112	1	04/05/2018 05:23	WG1093771
Bromomethane	U		0.00150	0.00560	1	04/05/2018 05:23	WG1093771
n-Butylbenzene	U		0.000289	0.00112	1	04/05/2018 05:23	WG1093771
sec-Butylbenzene	U		0.000225	0.00112	1	04/05/2018 05:23	WG1093771
tert-Butylbenzene	U		0.000231	0.00112	1	04/05/2018 05:23	WG1093771
Carbon disulfide	U		0.000247	0.00112	1	04/05/2018 05:23	WG1093771
Carbon tetrachloride	U		0.000367	0.00112	1	04/05/2018 05:23	WG1093771
Chlorobenzene	U		0.000237	0.00112	1	04/05/2018 05:23	WG1093771
Chlorodibromomethane	U		0.000417	0.00112	1	04/05/2018 05:23	WG1093771
Chloroethane	U		0.00106	0.00560	1	04/05/2018 05:23	WG1093771
Chloroform	U		0.000256	0.00560	1	04/05/2018 05:23	WG1093771
Chloromethane	U		0.000420	0.00280	1	04/05/2018 05:23	WG1093771
2-Chlorotoluene	U		0.000337	0.00112	1	04/05/2018 05:23	WG1093771
4-Chlorotoluene	U		0.000269	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00560	1	04/05/2018 05:23	WG1093771
1,2-Dibromoethane	U		0.000384	0.00112	1	04/05/2018 05:23	WG1093771
Dibromomethane	U		0.000428	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dichlorobenzene	U		0.000341	0.00112	1	04/05/2018 05:23	WG1093771
1,3-Dichlorobenzene	U		0.000267	0.00112	1	04/05/2018 05:23	WG1093771
1,4-Dichlorobenzene	U		0.000253	0.00112	1	04/05/2018 05:23	WG1093771
Dichlorodifluoromethane	U		0.000798	0.00560	1	04/05/2018 05:23	WG1093771
1,1-Dichloroethane	U		0.000223	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dichloroethane	U		0.000297	0.00112	1	04/05/2018 05:23	WG1093771
1,1-Dichloroethene	U		0.000339	0.00112	1	04/05/2018 05:23	WG1093771
cis-1,2-Dichloroethene	U		0.000263	0.00112	1	04/05/2018 05:23	WG1093771
trans-1,2-Dichloroethene	U		0.000295	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dichloropropane	U		0.000401	0.00112	1	04/05/2018 05:23	WG1093771
1,1-Dichloropropene	U		0.000355	0.00112	1	04/05/2018 05:23	WG1093771
1,3-Dichloropropane	U		0.000232	0.00112	1	04/05/2018 05:23	WG1093771
cis-1,3-Dichloropropene	U		0.000293	0.00112	1	04/05/2018 05:23	WG1093771
trans-1,3-Dichloropropene	U		0.000299	0.00112	1	04/05/2018 05:23	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000871	0.00280	1	04/05/2018 05:23	WG1093771
2,2-Dichloropropane	U		0.000312	0.00112	1	04/05/2018 05:23	WG1093771
Di-isopropyl ether	U		0.000278	0.00112	1	04/05/2018 05:23	WG1093771
Ethylbenzene	U		0.000332	0.00112	1	04/05/2018 05:23	WG1093771
Hexachloro-1,3-butadiene	U		0.000383	0.00112	1	04/05/2018 05:23	WG1093771
2-Hexanone	U		0.00153	0.0112	1	04/05/2018 05:23	WG1093771
n-Hexane	U		0.000325	0.0112	1	04/05/2018 05:23	WG1093771
Iodomethane	U		0.00283	0.0112	1	04/05/2018 05:23	WG1093771
Isopropylbenzene	U		0.000272	0.00112	1	04/05/2018 05:23	WG1093771
p-Isopropyltoluene	U		0.000228	0.00112	1	04/05/2018 05:23	WG1093771
2-Butanone (MEK)	U		0.00524	0.0112	1	04/05/2018 05:23	WG1093771
Methylene Chloride	U		0.00112	0.00560	1	04/05/2018 05:23	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	04/05/2018 05:23	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 11:45

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/05/2018 05:23	WG1093771
Naphthalene	U		0.00112	0.00560	1	04/05/2018 05:23	WG1093771
n-Propylbenzene	U		0.000231	0.00112	1	04/05/2018 05:23	WG1093771
Styrene	U		0.000262	0.00112	1	04/05/2018 05:23	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/05/2018 05:23	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000408	0.00112	1	04/05/2018 05:23	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000408	0.00112	1	04/05/2018 05:23	WG1093771
Tetrachloroethene	U		0.000309	0.00112	1	04/05/2018 05:23	WG1093771
Toluene	U		0.000486	0.00560	1	04/05/2018 05:23	WG1093771
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/05/2018 05:23	WG1093771
1,2,4-Trichlorobenzene	U		0.000434	0.00112	1	04/05/2018 05:23	WG1093771
1,1,1-Trichloroethane	U		0.000320	0.00112	1	04/05/2018 05:23	WG1093771
1,1,2-Trichloroethane	U		0.000310	0.00112	1	04/05/2018 05:23	WG1093771
Trichloroethene	U		0.000312	0.00112	1	04/05/2018 05:23	WG1093771
Trichlorofluoromethane	U		0.000428	0.00560	1	04/05/2018 05:23	WG1093771
1,2,3-Trichloropropane	U		0.000829	0.00280	1	04/05/2018 05:23	WG1093771
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/05/2018 05:23	WG1093771
1,2,3-Trimethylbenzene	U		0.000321	0.00112	1	04/05/2018 05:23	WG1093771
1,3,5-Trimethylbenzene	U		0.000298	0.00112	1	04/05/2018 05:23	WG1093771
Vinyl acetate	U		0.00267	0.0112	1	04/05/2018 05:23	WG1093771
Vinyl chloride	0.000502	J	0.000326	0.00112	1	04/05/2018 05:23	WG1093771
Xylenes, Total	U		0.000781	0.00336	1	04/05/2018 05:23	WG1093771
(S) Toluene-d8	101			80.0-120		04/05/2018 05:23	WG1093771
(S) Dibromofluoromethane	103			74.0-131		04/05/2018 05:23	WG1093771
(S) 4-Bromofluorobenzene	104			64.0-132		04/05/2018 05:23	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 12:09

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.4		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0159	J	0.0116	0.0579	1	04/05/2018 05:45	WG1093771
Acrylonitrile	U		0.00207	0.0116	1	04/05/2018 05:45	WG1093771
Benzene	U		0.000312	0.00116	1	04/05/2018 05:45	WG1093771
Bromobenzene	U		0.000329	0.00116	1	04/05/2018 05:45	WG1093771
Bromodichloromethane	U		0.000294	0.00116	1	04/05/2018 05:45	WG1093771
Bromochloromethane	U		0.000451	0.00579	1	04/05/2018 05:45	WG1093771
Bromoform	U		0.000491	0.00116	1	04/05/2018 05:45	WG1093771
Bromomethane	U		0.00155	0.00579	1	04/05/2018 05:45	WG1093771
n-Butylbenzene	U		0.000299	0.00116	1	04/05/2018 05:45	WG1093771
sec-Butylbenzene	U		0.000233	0.00116	1	04/05/2018 05:45	WG1093771
tert-Butylbenzene	U		0.000238	0.00116	1	04/05/2018 05:45	WG1093771
Carbon disulfide	U		0.000256	0.00116	1	04/05/2018 05:45	WG1093771
Carbon tetrachloride	U		0.000380	0.00116	1	04/05/2018 05:45	WG1093771
Chlorobenzene	U		0.000245	0.00116	1	04/05/2018 05:45	WG1093771
Chlorodibromomethane	U		0.000432	0.00116	1	04/05/2018 05:45	WG1093771
Chloroethane	U		0.00109	0.00579	1	04/05/2018 05:45	WG1093771
Chloroform	U		0.000265	0.00579	1	04/05/2018 05:45	WG1093771
Chloromethane	U		0.000434	0.00289	1	04/05/2018 05:45	WG1093771
2-Chlorotoluene	U		0.000348	0.00116	1	04/05/2018 05:45	WG1093771
4-Chlorotoluene	U		0.000278	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00579	1	04/05/2018 05:45	WG1093771
1,2-Dibromoethane	U		0.000397	0.00116	1	04/05/2018 05:45	WG1093771
Dibromomethane	U		0.000442	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dichlorobenzene	U		0.000353	0.00116	1	04/05/2018 05:45	WG1093771
1,3-Dichlorobenzene	U		0.000277	0.00116	1	04/05/2018 05:45	WG1093771
1,4-Dichlorobenzene	U		0.000262	0.00116	1	04/05/2018 05:45	WG1093771
Dichlorodifluoromethane	U		0.000825	0.00579	1	04/05/2018 05:45	WG1093771
1,1-Dichloroethane	U		0.000230	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dichloroethane	U		0.000307	0.00116	1	04/05/2018 05:45	WG1093771
1,1-Dichloroethene	U		0.000351	0.00116	1	04/05/2018 05:45	WG1093771
cis-1,2-Dichloroethene	U		0.000272	0.00116	1	04/05/2018 05:45	WG1093771
trans-1,2-Dichloroethene	U		0.000305	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dichloropropane	U		0.000414	0.00116	1	04/05/2018 05:45	WG1093771
1,1-Dichloropropene	U		0.000367	0.00116	1	04/05/2018 05:45	WG1093771
1,3-Dichloropropane	U		0.000240	0.00116	1	04/05/2018 05:45	WG1093771
cis-1,3-Dichloropropene	U		0.000303	0.00116	1	04/05/2018 05:45	WG1093771
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	04/05/2018 05:45	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000900	0.00289	1	04/05/2018 05:45	WG1093771
2,2-Dichloropropane	U		0.000323	0.00116	1	04/05/2018 05:45	WG1093771
Di-isopropyl ether	U		0.000287	0.00116	1	04/05/2018 05:45	WG1093771
Ethylbenzene	U		0.000344	0.00116	1	04/05/2018 05:45	WG1093771
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	04/05/2018 05:45	WG1093771
2-Hexanone	U		0.00159	0.0116	1	04/05/2018 05:45	WG1093771
n-Hexane	U		0.000336	0.0116	1	04/05/2018 05:45	WG1093771
Iodomethane	U		0.00293	0.0116	1	04/05/2018 05:45	WG1093771
Isopropylbenzene	U		0.000281	0.00116	1	04/05/2018 05:45	WG1093771
p-Isopropyltoluene	U		0.000236	0.00116	1	04/05/2018 05:45	WG1093771
2-Butanone (MEK)	U		0.00542	0.0116	1	04/05/2018 05:45	WG1093771
Methylene Chloride	U		0.00116	0.00579	1	04/05/2018 05:45	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	04/05/2018 05:45	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 12:09

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00116	1	04/05/2018 05:45	WG1093771
Naphthalene	U		0.00116	0.00579	1	04/05/2018 05:45	WG1093771
n-Propylbenzene	U		0.000238	0.00116	1	04/05/2018 05:45	WG1093771
Styrene	U		0.000271	0.00116	1	04/05/2018 05:45	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000305	0.00116	1	04/05/2018 05:45	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000422	0.00116	1	04/05/2018 05:45	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000422	0.00116	1	04/05/2018 05:45	WG1093771
Tetrachloroethene	U		0.000319	0.00116	1	04/05/2018 05:45	WG1093771
Toluene	U		0.000502	0.00579	1	04/05/2018 05:45	WG1093771
1,2,3-Trichlorobenzene	U		0.000354	0.00116	1	04/05/2018 05:45	WG1093771
1,2,4-Trichlorobenzene	U		0.000449	0.00116	1	04/05/2018 05:45	WG1093771
1,1,1-Trichloroethane	U		0.000331	0.00116	1	04/05/2018 05:45	WG1093771
1,1,2-Trichloroethane	U		0.000321	0.00116	1	04/05/2018 05:45	WG1093771
Trichloroethene	U		0.000323	0.00116	1	04/05/2018 05:45	WG1093771
Trichlorofluoromethane	U		0.000442	0.00579	1	04/05/2018 05:45	WG1093771
1,2,3-Trichloropropane	U		0.000857	0.00289	1	04/05/2018 05:45	WG1093771
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	04/05/2018 05:45	WG1093771
1,2,3-Trimethylbenzene	U		0.000332	0.00116	1	04/05/2018 05:45	WG1093771
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	04/05/2018 05:45	WG1093771
Vinyl acetate	U		0.00277	0.0116	1	04/05/2018 05:45	WG1093771
Vinyl chloride	U		0.000337	0.00116	1	04/05/2018 05:45	WG1093771
Xylenes, Total	U		0.000808	0.00347	1	04/05/2018 05:45	WG1093771
(S) Toluene-d8	99.7			80.0-120		04/05/2018 05:45	WG1093771
(S) Dibromofluoromethane	104			74.0-131		04/05/2018 05:45	WG1093771
(S) 4-Bromofluorobenzene	101			64.0-132		04/05/2018 05:45	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 00:00

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.19	J	1.05	25.0	1	04/04/2018 20:36	WG1093766
Acrylonitrile	U		0.873	5.00	1	04/04/2018 20:36	WG1093766
Benzene	U		0.0896	0.500	1	04/04/2018 20:36	WG1093766
Bromobenzene	U		0.133	0.500	1	04/04/2018 20:36	WG1093766
Bromodichloromethane	U		0.0800	0.500	1	04/04/2018 20:36	WG1093766
Bromochloromethane	U		0.145	0.500	1	04/04/2018 20:36	WG1093766
Bromoform	U		0.186	0.500	1	04/04/2018 20:36	WG1093766
Bromomethane	U		0.157	2.50	1	04/04/2018 20:36	WG1093766
n-Butylbenzene	U		0.143	0.500	1	04/04/2018 20:36	WG1093766
sec-Butylbenzene	U		0.134	0.500	1	04/04/2018 20:36	WG1093766
tert-Butylbenzene	U		0.183	0.500	1	04/04/2018 20:36	WG1093766
Carbon disulfide	U		0.101	0.500	1	04/04/2018 20:36	WG1093766
Carbon tetrachloride	U		0.159	0.500	1	04/04/2018 20:36	WG1093766
Chlorobenzene	U		0.140	0.500	1	04/04/2018 20:36	WG1093766
Chlorodibromomethane	U		0.128	0.500	1	04/04/2018 20:36	WG1093766
Chloroethane	U		0.141	2.50	1	04/04/2018 20:36	WG1093766
Chloroform	U		0.0860	0.500	1	04/04/2018 20:36	WG1093766
Chloromethane	U	J4	0.153	1.25	1	04/04/2018 20:36	WG1093766
2-Chlorotoluene	U		0.111	0.500	1	04/04/2018 20:36	WG1093766
4-Chlorotoluene	U		0.0972	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/04/2018 20:36	WG1093766
1,2-Dibromoethane	U		0.193	0.500	1	04/04/2018 20:36	WG1093766
Dibromomethane	U		0.117	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dichlorobenzene	U		0.101	0.500	1	04/04/2018 20:36	WG1093766
1,3-Dichlorobenzene	U		0.130	0.500	1	04/04/2018 20:36	WG1093766
1,4-Dichlorobenzene	U		0.121	0.500	1	04/04/2018 20:36	WG1093766
Dichlorodifluoromethane	U		0.127	2.50	1	04/04/2018 20:36	WG1093766
1,1-Dichloroethane	U		0.114	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dichloroethane	U		0.108	0.500	1	04/04/2018 20:36	WG1093766
1,1-Dichloroethene	U		0.188	0.500	1	04/04/2018 20:36	WG1093766
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/04/2018 20:36	WG1093766
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dichloropropane	U		0.190	0.500	1	04/04/2018 20:36	WG1093766
1,1-Dichloropropene	U		0.128	0.500	1	04/04/2018 20:36	WG1093766
1,3-Dichloropropane	U		0.147	1.00	1	04/04/2018 20:36	WG1093766
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/04/2018 20:36	WG1093766
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/04/2018 20:36	WG1093766
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/04/2018 20:36	WG1093766
2,2-Dichloropropane	U		0.0929	0.500	1	04/04/2018 20:36	WG1093766
Di-isopropyl ether	U		0.0924	0.500	1	04/04/2018 20:36	WG1093766
Ethylbenzene	U		0.158	0.500	1	04/04/2018 20:36	WG1093766
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/04/2018 20:36	WG1093766
2-Hexanone	U		0.757	5.00	1	04/04/2018 20:36	WG1093766
n-Hexane	U		0.305	5.00	1	04/04/2018 20:36	WG1093766
Iodomethane	U		0.377	10.0	1	04/04/2018 20:36	WG1093766
Isopropylbenzene	U		0.126	0.500	1	04/04/2018 20:36	WG1093766
p-Isopropyltoluene	U		0.138	0.500	1	04/04/2018 20:36	WG1093766
2-Butanone (MEK)	U		1.28	5.00	1	04/04/2018 20:36	WG1093766
Methylene Chloride	U		1.07	2.50	1	04/04/2018 20:36	WG1093766
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/04/2018 20:36	WG1093766
Methyl tert-butyl ether	U		0.102	0.500	1	04/04/2018 20:36	WG1093766
Naphthalene	U		0.174	2.50	1	04/04/2018 20:36	WG1093766
n-Propylbenzene	U		0.162	0.500	1	04/04/2018 20:36	WG1093766
Styrene	U	J4	0.117	0.500	1	04/04/2018 20:36	WG1093766
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/04/2018 20:36	WG1093766
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/04/2018 20:36	WG1093766

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 00:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/04/2018 20:36	WG1093766
Tetrachloroethene	U		0.199	0.500	1	04/04/2018 20:36	WG1093766
Toluene	U		0.412	0.500	1	04/04/2018 20:36	WG1093766
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/04/2018 20:36	WG1093766
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/04/2018 20:36	WG1093766
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/04/2018 20:36	WG1093766
1,1,2-Trichloroethane	U		0.186	0.500	1	04/04/2018 20:36	WG1093766
Trichloroethene	U		0.153	0.500	1	04/04/2018 20:36	WG1093766
Trichlorofluoromethane	U		0.130	2.50	1	04/04/2018 20:36	WG1093766
1,2,3-Trichloropropane	U		0.247	2.50	1	04/04/2018 20:36	WG1093766
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/04/2018 20:36	WG1093766
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/04/2018 20:36	WG1093766
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/04/2018 20:36	WG1093766
Vinyl acetate	U		0.645	5.00	1	04/04/2018 20:36	WG1093766
Vinyl chloride	U		0.118	0.500	1	04/04/2018 20:36	WG1093766
Xylenes, Total	U		0.316	1.50	1	04/04/2018 20:36	WG1093766
(S) Toluene-d8	98.9			80.0-120		04/04/2018 20:36	WG1093766
(S) Dibromofluoromethane	100			76.0-123		04/04/2018 20:36	WG1093766
(S) 4-Bromofluorobenzene	103			80.0-120		04/04/2018 20:36	WG1093766

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 14:00

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0193	J	0.0108	0.0538	1	04/10/2018 12:03	WG1093771
Acrylonitrile	U		0.00193	0.0108	1	04/10/2018 12:03	WG1093771
Benzene	U		0.000291	0.00108	1	04/10/2018 12:03	WG1093771
Bromobenzene	U		0.000306	0.00108	1	04/10/2018 12:03	WG1093771
Bromodichloromethane	U		0.000274	0.00108	1	04/10/2018 12:03	WG1093771
Bromochloromethane	U		0.000420	0.00538	1	04/10/2018 12:03	WG1093771
Bromoform	U		0.000457	0.00108	1	04/10/2018 12:03	WG1093771
Bromomethane	U		0.00144	0.00538	1	04/10/2018 12:03	WG1093771
n-Butylbenzene	U		0.000278	0.00108	1	04/10/2018 12:03	WG1093771
sec-Butylbenzene	U		0.000216	0.00108	1	04/10/2018 12:03	WG1093771
tert-Butylbenzene	U		0.000222	0.00108	1	04/10/2018 12:03	WG1093771
Carbon disulfide	0.000480	J	0.000238	0.00108	1	04/10/2018 12:03	WG1093771
Carbon tetrachloride	U		0.000353	0.00108	1	04/10/2018 12:03	WG1093771
Chlorobenzene	U		0.000228	0.00108	1	04/10/2018 12:03	WG1093771
Chlorodibromomethane	U		0.000402	0.00108	1	04/10/2018 12:03	WG1093771
Chloroethane	U		0.00102	0.00538	1	04/10/2018 12:03	WG1093771
Chloroform	U		0.000247	0.00538	1	04/10/2018 12:03	WG1093771
Chloromethane	0.00101	J	0.000404	0.00269	1	04/10/2018 12:03	WG1093771
2-Chlorotoluene	U		0.000324	0.00108	1	04/10/2018 12:03	WG1093771
4-Chlorotoluene	U		0.000258	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00538	1	04/10/2018 12:03	WG1093771
1,2-Dibromoethane	U		0.000369	0.00108	1	04/10/2018 12:03	WG1093771
Dibromomethane	U		0.000411	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dichlorobenzene	U		0.000328	0.00108	1	04/10/2018 12:03	WG1093771
1,3-Dichlorobenzene	U		0.000257	0.00108	1	04/10/2018 12:03	WG1093771
1,4-Dichlorobenzene	U		0.000243	0.00108	1	04/10/2018 12:03	WG1093771
Dichlorodifluoromethane	U		0.000768	0.00538	1	04/10/2018 12:03	WG1093771
1,1-Dichloroethane	U		0.000214	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dichloroethane	U		0.000285	0.00108	1	04/10/2018 12:03	WG1093771
1,1-Dichloroethene	U		0.000326	0.00108	1	04/10/2018 12:03	WG1093771
cis-1,2-Dichloroethene	U		0.000253	0.00108	1	04/10/2018 12:03	WG1093771
trans-1,2-Dichloroethene	U		0.000284	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dichloropropane	U		0.000386	0.00108	1	04/10/2018 12:03	WG1093771
1,1-Dichloropropene	U		0.000341	0.00108	1	04/10/2018 12:03	WG1093771
1,3-Dichloropropane	U		0.000223	0.00108	1	04/10/2018 12:03	WG1093771
cis-1,3-Dichloropropene	U		0.000282	0.00108	1	04/10/2018 12:03	WG1093771
trans-1,3-Dichloropropene	U		0.000288	0.00108	1	04/10/2018 12:03	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000838	0.00269	1	04/10/2018 12:03	WG1093771
2,2-Dichloropropane	U		0.000300	0.00108	1	04/10/2018 12:03	WG1093771
Di-isopropyl ether	U		0.000267	0.00108	1	04/10/2018 12:03	WG1093771
Ethylbenzene	U		0.000320	0.00108	1	04/10/2018 12:03	WG1093771
Hexachloro-1,3-butadiene	U		0.000368	0.00108	1	04/10/2018 12:03	WG1093771
2-Hexanone	U		0.00148	0.0108	1	04/10/2018 12:03	WG1093771
n-Hexane	0.00203	J	0.000312	0.0108	1	04/10/2018 12:03	WG1093771
Iodomethane	U		0.00272	0.0108	1	04/10/2018 12:03	WG1093771
Isopropylbenzene	U		0.000262	0.00108	1	04/10/2018 12:03	WG1093771
p-Isopropyltoluene	U		0.000220	0.00108	1	04/10/2018 12:03	WG1093771
2-Butanone (MEK)	U		0.00504	0.0108	1	04/10/2018 12:03	WG1093771
Methylene Chloride	U		0.00108	0.00538	1	04/10/2018 12:03	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0108	1	04/10/2018 12:03	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/02/18 14:00

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00108	1	04/10/2018 12:03	WG1093771
Naphthalene	U		0.00108	0.00538	1	04/10/2018 12:03	WG1093771
n-Propylbenzene	U		0.000222	0.00108	1	04/10/2018 12:03	WG1093771
Styrene	U		0.000252	0.00108	1	04/10/2018 12:03	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000284	0.00108	1	04/10/2018 12:03	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000393	0.00108	1	04/10/2018 12:03	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000393	0.00108	1	04/10/2018 12:03	WG1093771
Tetrachloroethene	0.000377	J	0.000297	0.00108	1	04/10/2018 12:03	WG1093771
Toluene	U		0.000467	0.00538	1	04/10/2018 12:03	WG1093771
1,2,3-Trichlorobenzene	U		0.000330	0.00108	1	04/10/2018 12:03	WG1093771
1,2,4-Trichlorobenzene	U		0.000418	0.00108	1	04/10/2018 12:03	WG1093771
1,1,1-Trichloroethane	U		0.000308	0.00108	1	04/10/2018 12:03	WG1093771
1,1,2-Trichloroethane	U		0.000298	0.00108	1	04/10/2018 12:03	WG1093771
Trichloroethene	U		0.000300	0.00108	1	04/10/2018 12:03	WG1093771
Trichlorofluoromethane	U		0.000411	0.00538	1	04/10/2018 12:03	WG1093771
1,2,3-Trichloropropane	U		0.000798	0.00269	1	04/10/2018 12:03	WG1093771
1,2,4-Trimethylbenzene	U		0.000227	0.00108	1	04/10/2018 12:03	WG1093771
1,2,3-Trimethylbenzene	U		0.000309	0.00108	1	04/10/2018 12:03	WG1093771
1,3,5-Trimethylbenzene	U		0.000286	0.00108	1	04/10/2018 12:03	WG1093771
Vinyl acetate	U		0.00257	0.0108	1	04/10/2018 12:03	WG1093771
Vinyl chloride	U		0.000313	0.00108	1	04/10/2018 12:03	WG1093771
Xylenes, Total	U		0.000752	0.00323	1	04/10/2018 12:03	WG1093771
(S) Toluene-d8	102			80.0-120		04/10/2018 12:03	WG1093771
(S) Dibromofluoromethane	101			74.0-131		04/10/2018 12:03	WG1093771
(S) 4-Bromofluorobenzene	103			64.0-132		04/10/2018 12:03	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
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Total Solids by Method 2540 G-2011

[L982616-01.02.03.04.05](#)

Method Blank (MB)

(MB) R3299970-1 04/07/18 13:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.000	%	%	%

L982616-05 Original Sample (OS) • Duplicate (DUP)

(OS) L982616-05 04/07/18 13:06 • (DUP) R3299970-3 04/07/18 13:06

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	90.3	90.6	1	0.393	%	5

Laboratory Control Sample (LCS)

(LCS) R3299970-2 04/07/18 13:06

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

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Total Solids by Method 2540 G-2011

[L982616-06.07.08.10](#)

Method Blank (MB)

(MB) R3299859-1 04/06/18 11:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.00100	%	%	%

L982619-16 Original Sample (OS) • Duplicate (DUP)

(OS) L982619-16 04/06/18 11:25 • (DUP) R3299859-3 04/06/18 11:25

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	87.9	88.7	1	0.884	%	5

Laboratory Control Sample (LCS)

(LCS) R3299859-2 04/06/18 11:25

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

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Method Blank (MB)

(MB) R32399965-2 04/04/18 19:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
Carbon disulfide	U		0.101	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
2-Hexanone	U		0.757	5.00

Public Review Draft

1 Cp
2 Tc
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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R32399965-2 04/04/18 19:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
n-Hexane	U		0.305	5.00
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1-3-butadiene	U		0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	5.00
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	97.9			80.0-120
(S) Dibromofluoromethane	106			76.0-123
(S) 4-Bromofluorobenzene	102			80.0-120

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Laboratory Control Sample (LCS)

(LCS) R3299965-1 04/04/18 18:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromochloromethane	25.0	26.0	104	76.0-122	
Carbon disulfide	25.0	29.9	120	55.0-127	
Acetone	125	176	141	10.0-160	
Acrylonitrile	125	135	108	60.0-142	
Benzene	25.0	26.3	105	69.0-123	
trans-1,4-Dichloro-2-butene	25.0	24.1	96.4	55.0-134	
Bromobenzene	25.0	24.6	98.3	79.0-120	
Bromodichloromethane	25.0	24.5	98.1	76.0-120	
Bromoform	25.0	28.6	114	67.0-132	
2-Hexanone	125	126	101	58.0-147	
Bromomethane	25.0	22.1	88.4	18.0-160	
n-Hexane	25.0	27.5	110	56.0-124	
Iodomethane	125	139	111	57.0-140	
n-Butylbenzene	25.0	24.9	99.8	72.0-126	
sec-Butylbenzene	25.0	24.8	99.0	74.0-121	
tert-Butylbenzene	25.0	24.3	97.2	75.0-122	
Carbon tetrachloride	25.0	24.2	96.7	63.0-122	
Chlorobenzene	25.0	24.6	98.4	79.0-121	
Chlorodibromomethane	25.0	25.8	103	75.0-125	
Chloroethane	25.0	25.4	102	47.0-152	
Chloroform	25.0	26.0	104	72.0-121	
Chloromethane	25.0	35.7	143	48.0-139	J4
2-Chlorotoluene	25.0	26.2	105	74.0-122	
4-Chlorotoluene	25.0	24.7	98.6	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	19.1	76.4	64.0-127	
1,2-Dibromoethane	25.0	24.1	96.5	77.0-123	
Dibromomethane	25.0	25.7	103	78.0-120	
1,2-Dichlorobenzene	25.0	24.2	96.8	80.0-120	
1,3-Dichlorobenzene	25.0	24.5	98.1	72.0-123	
1,4-Dichlorobenzene	25.0	25.1	100	77.0-120	
Dichlorodifluoromethane	25.0	30.4	122	49.0-155	
1,1-Dichloroethane	25.0	27.1	108	70.0-126	
1,2-Dichloroethane	25.0	25.6	102	67.0-126	
1,1-Dichloroethene	25.0	28.0	112	64.0-129	
cis-1,2-Dichloroethene	25.0	25.8	103	73.0-120	
Vinyl acetate	125	172	137	46.0-160	
trans-1,2-Dichloroethene	25.0	25.3	101	71.0-121	
1,2-Dichloropropane	25.0	25.9	104	75.0-125	
1,1-Dichloropropane	25.0	26.3	105	71.0-129	
1,3-Dichloropropane	25.0	24.9	99.8	80.0-121	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L982616-09](#)

Laboratory Control Sample (LCS)

(LCS) R3299965-1 04/04/18 18:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,3-Dichloropropene	25.0	25.9	103	79.0-123	
trans-1,3-Dichloropropene	25.0	25.2	101	74.0-127	
2,2-Dichloropropane	25.0	25.9	104	60.0-125	
Di-isopropyl ether	25.0	30.5	122	59.0-133	
Ethylbenzene	25.0	25.5	102	77.0-120	
Hexachloro-1,3-butadiene	25.0	24.1	96.6	64.0-131	
Isopropylbenzene	25.0	29.2	117	75.0-120	
p-Isopropyltoluene	25.0	24.0	96.0	74.0-126	
2-Butanone (MEK)	125	159	127	37.0-158	
Methylene Chloride	25.0	25.8	103	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	148	118	59.0-143	
Methyl tert-butyl ether	25.0	24.4	97.7	64.0-123	
Naphthalene	25.0	22.1	88.3	62.0-128	
n-Propylbenzene	25.0	26.0	104	79.0-120	
Styrene	25.0	32.0	128	78.0-124	14
1,1,1,2-Tetrachloroethane	25.0	23.4	93.6	75.0-122	
1,1,2,2-Tetrachloroethane	25.0	24.1	96.2	71.0-122	
Tetrachloroethene	25.0	22.8	91.0	70.0-127	
Toluene	25.0	25.0	99.9	77.0-120	
1,1,2-Trichlorotrifluoroethane	25.0	27.5	110	61.0-136	
1,2,3-Trichlorobenzene	25.0	25.6	102	61.0-133	
1,2,4-Trichlorobenzene	25.0	25.5	102	69.0-129	
1,1,1-Trichloroethane	25.0	23.9	95.7	68.0-122	
1,1,2-Trichloroethane	25.0	25.8	103	78.0-120	
Trichloroethene	25.0	23.7	94.7	78.0-120	
Trichlorofluoromethane	25.0	28.7	115	56.0-137	
1,2,3-Trichloropropane	25.0	21.6	86.4	72.0-124	
1,2,3-Trimethylbenzene	25.0	24.9	99.6	75.0-120	
1,2,4-Trimethylbenzene	25.0	24.3	97.3	75.0-120	
1,3,5-Trimethylbenzene	25.0	24.8	99.3	75.0-120	
Vinyl chloride	25.0	32.2	129	64.0-133	
Xylenes, Total	75.0	75.8	101	77.0-120	
<i>(S) Toluene-d8</i>			97.8	80.0-120	
<i>(S) Dibromofluoromethane</i>			103	76.0-123	
<i>(S) 4-Bromofluorobenzene</i>			102	80.0-120	

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Method Blank (MB)

(MB) R3300269-3 04/04/18 23:41

Analyte	MB Result mg/kg	MB Qualifier	MB MDL mg/kg	MB RDL mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Method Blank (MB)

(MB) R3300269-3 04/04/18 23:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	112			80.0-120
(S) Dibromofluoromethane	94.7			74.0-131
(S) 4-Bromofluorobenzene	99.2			64.0-132

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3300269-1 04/04/18 22:38 • (LCSD) R3300269-2 04/04/18 22:59

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Acetone	0.125	0.151	0.145	121	116	11.0-160			4.06	23
Acrylonitrile	0.125	0.135	0.127	108	101	61.0-143			6.16	20
Benzene	0.0250	0.0244	0.0248	97.7	99.4	71.0-124			1.67	20
Bromobenzene	0.0250	0.0238	0.0242	95.1	96.8	78.0-120			1.71	20
Bromodichloromethane	0.0250	0.0261	0.0261	105	104	75.0-120			0.342	20
Bromochloromethane	0.0250	0.0255	0.0258	102	103	80.0-121			1.04	20
Bromoform	0.0250	0.0266	0.0258	106	103	65.0-133			2.97	20
Bromomethane	0.0250	0.0237	0.0238	94.6	95.1	26.0-160			0.522	20
n-Butylbenzene	0.0250	0.0251	0.0256	100	102	73.0-126			1.90	20
sec-Butylbenzene	0.0250	0.0253	0.0259	101	104	75.0-121			2.20	20
tert-Butylbenzene	0.0250	0.0263	0.0263	105	105	74.0-122			0.183	20
Carbon disulfide	0.0250	0.0266	0.0269	106	107	53.0-130			0.971	20
Carbon tetrachloride	0.0250	0.0264	0.0244	106	97.8	66.0-123			7.84	20
Chlorobenzene	0.0250	0.0257	0.0263	103	105	79.0-121			2.26	20
Chlorodibromomethane	0.0250	0.0270	0.0267	108	107	74.0-128			1.18	20
Chloroethane	0.0250	0.0237	0.0236	95.0	94.4	51.0-147			0.601	20
Chloroform	0.0250	0.0249	0.0248	99.5	99.0	73.0-123			0.468	20
Chloromethane	0.0250	0.0261	0.0259	104	104	51.0-138			0.655	20
2-Chlorotoluene	0.0250	0.0243	0.0251	97.4	100	72.0-124			3.09	20
4-Chlorotoluene	0.0250	0.0239	0.0242	95.5	96.7	78.0-120			1.21	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0264	0.0251	106	100	65.0-126			5.03	20
1,2-Dibromoethane	0.0250	0.0260	0.0262	104	105	78.0-122			0.859	20
Dibromomethane	0.0250	0.0266	0.0260	106	104	79.0-120			2.41	20
1,2-Dichlorobenzene	0.0250	0.0256	0.0254	102	102	80.0-120			0.534	20
1,3-Dichlorobenzene	0.0250	0.0248	0.0252	99.3	101	72.0-123			1.56	20
1,4-Dichlorobenzene	0.0250	0.0237	0.0243	94.8	97.2	77.0-120			2.47	20
trans-1,4-Dichloro-2-butene	0.0250	0.0305	0.0288	122	115	68.0-126			5.65	20
Dichlorodifluoromethane	0.0250	0.0263	0.0272	105	109	49.0-155			3.35	20
1,1-Dichloroethane	0.0250	0.0257	0.0257	103	103	70.0-128			0.00931	20
1,2-Dichloroethane	0.0250	0.0247	0.0245	98.8	98.1	69.0-128			0.686	20
1,1-Dichloroethene	0.0250	0.0259	0.0257	104	103	63.0-131			0.809	20
cis-1,2-Dichloroethene	0.0250	0.0252	0.0250	101	100	74.0-123			0.773	20
trans-1,2-Dichloroethene	0.0250	0.0251	0.0260	101	104	72.0-122			3.45	20
1,2-Dichloropropane	0.0250	0.0262	0.0263	105	105	75.0-126			0.685	20
1,1-Dichloropropene	0.0250	0.0246	0.0250	98.3	99.9	72.0-130			1.56	20
1,3-Dichloropropene	0.0250	0.0258	0.0258	103	103	80.0-121			0.0161	20
cis-1,3-Dichloropropene	0.0250	0.0256	0.0261	102	104	80.0-125			2.06	20
trans-1,3-Dichloropropene	0.0250	0.0258	0.0259	103	103	75.0-129			0.108	20
2,2-Dichloropropane	0.0250	0.0247	0.0242	98.9	96.6	60.0-129			2.29	20
Di-isopropyl ether	0.0250	0.0258	0.0250	103	100	62.0-133			3.09	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3300269-1 04/04/18 22:38 • (LCSD) R3300269-2 04/04/18 22:59

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	mg/kg	mg/kg	mg/kg	%	%	%			%	%
Ethylbenzene	0.0250	0.0265	0.0270	106	108	77.0-120			1.75	20
Hexachloro-1,3-butadiene	0.0250	0.0281	0.0288	112	115	68.0-128			2.38	20
2-Hexanone	0.125	0.153	0.147	123	118	61.0-143			3.78	20
n-Hexane	0.0250	0.0259	0.0271	104	109	57.0-125			4.76	20
Iodomethane	0.125	0.132	0.133	105	107	67.0-132			1.12	20
Isopropylbenzene	0.0250	0.0255	0.0258	102	103	75.0-120			1.14	20
p-Isopropyltoluene	0.0250	0.0253	0.0259	101	103	74.0-125			2.25	20
2-Butanone (MEK)	0.125	0.150	0.142	120	113	37.0-159			5.39	20
Methylene Chloride	0.0250	0.0254	0.0250	102	100	67.0-123			1.59	20
4-Methyl-2-pentanone (MIBK)	0.125	0.143	0.137	115	110	60.0-144			4.36	20
Methyl tert-butyl ether	0.0250	0.0262	0.0253	105	101	66.0-125			3.54	20
Naphthalene	0.0250	0.0260	0.0257	104	103	64.0-125			1.19	20
n-Propylbenzene	0.0250	0.0248	0.0250	99.0	99.9	78.0-120			0.829	20
Styrene	0.0250	0.0269	0.0272	108	109	78.0-124			1.06	20
1,1,1,2-Tetrachloroethane	0.0250	0.0269	0.0273	108	109	74.0-124			1.48	20
1,1,2,2-Tetrachloroethane	0.0250	0.0240	0.0239	95.9	95.6	73.0-120			0.383	20
Tetrachloroethene	0.0250	0.0262	0.0272	105	109	70.0-127			3.92	20
Toluene	0.0250	0.0249	0.0258	99.5	103	77.0-120			3.60	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0259	0.0259	104	104	64.0-135			0.0447	20
1,2,3-Trichlorobenzene	0.0250	0.0262	0.0266	105	106	68.0-126			1.48	20
1,2,4-Trichlorobenzene	0.0250	0.0249	0.0253	99.8	101	70.0-127			1.48	20
1,1,1-Trichloroethane	0.0250	0.0256	0.0255	102	102	69.0-125			0.400	20
1,1,2-Trichloroethane	0.0250	0.0262	0.0251	105	100	78.0-120			4.11	20
Trichloroethene	0.0250	0.0265	0.0269	106	108	79.0-120			1.54	20
Trichlorofluoromethane	0.0250	0.0261	0.0264	104	105	59.0-136			1.17	20
1,2,3-Trichloropropane	0.0250	0.0245	0.0241	98.2	96.5	73.0-124			1.73	20
1,2,3-Trimethylbenzene	0.0250	0.0250	0.0253	100	101	76.0-120			0.910	20
1,2,4-Trimethylbenzene	0.0250	0.0249	0.0255	99.5	102	75.0-120			2.65	20
1,3,5-Trimethylbenzene	0.0250	0.0250	0.0258	100	103	75.0-120			2.92	20
Vinyl acetate	0.125	0.123	0.120	98.2	96.1	58.0-156			2.13	20
Vinyl chloride	0.0250	0.0280	0.0280	112	112	63.0-134			0.128	20
Xylenes, Total	0.0750	0.0800	0.0820	107	109	77.0-120			2.47	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										
	92.3				91.8	64.0-132				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

L982616-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L982619-04 04/05/18 07:30 • (MS) R3300269-4 04/05/18 07:51 • (MSD) R3300269-5 04/05/18 08:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	0.146	U	0.0915	0.0916	73.2	73.3	1	10.0-160			0.0535	36
Acrylonitrile	0.146	U	0.125	0.123	100	98.7	1	14.0-160			1.41	33
Benzene	0.0291	U	0.0211	0.0213	84.4	85.4	1	13.0-146			1.15	27
Bromobenzene	0.0291	U	0.0165	0.0169	66.1	67.7	1	10.0-149			2.39	33
Bromodichloromethane	0.0291	U	0.0216	0.0218	86.3	87.4	1	15.0-142			1.23	28
Bromochloromethane	0.0291	U	0.0214	0.0215	85.8	86.2	1	24.0-146			0.495	27
Bromoform	0.0291	U	0.0217	0.0212	86.6	84.9	1	10.0-147			2.04	31
Bromomethane	0.0291	U	0.0208	0.0203	83.4	81.1	1	10.0-160			2.77	32
n-Butylbenzene	0.0291	U	0.0144	0.0148	57.6	59.3	1	10.0-154			2.83	37
sec-Butylbenzene	0.0291	U	0.0167	0.0174	66.7	69.6	1	10.0-151			4.30	36
tert-Butylbenzene	0.0291	U	0.0185	0.0187	74.0	75.0	1	10.0-152			1.25	35
Carbon disulfide	0.0291	U	0.0218	0.0214	87.0	85.6	1	10.0-141			1.69	30
Carbon tetrachloride	0.0291	U	0.0225	0.0224	90.1	89.7	1	13.0-140			0.457	30
Chlorobenzene	0.0291	U	0.0186	0.0191	74.5	76.4	1	10.0-149			2.45	31
Chlorodibromomethane	0.0291	U	0.0213	0.0223	85.4	89.0	1	12.0-147			4.18	29
Chloroethane	0.0291	U	0.0217	0.0209	86.9	83.5	1	10.0-159			3.99	33
Chloroform	0.0291	U	0.0213	0.0213	85.0	85.0	1	18.0-148			0.00339	28
Chloromethane	0.0291	U	0.0237	0.0228	95.0	91.0	1	10.0-146			4.24	29
2-Chlorotoluene	0.0291	U	0.0166	0.0174	66.6	69.5	1	10.0-151			4.28	35
4-Chlorotoluene	0.0291	U	0.0151	0.0159	60.4	63.5	1	10.0-150			5.01	35
1,2-Dibromo-3-Chloropropane	0.0291	U	0.0220	0.0230	88.0	91.9	1	10.0-149			4.44	34
1,2-Dibromoethane	0.0291	U	0.0217	0.0215	86.8	86.2	1	14.0-145			0.781	28
Dibromomethane	0.0291	U	0.0222	0.0229	88.9	91.6	1	18.0-144			2.97	27
1,2-Dichlorobenzene	0.0291	U	0.0148	0.0156	59.4	62.5	1	10.0-153			5.19	34
1,3-Dichlorobenzene	0.0291	U	0.0145	0.0152	58.1	61.0	1	10.0-150			4.83	35
1,4-Dichlorobenzene	0.0291	U	0.0136	0.0145	54.4	57.9	1	10.0-148			6.20	34
trans-1,4-Dichloro-2-butene	0.0291	U	0.0250	0.0246	99.9	98.3	1	10.0-160			1.60	40
Dichlorodifluoromethane	0.0291	U	0.0252	0.0239	101	95.4	1	10.0-160			5.60	30
1,1-Dichloroethane	0.0291	U	0.0226	0.0218	90.2	87.4	1	19.0-148			3.18	28
1,2-Dichloroethane	0.0291	U	0.0219	0.0216	87.4	86.3	1	17.0-147			1.32	27
1,1-Dichloroethene	0.0291	0.000964	0.0222	0.0217	84.8	82.9	1	10.0-150			2.13	31
cis-1,2-Dichloroethene	0.0291	0.122	0.0577	0.0478	0.000	0.000	1	16.0-145	Y	Y	18.8	28
trans-1,2-Dichloroethene	0.0291	0.000532	0.0219	0.0212	85.4	82.7	1	11.0-142			3.14	29
1,2-Dichloropropane	0.0291	U	0.0215	0.0222	86.1	88.8	1	17.0-148			3.04	28
1,1-Dichloropropene	0.0291	U	0.0208	0.0209	83.3	83.5	1	10.0-150			0.302	30
1,3-Dichloropropene	0.0291	U	0.0210	0.0212	83.8	84.7	1	16.0-148			1.10	27
cis-1,3-Dichloropropene	0.0291	U	0.0192	0.0198	76.6	79.2	1	13.0-150			3.32	28
trans-1,3-Dichloropropene	0.0291	U	0.0228	0.0218	91.2	87.2	1	10.0-152			4.49	29
2,2-Dichloropropane	0.0291	U	0.0209	0.0200	83.8	80.2	1	16.0-143			4.41	30
Di-isopropyl ether	0.0291	U	0.0218	0.0221	87.2	88.4	1	16.0-149			1.36	28

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.05.304

SDG:

L982616

DATE/TIME:

04/10/18 16:47

PAGE:

36 of 40

L982619-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L982619-04 04/05/18 07:30 • (MS) R3300269-4 04/05/18 07:51 • (MSD) R3300269-5 04/05/18 08:12

Analyte	Spike Amount mg/kg	Original Result mg/kg	MS Result mg/kg	MSD Result mg/kg	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0291	U	0.0192	0.0199	76.7	79.6	1	10.0-147			3.79	31
Hexachloro-1,3-butadiene	0.0291	U	0.0146	0.0148	58.3	59.4	1	10.0-154			1.84	40
2-Hexanone	0.146	U	0.127	0.126	102	101	1	12.0-158			0.586	30
n-Hexane	0.0291	U	0.0204	0.0197	81.5	78.7	1	10.0-140			3.51	34
Iodomethane	0.146	U	0.110	0.110	88.2	87.7	1	10.0-157			0.624	34
Isopropylbenzene	0.0291	U	0.0185	0.0190	73.8	75.8	1	10.0-147			2.68	33
p-Isopropyltoluene	0.0291	U	0.0162	0.0167	64.9	66.8	1	10.0-156			2.97	37
2-Butanone (MEK)	0.146	U	0.126	0.122	101	97.5	1	10.0-160			3.56	33
Methylene Chloride	0.0291	U	0.0212	0.0215	84.7	85.9	1	16.0-139			1.41	29
4-Methyl-2-pentanone (MIBK)	0.146	U	0.137	0.139	110	111	1	12.0-160			1.32	32
Methyl tert-butyl ether	0.0291	U	0.0235	0.0234	94.0	93.6	1	21.0-145			0.448	29
Naphthalene	0.0291	U	0.0131	0.0148	52.4	59.3	1	10.0-153			12.3	36
n-Propylbenzene	0.0291	U	0.0169	0.0173	67.5	69.1	1	10.0-151			2.38	34
Styrene	0.0291	U	0.0174	0.0181	69.7	72.3	1	10.0-155			3.66	34
1,1,1,2-Tetrachloroethane	0.0291	U	0.0207	0.0210	82.7	84.2	1	10.0-147			1.76	30
1,1,2,2-Tetrachloroethane	0.0291	U	0.0216	0.0216	86.5	86.5	1	10.0-155			0.00245	31
Tetrachloroethene	0.0291	U	1.23	0.763	0.000	0.000	1	10.0-144	E V	E J 3 V	46.8	32
Toluene	0.0291	U	0.0192	0.0196	76.7	78.2	1	10.0-144			1.99	28
1,1,2-Trichlorotrifluoroethane	0.0291	U	0.0226	0.0219	90.4	87.7	1	10.0-153			2.96	33
1,2,3-Trichlorobenzene	0.0291	U	0.00978	0.0114	39.1	45.5	1	10.0-153			15.0	40
1,2,4-Trichlorobenzene	0.0291	U	0.00917	0.0105	36.7	42.0	1	10.0-156			13.5	40
1,1,1-Trichloroethane	0.0291	U	0.0226	0.0221	90.2	88.4	1	18.0-145			2.04	29
1,1,2-Trichloroethane	0.0291	U	0.0207	0.0213	82.9	85.2	1	12.0-151			2.75	28
Trichloroethene	0.0291	0.0614	0.0457	0.0387	0.000	0.000	1	11.0-148	J 6	J 6	16.7	29
Trichlorofluoromethane	0.0291	U	0.0231	0.0227	92.5	90.7	1	10.0-157			1.94	34
1,2,3-Trichloropropane	0.0291	U	0.0220	0.0220	87.9	88.1	1	10.0-154			0.211	32
1,2,3-Trimethylbenzene	0.0291	U	0.0165	0.0174	66.1	69.7	1	10.0-150			5.40	33
1,2,4-Trimethylbenzene	0.0291	U	0.0161	0.0168	64.4	67.3	1	10.0-151			4.34	34
1,3,5-Trimethylbenzene	0.0291	U	0.0168	0.0176	67.2	70.5	1	10.0-150			4.84	33
Vinyl acetate	0.146	U	0.0629	0.0587	50.3	47.0	1	10.0-160			6.78	40
Vinyl chloride	0.0291	0.0230	0.0314	0.0285	33.4	21.9	1	10.0-150			9.57	29
Xylenes, Total	0.0873	U	0.0571	0.0596	76.1	79.5	1	10.0-150			4.28	31
<i>(S) Toluene-d8</i>												
<i>(S) Dibromofluoromethane</i>												
<i>(S) 4-Bromofluorobenzene</i>												
			93.2			90.7		64.0-132				

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
J6	The sample matrix interfered with the ability to make any accurate determination; spike value is low.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

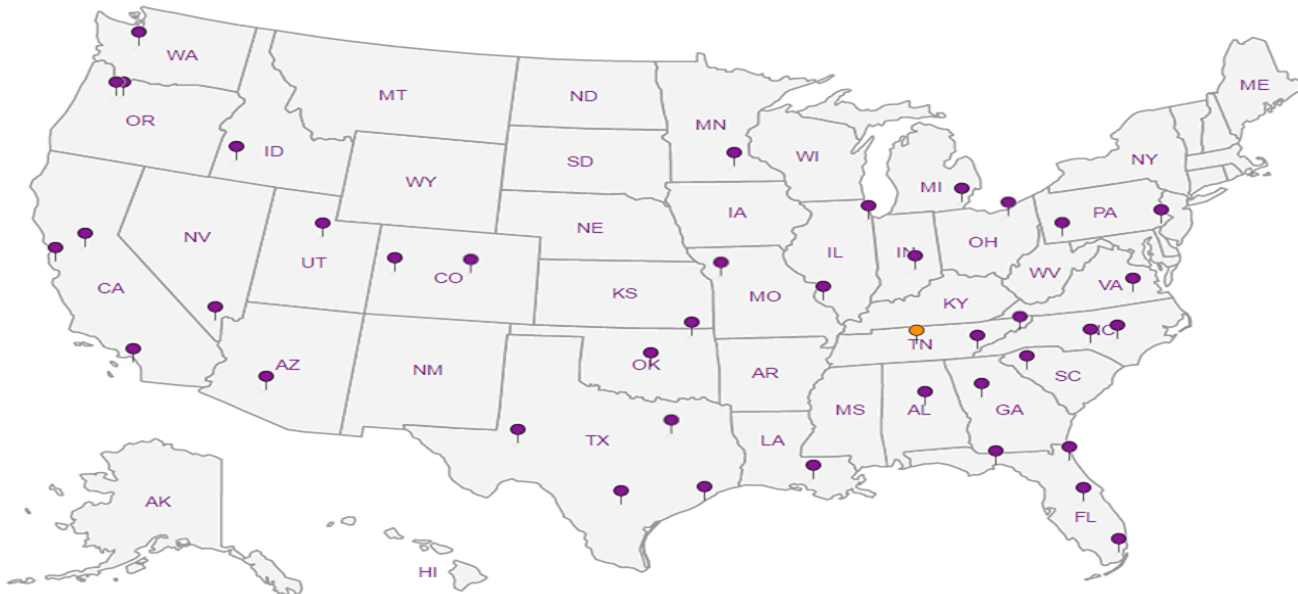
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹Drinking Water ²Underground Storage Tanks ³Aquatic Toxicity ⁴Chemical/Microbiological ⁵Mold ⁶Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: bhaldemann@pesenv.com

Report to: **Bill Haldeaman / Brian O'Neal**
bhaldemann@pesenv.com

Project: **American Linen Project**

City/State: **Seattle WA**

Lab Project #: **PESENVSWA-ALP**

Client Project #: **1413.001.02.802**

Phone: **206-529-3980**
Fax: **206-529-3985**

P.O. #

Collected by (print): **Patricia McDaniel**
Collected by (signature): *[Signature]*
Immediately Packed on Ice: **X**

Rush? (Lab MUST Be Notified)

Quote #

Same Day
Next Day
Two Day
Three Day

Five Day (Bad Only)
10 Day (Rad Only)

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-147-10	Grab	SS	10	4-2-18	0945	5
MW-147-20			20		1005	5
MW-147-30			30		1020	5
MW-147-40			40		1035	5
MW-147-50			50		1100	5
MW-147-60			60		1120	5
MW-147-70			70		1145	5
MW-147-80			80		1209	5
MW-921-10		SS	10	4-2-18	1400	5

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-147-10	Grab	SS	10	4-2-18	0945	5
MW-147-20			20		1005	5
MW-147-30			30		1020	5
MW-147-40			40		1035	5
MW-147-50			50		1100	5
MW-147-60			60		1120	5
MW-147-70			70		1145	5
MW-147-80			80		1209	5
MW-921-10		SS	10	4-2-18	1400	5

V8260C VOCs 40ml/NaHSO4/Syr/MeOH
dry wt/voc screen 2ozClr-NoPres

Analysis / Container / Preservative	Pres. Chk
V8260C VOCs 40ml/NaHSO4/Syr/MeOH	
dry wt/voc screen 2ozClr-NoPres	

pH _____ Temp _____
Flow _____ Other _____

Tip Blank Received: **X**
Temp: 5.6°C
Date: 4/3/18
Time: 0845

Tracking # 41963859
Received by: [Signature]
Received per lab by: [Signature]
Date: 4-2-18
Time: 1500

Remarks: blank
Matrix: **SS - Soil**
* Matrix: **AIR - Air**
GW - Groundwater **F - Filter**
WW - Wastewater **B - Biossary**
DW - Drinking Water
OT - Other

Relinquished by: [Signature]
Relinquished by: [Signature]
Date: 4-2-18
Time: 1500

Received by: [Signature]
Received per lab by: [Signature]
Date: 4/3/18
Time: 0845

Hold: 5
Condition: MCF / OK

IESC
12055 Lubbock Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5839
Fax: 615-758-5899



L# 98266
H012
Accrnum: **PESENVSWA**
Template: **T130006**
Prelogin: **P638152**
TSR: **110 - Brian Ford**
PB:

Shipped Via: _____
Remarks: _____
Sample # (lab only)

Sample Receipt Checklist
COC Seal Present/Intact: Y
COC Signed/Accurate: Y
Bottles arrive Intact: Y
Correct bottles used: Y
Sufficient volume sent: Y
IL Available: Y
NQA Zero Headpace: Y
Preservation Correct/Checked: Y



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.1		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0111	U	0.0109	0.0543	1	04/05/2018 03:16	WG1093771
Acrylonitrile	U		0.00194	0.0109	1	04/05/2018 03:16	WG1093771
Benzene	0.000566	J	0.000293	0.00109	1	04/05/2018 03:16	WG1093771
Bromobenzene	U		0.000308	0.00109	1	04/05/2018 03:16	WG1093771
Bromodichloromethane	U		0.000276	0.00109	1	04/05/2018 03:16	WG1093771
Bromochloromethane	U		0.000424	0.00543	1	04/05/2018 03:16	WG1093771
Bromoform	U		0.000460	0.00109	1	04/05/2018 03:16	WG1093771
Bromomethane	U		0.00146	0.00543	1	04/05/2018 03:16	WG1093771
n-Butylbenzene	U		0.000280	0.00109	1	04/05/2018 03:16	WG1093771
sec-Butylbenzene	U		0.000218	0.00109	1	04/05/2018 03:16	WG1093771
tert-Butylbenzene	U		0.000224	0.00109	1	04/05/2018 03:16	WG1093771
Carbon disulfide	0.000653	J	0.000240	0.00109	1	04/05/2018 03:16	WG1093771
Carbon tetrachloride	U		0.000356	0.00109	1	04/05/2018 03:16	WG1093771
Chlorobenzene	U		0.000230	0.00109	1	04/05/2018 03:16	WG1093771
Chlorodibromomethane	U		0.000405	0.00109	1	04/05/2018 03:16	WG1093771
Chloroethane	U		0.00103	0.00543	1	04/05/2018 03:16	WG1093771
Chloroform	U		0.000249	0.00543	1	04/05/2018 03:16	WG1093771
Chloromethane	U		0.000407	0.00271	1	04/05/2018 03:16	WG1093771
2-Chlorotoluene	U		0.000327	0.00109	1	04/05/2018 03:16	WG1093771
4-Chlorotoluene	U		0.000261	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00543	1	04/05/2018 03:16	WG1093771
1,2-Dibromoethane	U		0.000372	0.00109	1	04/05/2018 03:16	WG1093771
Dibromomethane	U		0.000415	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dichlorobenzene	U		0.000331	0.00109	1	04/05/2018 03:16	WG1093771
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/05/2018 03:16	WG1093771
1,4-Dichlorobenzene	U		0.000245	0.00109	1	04/05/2018 03:16	WG1093771
Dichlorodifluoromethane	U		0.000774	0.00543	1	04/05/2018 03:16	WG1093771
1,1-Dichloroethane	U		0.000216	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dichloroethane	U		0.000288	0.00109	1	04/05/2018 03:16	WG1093771
1,1-Dichloroethene	U		0.000329	0.00109	1	04/05/2018 03:16	WG1093771
cis-1,2-Dichloroethene	U		0.000255	0.00109	1	04/05/2018 03:16	WG1093771
trans-1,2-Dichloroethene	U		0.000287	0.00109	1	04/05/2018 03:16	WG1093771
1,2-Dichloropropane	U		0.000389	0.00109	1	04/05/2018 03:16	WG1093771
1,1-Dichloropropene	U		0.000344	0.00109	1	04/05/2018 03:16	WG1093771
1,3-Dichloropropane	U		0.000225	0.00109	1	04/05/2018 03:16	WG1093771
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/05/2018 03:16	WG1093771
trans-1,3-Dichloropropene	U		0.000290	0.00109	1	04/05/2018 03:16	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000845	0.00271	1	04/05/2018 03:16	WG1093771
2,2-Dichloropropane	U		0.000303	0.00109	1	04/05/2018 03:16	WG1093771
Di-isopropyl ether	U		0.000269	0.00109	1	04/05/2018 03:16	WG1093771
Ethylbenzene	U		0.000323	0.00109	1	04/05/2018 03:16	WG1093771
Hexachloro-1,3-butadiene	U		0.000371	0.00109	1	04/05/2018 03:16	WG1093771
2-Hexanone	U		0.00149	0.0109	1	04/05/2018 03:16	WG1093771
n-Hexane	U		0.000315	0.0109	1	04/05/2018 03:16	WG1093771
Iodomethane	U		0.00275	0.0109	1	04/05/2018 03:16	WG1093771
Isopropylbenzene	U		0.000264	0.00109	1	04/05/2018 03:16	WG1093771
p-Isopropyltoluene	U		0.000222	0.00109	1	04/05/2018 03:16	WG1093771
2-Butanone (MEK)	U		0.00508	0.0109	1	04/05/2018 03:16	WG1093771
Methylene Chloride	U		0.00109	0.00543	1	04/05/2018 03:16	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0109	1	04/05/2018 03:16	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 09:45

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00109	1	04/05/2018 03:16	WG1093771
Naphthalene	U		0.00109	0.00543	1	04/05/2018 03:16	WG1093771
n-Propylbenzene	U		0.000224	0.00109	1	04/05/2018 03:16	WG1093771
Styrene	U		0.000254	0.00109	1	04/05/2018 03:16	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/05/2018 03:16	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000396	0.00109	1	04/05/2018 03:16	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00109	1	04/05/2018 03:16	WG1093771
Tetrachloroethene	0.000697	J	0.000300	0.00109	1	04/05/2018 03:16	WG1093771
Toluene	U		0.000471	0.00543	1	04/05/2018 03:16	WG1093771
1,2,3-Trichlorobenzene	U		0.000332	0.00109	1	04/05/2018 03:16	WG1093771
1,2,4-Trichlorobenzene	U		0.000421	0.00109	1	04/05/2018 03:16	WG1093771
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/05/2018 03:16	WG1093771
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/05/2018 03:16	WG1093771
Trichloroethene	U		0.000303	0.00109	1	04/05/2018 03:16	WG1093771
Trichlorofluoromethane	U		0.000415	0.00543	1	04/05/2018 03:16	WG1093771
1,2,3-Trichloropropane	U		0.000805	0.00271	1	04/05/2018 03:16	WG1093771
1,2,4-Trimethylbenzene	U		0.000229	0.00109	1	04/05/2018 03:16	WG1093771
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/05/2018 03:16	WG1093771
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/05/2018 03:16	WG1093771
Vinyl acetate	U		0.00260	0.0109	1	04/05/2018 03:16	WG1093771
Vinyl chloride	U		0.000316	0.00109	1	04/05/2018 03:16	WG1093771
Xylenes, Total	U		0.000758	0.00326	1	04/05/2018 03:16	WG1093771
(S) Toluene-d8	102			80.0-120		04/05/2018 03:16	WG1093771
(S) Dibromofluoromethane	100			74.0-131		04/05/2018 03:16	WG1093771
(S) 4-Bromofluorobenzene	102			64.0-132		04/05/2018 03:16	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 10:05

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.5		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0108	0.0540	1	04/05/2018 03:37	WG1093771
Acrylonitrile	U		0.00193	0.0108	1	04/05/2018 03:37	WG1093771
Benzene	U		0.000292	0.00108	1	04/05/2018 03:37	WG1093771
Bromobenzene	U		0.000307	0.00108	1	04/05/2018 03:37	WG1093771
Bromodichloromethane	U		0.000275	0.00108	1	04/05/2018 03:37	WG1093771
Bromochloromethane	U		0.000421	0.00540	1	04/05/2018 03:37	WG1093771
Bromoform	U		0.000458	0.00108	1	04/05/2018 03:37	WG1093771
Bromomethane	U		0.00145	0.00540	1	04/05/2018 03:37	WG1093771
n-Butylbenzene	U		0.000279	0.00108	1	04/05/2018 03:37	WG1093771
sec-Butylbenzene	U		0.000217	0.00108	1	04/05/2018 03:37	WG1093771
tert-Butylbenzene	U		0.000223	0.00108	1	04/05/2018 03:37	WG1093771
Carbon disulfide	0.00140		0.000239	0.00108	1	04/05/2018 03:37	WG1093771
Carbon tetrachloride	U		0.000354	0.00108	1	04/05/2018 03:37	WG1093771
Chlorobenzene	U		0.000229	0.00108	1	04/05/2018 03:37	WG1093771
Chlorodibromomethane	U		0.000403	0.00108	1	04/05/2018 03:37	WG1093771
Chloroethane	U		0.00102	0.00540	1	04/05/2018 03:37	WG1093771
Chloroform	U		0.000247	0.00540	1	04/05/2018 03:37	WG1093771
Chloromethane	U		0.000405	0.00270	1	04/05/2018 03:37	WG1093771
2-Chlorotoluene	U		0.000325	0.00108	1	04/05/2018 03:37	WG1093771
4-Chlorotoluene	U		0.000259	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00540	1	04/05/2018 03:37	WG1093771
1,2-Dibromoethane	U		0.000371	0.00108	1	04/05/2018 03:37	WG1093771
Dibromomethane	U		0.000413	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dichlorobenzene	U		0.000330	0.00108	1	04/05/2018 03:37	WG1093771
1,3-Dichlorobenzene	U		0.000258	0.00108	1	04/05/2018 03:37	WG1093771
1,4-Dichlorobenzene	U		0.000244	0.00108	1	04/05/2018 03:37	WG1093771
Dichlorodifluoromethane	U		0.000771	0.00540	1	04/05/2018 03:37	WG1093771
1,1-Dichloroethane	U		0.000215	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dichloroethane	U		0.000286	0.00108	1	04/05/2018 03:37	WG1093771
1,1-Dichloroethene	U		0.000327	0.00108	1	04/05/2018 03:37	WG1093771
cis-1,2-Dichloroethene	U		0.000254	0.00108	1	04/05/2018 03:37	WG1093771
trans-1,2-Dichloroethene	U		0.000285	0.00108	1	04/05/2018 03:37	WG1093771
1,2-Dichloropropane	U		0.000387	0.00108	1	04/05/2018 03:37	WG1093771
1,1-Dichloropropene	U		0.000343	0.00108	1	04/05/2018 03:37	WG1093771
1,3-Dichloropropane	U		0.000224	0.00108	1	04/05/2018 03:37	WG1093771
cis-1,3-Dichloropropene	U		0.000283	0.00108	1	04/05/2018 03:37	WG1093771
trans-1,3-Dichloropropene	U		0.000289	0.00108	1	04/05/2018 03:37	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000841	0.00270	1	04/05/2018 03:37	WG1093771
2,2-Dichloropropane	U		0.000302	0.00108	1	04/05/2018 03:37	WG1093771
Di-isopropyl ether	U		0.000268	0.00108	1	04/05/2018 03:37	WG1093771
Ethylbenzene	U		0.000321	0.00108	1	04/05/2018 03:37	WG1093771
Hexachloro-1,3-butadiene	U		0.000370	0.00108	1	04/05/2018 03:37	WG1093771
2-Hexanone	U		0.00148	0.0108	1	04/05/2018 03:37	WG1093771
n-Hexane	U		0.000313	0.0108	1	04/05/2018 03:37	WG1093771
Iodomethane	U		0.00273	0.0108	1	04/05/2018 03:37	WG1093771
Isopropylbenzene	U		0.000263	0.00108	1	04/05/2018 03:37	WG1093771
p-Isopropyltoluene	U		0.000220	0.00108	1	04/05/2018 03:37	WG1093771
2-Butanone (MEK)	U		0.00506	0.0108	1	04/05/2018 03:37	WG1093771
Methylene Chloride	U		0.00108	0.00540	1	04/05/2018 03:37	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00203	0.0108	1	04/05/2018 03:37	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 10:05

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000229	0.00108	1	04/05/2018 03:37	WG1093771
Naphthalene	U		0.00108	0.00540	1	04/05/2018 03:37	WG1093771
n-Propylbenzene	U		0.000223	0.00108	1	04/05/2018 03:37	WG1093771
Styrene	U		0.000253	0.00108	1	04/05/2018 03:37	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000285	0.00108	1	04/05/2018 03:37	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000394	0.00108	1	04/05/2018 03:37	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000394	0.00108	1	04/05/2018 03:37	WG1093771
Tetrachloroethene	0.000759	J	0.000298	0.00108	1	04/05/2018 03:37	WG1093771
Toluene	U		0.000469	0.00540	1	04/05/2018 03:37	WG1093771
1,2,3-Trichlorobenzene	U		0.000331	0.00108	1	04/05/2018 03:37	WG1093771
1,2,4-Trichlorobenzene	U		0.000419	0.00108	1	04/05/2018 03:37	WG1093771
1,1,1-Trichloroethane	U		0.000309	0.00108	1	04/05/2018 03:37	WG1093771
1,1,2-Trichloroethane	U		0.000299	0.00108	1	04/05/2018 03:37	WG1093771
Trichloroethene	U		0.000302	0.00108	1	04/05/2018 03:37	WG1093771
Trichlorofluoromethane	U		0.000413	0.00540	1	04/05/2018 03:37	WG1093771
1,2,3-Trichloropropane	U		0.000801	0.00270	1	04/05/2018 03:37	WG1093771
1,2,4-Trimethylbenzene	U		0.000228	0.00108	1	04/05/2018 03:37	WG1093771
1,2,3-Trimethylbenzene	U		0.000310	0.00108	1	04/05/2018 03:37	WG1093771
1,3,5-Trimethylbenzene	U		0.000287	0.00108	1	04/05/2018 03:37	WG1093771
Vinyl acetate	U		0.00258	0.0108	1	04/05/2018 03:37	WG1093771
Vinyl chloride	U		0.000314	0.00108	1	04/05/2018 03:37	WG1093771
Xylenes, Total	U		0.000754	0.00324	1	04/05/2018 03:37	WG1093771
(S) Toluene-d8	101			80.0-120		04/05/2018 03:37	WG1093771
(S) Dibromofluoromethane	101			74.0-131		04/05/2018 03:37	WG1093771
(S) 4-Bromofluorobenzene	99.1			64.0-132		04/05/2018 03:37	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 10:20

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.6		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0558	1	04/05/2018 03:58	WG1093771
Acrylonitrile	U		0.00200	0.0112	1	04/05/2018 03:58	WG1093771
Benzene	U		0.000301	0.00112	1	04/05/2018 03:58	WG1093771
Bromobenzene	U		0.000317	0.00112	1	04/05/2018 03:58	WG1093771
Bromodichloromethane	U		0.000284	0.00112	1	04/05/2018 03:58	WG1093771
Bromochloromethane	U		0.000435	0.00558	1	04/05/2018 03:58	WG1093771
Bromoform	U		0.000473	0.00112	1	04/05/2018 03:58	WG1093771
Bromomethane	U		0.00150	0.00558	1	04/05/2018 03:58	WG1093771
n-Butylbenzene	U		0.000288	0.00112	1	04/05/2018 03:58	WG1093771
sec-Butylbenzene	U		0.000224	0.00112	1	04/05/2018 03:58	WG1093771
tert-Butylbenzene	U		0.000230	0.00112	1	04/05/2018 03:58	WG1093771
Carbon disulfide	U		0.000247	0.00112	1	04/05/2018 03:58	WG1093771
Carbon tetrachloride	U		0.000366	0.00112	1	04/05/2018 03:58	WG1093771
Chlorobenzene	U		0.000237	0.00112	1	04/05/2018 03:58	WG1093771
Chlorodibromomethane	U		0.000416	0.00112	1	04/05/2018 03:58	WG1093771
Chloroethane	U		0.00106	0.00558	1	04/05/2018 03:58	WG1093771
Chloroform	U		0.000256	0.00558	1	04/05/2018 03:58	WG1093771
Chloromethane	U		0.000419	0.00279	1	04/05/2018 03:58	WG1093771
2-Chlorotoluene	U		0.000336	0.00112	1	04/05/2018 03:58	WG1093771
4-Chlorotoluene	U		0.000268	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00558	1	04/05/2018 03:58	WG1093771
1,2-Dibromoethane	U		0.000383	0.00112	1	04/05/2018 03:58	WG1093771
Dibromomethane	U		0.000427	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dichlorobenzene	U		0.000341	0.00112	1	04/05/2018 03:58	WG1093771
1,3-Dichlorobenzene	U		0.000267	0.00112	1	04/05/2018 03:58	WG1093771
1,4-Dichlorobenzene	U		0.000252	0.00112	1	04/05/2018 03:58	WG1093771
Dichlorodifluoromethane	U		0.000796	0.00558	1	04/05/2018 03:58	WG1093771
1,1-Dichloroethane	U		0.000222	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dichloroethane	U		0.000296	0.00112	1	04/05/2018 03:58	WG1093771
1,1-Dichloroethene	U		0.000338	0.00112	1	04/05/2018 03:58	WG1093771
cis-1,2-Dichloroethene	0.00239		0.000262	0.00112	1	04/05/2018 03:58	WG1093771
trans-1,2-Dichloroethene	U		0.000295	0.00112	1	04/05/2018 03:58	WG1093771
1,2-Dichloropropane	U		0.000400	0.00112	1	04/05/2018 03:58	WG1093771
1,1-Dichloropropene	U		0.000354	0.00112	1	04/05/2018 03:58	WG1093771
1,3-Dichloropropane	U		0.000231	0.00112	1	04/05/2018 03:58	WG1093771
cis-1,3-Dichloropropene	U		0.000293	0.00112	1	04/05/2018 03:58	WG1093771
trans-1,3-Dichloropropene	U		0.000298	0.00112	1	04/05/2018 03:58	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000869	0.00279	1	04/05/2018 03:58	WG1093771
2,2-Dichloropropane	U		0.000312	0.00112	1	04/05/2018 03:58	WG1093771
Di-isopropyl ether	U		0.000277	0.00112	1	04/05/2018 03:58	WG1093771
Ethylbenzene	U		0.000332	0.00112	1	04/05/2018 03:58	WG1093771
Hexachloro-1,3-butadiene	U		0.000382	0.00112	1	04/05/2018 03:58	WG1093771
2-Hexanone	U		0.00153	0.0112	1	04/05/2018 03:58	WG1093771
n-Hexane	U		0.000324	0.0112	1	04/05/2018 03:58	WG1093771
Iodomethane	U		0.00282	0.0112	1	04/05/2018 03:58	WG1093771
Isopropylbenzene	U		0.000271	0.00112	1	04/05/2018 03:58	WG1093771
p-Isopropyltoluene	U		0.000228	0.00112	1	04/05/2018 03:58	WG1093771
2-Butanone (MEK)	U		0.00523	0.0112	1	04/05/2018 03:58	WG1093771
Methylene Chloride	U		0.00112	0.00558	1	04/05/2018 03:58	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	04/05/2018 03:58	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 10:20

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/05/2018 03:58	WG1093771
Naphthalene	U		0.00112	0.00558	1	04/05/2018 03:58	WG1093771
n-Propylbenzene	U		0.000230	0.00112	1	04/05/2018 03:58	WG1093771
Styrene	U		0.000261	0.00112	1	04/05/2018 03:58	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/05/2018 03:58	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000408	0.00112	1	04/05/2018 03:58	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000408	0.00112	1	04/05/2018 03:58	WG1093771
Tetrachloroethene	0.0238		0.000308	0.00112	1	04/05/2018 03:58	WG1093771
Toluene	U		0.000485	0.00558	1	04/05/2018 03:58	WG1093771
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/05/2018 03:58	WG1093771
1,2,4-Trichlorobenzene	U		0.000433	0.00112	1	04/05/2018 03:58	WG1093771
1,1,1-Trichloroethane	U		0.000319	0.00112	1	04/05/2018 03:58	WG1093771
1,1,2-Trichloroethane	U		0.000309	0.00112	1	04/05/2018 03:58	WG1093771
Trichloroethene	0.00330		0.000312	0.00112	1	04/05/2018 03:58	WG1093771
Trichlorofluoromethane	U		0.000427	0.00558	1	04/05/2018 03:58	WG1093771
1,2,3-Trichloropropane	U		0.000827	0.00279	1	04/05/2018 03:58	WG1093771
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/05/2018 03:58	WG1093771
1,2,3-Trimethylbenzene	U		0.000320	0.00112	1	04/05/2018 03:58	WG1093771
1,3,5-Trimethylbenzene	U		0.000297	0.00112	1	04/05/2018 03:58	WG1093771
Vinyl acetate	U		0.00267	0.0112	1	04/05/2018 03:58	WG1093771
Vinyl chloride	U		0.000325	0.00112	1	04/05/2018 03:58	WG1093771
Xylenes, Total	U		0.000779	0.00335	1	04/05/2018 03:58	WG1093771
(S) Toluene-d8	100			80.0-120		04/05/2018 03:58	WG1093771
(S) Dibromofluoromethane	104			74.0-131		04/05/2018 03:58	WG1093771
(S) 4-Bromofluorobenzene	98.1			64.0-132		04/05/2018 03:58	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 10:35

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.6		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0113	U J	0.0110	0.0552	1	04/05/2018 04:20	WG1093771
Acrylonitrile	U		0.00198	0.0110	1	04/05/2018 04:20	WG1093771
Benzene	U		0.000298	0.00110	1	04/05/2018 04:20	WG1093771
Bromobenzene	U		0.000313	0.00110	1	04/05/2018 04:20	WG1093771
Bromodichloromethane	U		0.000280	0.00110	1	04/05/2018 04:20	WG1093771
Bromochloromethane	U		0.000430	0.00552	1	04/05/2018 04:20	WG1093771
Bromoform	U		0.000468	0.00110	1	04/05/2018 04:20	WG1093771
Bromomethane	U		0.00148	0.00552	1	04/05/2018 04:20	WG1093771
n-Butylbenzene	U		0.000285	0.00110	1	04/05/2018 04:20	WG1093771
sec-Butylbenzene	U		0.000222	0.00110	1	04/05/2018 04:20	WG1093771
tert-Butylbenzene	U		0.000227	0.00110	1	04/05/2018 04:20	WG1093771
Carbon disulfide	0.000405	J J	0.000244	0.00110	1	04/05/2018 04:20	WG1093771
Carbon tetrachloride	U		0.000362	0.00110	1	04/05/2018 04:20	WG1093771
Chlorobenzene	U		0.000234	0.00110	1	04/05/2018 04:20	WG1093771
Chlorodibromomethane	U		0.000412	0.00110	1	04/05/2018 04:20	WG1093771
Chloroethane	U		0.00104	0.00552	1	04/05/2018 04:20	WG1093771
Chloroform	U		0.000253	0.00552	1	04/05/2018 04:20	WG1093771
Chloromethane	U		0.000414	0.00276	1	04/05/2018 04:20	WG1093771
2-Chlorotoluene	U		0.000332	0.00110	1	04/05/2018 04:20	WG1093771
4-Chlorotoluene	U		0.000265	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00552	1	04/05/2018 04:20	WG1093771
1,2-Dibromoethane	U		0.000378	0.00110	1	04/05/2018 04:20	WG1093771
Dibromomethane	U		0.000421	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dichlorobenzene	U		0.000337	0.00110	1	04/05/2018 04:20	WG1093771
1,3-Dichlorobenzene	U		0.000264	0.00110	1	04/05/2018 04:20	WG1093771
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/05/2018 04:20	WG1093771
Dichlorodifluoromethane	U		0.000787	0.00552	1	04/05/2018 04:20	WG1093771
1,1-Dichloroethane	U		0.000220	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dichloroethane	U		0.000292	0.00110	1	04/05/2018 04:20	WG1093771
1,1-Dichloroethene	U		0.000334	0.00110	1	04/05/2018 04:20	WG1093771
cis-1,2-Dichloroethene	0.00488		0.000259	0.00110	1	04/05/2018 04:20	WG1093771
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	04/05/2018 04:20	WG1093771
1,2-Dichloropropane	U		0.000395	0.00110	1	04/05/2018 04:20	WG1093771
1,1-Dichloropropene	U		0.000350	0.00110	1	04/05/2018 04:20	WG1093771
1,3-Dichloropropane	U		0.000228	0.00110	1	04/05/2018 04:20	WG1093771
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	04/05/2018 04:20	WG1093771
trans-1,3-Dichloropropene	U		0.000295	0.00110	1	04/05/2018 04:20	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000858	0.00276	1	04/05/2018 04:20	WG1093771
2,2-Dichloropropane	U		0.000308	0.00110	1	04/05/2018 04:20	WG1093771
Di-isopropyl ether	U		0.000274	0.00110	1	04/05/2018 04:20	WG1093771
Ethylbenzene	U		0.000328	0.00110	1	04/05/2018 04:20	WG1093771
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	04/05/2018 04:20	WG1093771
2-Hexanone	U		0.00151	0.0110	1	04/05/2018 04:20	WG1093771
n-Hexane	U		0.000320	0.0110	1	04/05/2018 04:20	WG1093771
Iodomethane	U		0.00279	0.0110	1	04/05/2018 04:20	WG1093771
Isopropylbenzene	U		0.000268	0.00110	1	04/05/2018 04:20	WG1093771
p-Isopropyltoluene	U		0.000225	0.00110	1	04/05/2018 04:20	WG1093771
2-Butanone (MEK)	0.00707	J J	0.00516	0.0110	1	04/05/2018 04:20	WG1093771
Methylene Chloride	U		0.00110	0.00552	1	04/05/2018 04:20	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/05/2018 04:20	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 10:35

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	04/05/2018 04:20	WG1093771
Naphthalene	U		0.00110	0.00552	1	04/05/2018 04:20	WG1093771
n-Propylbenzene	U		0.000227	0.00110	1	04/05/2018 04:20	WG1093771
Styrene	U		0.000258	0.00110	1	04/05/2018 04:20	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	04/05/2018 04:20	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	04/05/2018 04:20	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	04/05/2018 04:20	WG1093771
Tetrachloroethene	0.0146		0.000305	0.00110	1	04/05/2018 04:20	WG1093771
Toluene	U		0.000479	0.00552	1	04/05/2018 04:20	WG1093771
1,2,3-Trichlorobenzene	U		0.000338	0.00110	1	04/05/2018 04:20	WG1093771
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	04/05/2018 04:20	WG1093771
1,1,1-Trichloroethane	U		0.000316	0.00110	1	04/05/2018 04:20	WG1093771
1,1,2-Trichloroethane	U		0.000306	0.00110	1	04/05/2018 04:20	WG1093771
Trichloroethene	0.00118		0.000308	0.00110	1	04/05/2018 04:20	WG1093771
Trichlorofluoromethane	U		0.000421	0.00552	1	04/05/2018 04:20	WG1093771
1,2,3-Trichloropropane	U		0.000818	0.00276	1	04/05/2018 04:20	WG1093771
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	04/05/2018 04:20	WG1093771
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	04/05/2018 04:20	WG1093771
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/05/2018 04:20	WG1093771
Vinyl acetate	U		0.00264	0.0110	1	04/05/2018 04:20	WG1093771
Vinyl chloride	0.0615		0.000321	0.00110	1	04/05/2018 04:20	WG1093771
Xylenes, Total	U		0.000770	0.00331	1	04/05/2018 04:20	WG1093771
(S) Toluene-d8	100			80.0-120		04/05/2018 04:20	WG1093771
(S) Dibromofluoromethane	104			74.0-131		04/05/2018 04:20	WG1093771
(S) 4-Bromofluorobenzene	99.5			64.0-132		04/05/2018 04:20	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 11:00

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.3		1	04/07/2018 13:06	WG1094352

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0121	U	0.0111	0.0554	1	04/05/2018 04:41	WG1093771
Acrylonitrile	U		0.00198	0.0111	1	04/05/2018 04:41	WG1093771
Benzene	U		0.000299	0.00111	1	04/05/2018 04:41	WG1093771
Bromobenzene	U		0.000315	0.00111	1	04/05/2018 04:41	WG1093771
Bromodichloromethane	U		0.000281	0.00111	1	04/05/2018 04:41	WG1093771
Bromochloromethane	U		0.000432	0.00554	1	04/05/2018 04:41	WG1093771
Bromoform	U		0.000470	0.00111	1	04/05/2018 04:41	WG1093771
Bromomethane	U		0.00148	0.00554	1	04/05/2018 04:41	WG1093771
n-Butylbenzene	U		0.000286	0.00111	1	04/05/2018 04:41	WG1093771
sec-Butylbenzene	U		0.000223	0.00111	1	04/05/2018 04:41	WG1093771
tert-Butylbenzene	U		0.000228	0.00111	1	04/05/2018 04:41	WG1093771
Carbon disulfide	U		0.000245	0.00111	1	04/05/2018 04:41	WG1093771
Carbon tetrachloride	U		0.000363	0.00111	1	04/05/2018 04:41	WG1093771
Chlorobenzene	U		0.000235	0.00111	1	04/05/2018 04:41	WG1093771
Chlorodibromomethane	U		0.000413	0.00111	1	04/05/2018 04:41	WG1093771
Chloroethane	U		0.00105	0.00554	1	04/05/2018 04:41	WG1093771
Chloroform	U		0.000254	0.00554	1	04/05/2018 04:41	WG1093771
Chloromethane	U		0.000415	0.00277	1	04/05/2018 04:41	WG1093771
2-Chlorotoluene	U		0.000333	0.00111	1	04/05/2018 04:41	WG1093771
4-Chlorotoluene	U		0.000266	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00554	1	04/05/2018 04:41	WG1093771
1,2-Dibromoethane	U		0.000380	0.00111	1	04/05/2018 04:41	WG1093771
Dibromomethane	U		0.000423	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dichlorobenzene	U		0.000338	0.00111	1	04/05/2018 04:41	WG1093771
1,3-Dichlorobenzene	U		0.000265	0.00111	1	04/05/2018 04:41	WG1093771
1,4-Dichlorobenzene	U		0.000250	0.00111	1	04/05/2018 04:41	WG1093771
Dichlorodifluoromethane	U		0.000790	0.00554	1	04/05/2018 04:41	WG1093771
1,1-Dichloroethane	U		0.000220	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dichloroethane	U		0.000294	0.00111	1	04/05/2018 04:41	WG1093771
1,1-Dichloroethene	U		0.000336	0.00111	1	04/05/2018 04:41	WG1093771
cis-1,2-Dichloroethene	0.00432		0.000260	0.00111	1	04/05/2018 04:41	WG1093771
trans-1,2-Dichloroethene	U		0.000292	0.00111	1	04/05/2018 04:41	WG1093771
1,2-Dichloropropane	U		0.000397	0.00111	1	04/05/2018 04:41	WG1093771
1,1-Dichloropropene	U		0.000351	0.00111	1	04/05/2018 04:41	WG1093771
1,3-Dichloropropane	U		0.000229	0.00111	1	04/05/2018 04:41	WG1093771
cis-1,3-Dichloropropene	U		0.000290	0.00111	1	04/05/2018 04:41	WG1093771
trans-1,3-Dichloropropene	U		0.000296	0.00111	1	04/05/2018 04:41	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000862	0.00277	1	04/05/2018 04:41	WG1093771
2,2-Dichloropropane	U		0.000309	0.00111	1	04/05/2018 04:41	WG1093771
Di-isopropyl ether	U		0.000275	0.00111	1	04/05/2018 04:41	WG1093771
Ethylbenzene	U		0.000329	0.00111	1	04/05/2018 04:41	WG1093771
Hexachloro-1,3-butadiene	U		0.000379	0.00111	1	04/05/2018 04:41	WG1093771
2-Hexanone	U		0.00152	0.0111	1	04/05/2018 04:41	WG1093771
n-Hexane	U		0.000321	0.0111	1	04/05/2018 04:41	WG1093771
Iodomethane	U		0.00280	0.0111	1	04/05/2018 04:41	WG1093771
Isopropylbenzene	U		0.000269	0.00111	1	04/05/2018 04:41	WG1093771
p-Isopropyltoluene	U		0.000226	0.00111	1	04/05/2018 04:41	WG1093771
2-Butanone (MEK)	U		0.00518	0.0111	1	04/05/2018 04:41	WG1093771
Methylene Chloride	U		0.00111	0.00554	1	04/05/2018 04:41	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00208	0.0111	1	04/05/2018 04:41	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 11:00

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000235	0.0011	1	04/05/2018 04:41	WG1093771
Naphthalene	U		0.0011	0.00554	1	04/05/2018 04:41	WG1093771
n-Propylbenzene	U		0.000228	0.0011	1	04/05/2018 04:41	WG1093771
Styrene	U		0.000259	0.0011	1	04/05/2018 04:41	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000292	0.0011	1	04/05/2018 04:41	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000404	0.0011	1	04/05/2018 04:41	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000404	0.0011	1	04/05/2018 04:41	WG1093771
Tetrachloroethene	0.00175		0.000306	0.0011	1	04/05/2018 04:41	WG1093771
Toluene	U		0.000481	0.00554	1	04/05/2018 04:41	WG1093771
1,2,3-Trichlorobenzene	U		0.000339	0.0011	1	04/05/2018 04:41	WG1093771
1,2,4-Trichlorobenzene	U		0.000430	0.0011	1	04/05/2018 04:41	WG1093771
1,1,1-Trichloroethane	U		0.000317	0.0011	1	04/05/2018 04:41	WG1093771
1,1,2-Trichloroethane	U		0.000307	0.0011	1	04/05/2018 04:41	WG1093771
Trichloroethene	0.00105	J	0.000309	0.0011	1	04/05/2018 04:41	WG1093771
Trichlorofluoromethane	U		0.000423	0.00554	1	04/05/2018 04:41	WG1093771
1,2,3-Trichloropropane	U		0.000821	0.00277	1	04/05/2018 04:41	WG1093771
1,2,4-Trimethylbenzene	U		0.000234	0.0011	1	04/05/2018 04:41	WG1093771
1,2,3-Trimethylbenzene	U		0.000318	0.0011	1	04/05/2018 04:41	WG1093771
1,3,5-Trimethylbenzene	U		0.000295	0.0011	1	04/05/2018 04:41	WG1093771
Vinyl acetate	U		0.00265	0.011	1	04/05/2018 04:41	WG1093771
Vinyl chloride	0.00322		0.000322	0.0011	1	04/05/2018 04:41	WG1093771
Xylenes, Total	U		0.000773	0.00332	1	04/05/2018 04:41	WG1093771
(S) Toluene-d8	102			80.0-120		04/05/2018 04:41	WG1093771
(S) Dibromofluoromethane	99.1			74.0-131		04/05/2018 04:41	WG1093771
(S) 4-Bromofluorobenzene	105			64.0-132		04/05/2018 04:41	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 11:20

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	93.0		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0145	U	0.0108	0.0538	1	04/05/2018 05:02	WG1093771
Acrylonitrile	U		0.00192	0.0108	1	04/05/2018 05:02	WG1093771
Benzene	U		0.000290	0.00108	1	04/05/2018 05:02	WG1093771
Bromobenzene	U		0.000305	0.00108	1	04/05/2018 05:02	WG1093771
Bromodichloromethane	U		0.000273	0.00108	1	04/05/2018 05:02	WG1093771
Bromochloromethane	U		0.000419	0.00538	1	04/05/2018 05:02	WG1093771
Bromoform	U		0.000456	0.00108	1	04/05/2018 05:02	WG1093771
Bromomethane	U		0.00144	0.00538	1	04/05/2018 05:02	WG1093771
n-Butylbenzene	U		0.000277	0.00108	1	04/05/2018 05:02	WG1093771
sec-Butylbenzene	U		0.000216	0.00108	1	04/05/2018 05:02	WG1093771
tert-Butylbenzene	U		0.000221	0.00108	1	04/05/2018 05:02	WG1093771
Carbon disulfide	U		0.000238	0.00108	1	04/05/2018 05:02	WG1093771
Carbon tetrachloride	U		0.000353	0.00108	1	04/05/2018 05:02	WG1093771
Chlorobenzene	U		0.000228	0.00108	1	04/05/2018 05:02	WG1093771
Chlorodibromomethane	U		0.000401	0.00108	1	04/05/2018 05:02	WG1093771
Chloroethane	U		0.00102	0.00538	1	04/05/2018 05:02	WG1093771
Chloroform	U		0.000246	0.00538	1	04/05/2018 05:02	WG1093771
Chloromethane	U		0.000403	0.00269	1	04/05/2018 05:02	WG1093771
2-Chlorotoluene	U		0.000324	0.00108	1	04/05/2018 05:02	WG1093771
4-Chlorotoluene	U		0.000258	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00538	1	04/05/2018 05:02	WG1093771
1,2-Dibromoethane	U		0.000369	0.00108	1	04/05/2018 05:02	WG1093771
Dibromomethane	U		0.000411	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dichlorobenzene	U		0.000328	0.00108	1	04/05/2018 05:02	WG1093771
1,3-Dichlorobenzene	U		0.000257	0.00108	1	04/05/2018 05:02	WG1093771
1,4-Dichlorobenzene	U		0.000243	0.00108	1	04/05/2018 05:02	WG1093771
Dichlorodifluoromethane	U		0.000767	0.00538	1	04/05/2018 05:02	WG1093771
1,1-Dichloroethane	U		0.000214	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dichloroethane	U		0.000285	0.00108	1	04/05/2018 05:02	WG1093771
1,1-Dichloroethene	U		0.000326	0.00108	1	04/05/2018 05:02	WG1093771
cis-1,2-Dichloroethene	0.000696	J	0.000253	0.00108	1	04/05/2018 05:02	WG1093771
trans-1,2-Dichloroethene	U		0.000284	0.00108	1	04/05/2018 05:02	WG1093771
1,2-Dichloropropane	U		0.000385	0.00108	1	04/05/2018 05:02	WG1093771
1,1-Dichloropropene	U		0.000341	0.00108	1	04/05/2018 05:02	WG1093771
1,3-Dichloropropane	U		0.000223	0.00108	1	04/05/2018 05:02	WG1093771
cis-1,3-Dichloropropene	U		0.000282	0.00108	1	04/05/2018 05:02	WG1093771
trans-1,3-Dichloropropene	U		0.000287	0.00108	1	04/05/2018 05:02	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000837	0.00269	1	04/05/2018 05:02	WG1093771
2,2-Dichloropropane	U		0.000300	0.00108	1	04/05/2018 05:02	WG1093771
Di-isopropyl ether	U		0.000267	0.00108	1	04/05/2018 05:02	WG1093771
Ethylbenzene	U		0.000319	0.00108	1	04/05/2018 05:02	WG1093771
Hexachloro-1,3-butadiene	U		0.000368	0.00108	1	04/05/2018 05:02	WG1093771
2-Hexanone	U		0.00147	0.0108	1	04/05/2018 05:02	WG1093771
n-Hexane	U		0.000312	0.0108	1	04/05/2018 05:02	WG1093771
Iodomethane	U		0.00272	0.0108	1	04/05/2018 05:02	WG1093771
Isopropylbenzene	U		0.000261	0.00108	1	04/05/2018 05:02	WG1093771
p-Isopropyltoluene	U		0.000219	0.00108	1	04/05/2018 05:02	WG1093771
2-Butanone (MEK)	U		0.00503	0.0108	1	04/05/2018 05:02	WG1093771
Methylene Chloride	U		0.00108	0.00538	1	04/05/2018 05:02	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0108	1	04/05/2018 05:02	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 11:20

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00108	1	04/05/2018 05:02	WG1093771
Naphthalene	U		0.00108	0.00538	1	04/05/2018 05:02	WG1093771
n-Propylbenzene	U		0.000221	0.00108	1	04/05/2018 05:02	WG1093771
Styrene	U		0.000252	0.00108	1	04/05/2018 05:02	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000284	0.00108	1	04/05/2018 05:02	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000392	0.00108	1	04/05/2018 05:02	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000392	0.00108	1	04/05/2018 05:02	WG1093771
Tetrachloroethene	0.000607	J	0.000297	0.00108	1	04/05/2018 05:02	WG1093771
Toluene	U		0.000467	0.00538	1	04/05/2018 05:02	WG1093771
1,2,3-Trichlorobenzene	U		0.000329	0.00108	1	04/05/2018 05:02	WG1093771
1,2,4-Trichlorobenzene	U		0.000417	0.00108	1	04/05/2018 05:02	WG1093771
1,1,1-Trichloroethane	U		0.000308	0.00108	1	04/05/2018 05:02	WG1093771
1,1,2-Trichloroethane	U		0.000298	0.00108	1	04/05/2018 05:02	WG1093771
Trichloroethene	U		0.000300	0.00108	1	04/05/2018 05:02	WG1093771
Trichlorofluoromethane	U		0.000411	0.00538	1	04/05/2018 05:02	WG1093771
1,2,3-Trichloropropane	U		0.000797	0.00269	1	04/05/2018 05:02	WG1093771
1,2,4-Trimethylbenzene	U		0.000227	0.00108	1	04/05/2018 05:02	WG1093771
1,2,3-Trimethylbenzene	U		0.000309	0.00108	1	04/05/2018 05:02	WG1093771
1,3,5-Trimethylbenzene	U		0.000286	0.00108	1	04/05/2018 05:02	WG1093771
Vinyl acetate	U		0.00257	0.0108	1	04/05/2018 05:02	WG1093771
Vinyl chloride	U		0.000313	0.00108	1	04/05/2018 05:02	WG1093771
Xylenes, Total	U		0.000751	0.00323	1	04/05/2018 05:02	WG1093771
(S) Toluene-d8	98.3			80.0-120		04/05/2018 05:02	WG1093771
(S) Dibromofluoromethane	104			74.0-131		04/05/2018 05:02	WG1093771
(S) 4-Bromofluorobenzene	102			64.0-132		04/05/2018 05:02	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 11:45

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0560	1	04/05/2018 05:23	WG1093771
Acrylonitrile	U		0.00200	0.0112	1	04/05/2018 05:23	WG1093771
Benzene	U		0.000302	0.00112	1	04/05/2018 05:23	WG1093771
Bromobenzene	U		0.000318	0.00112	1	04/05/2018 05:23	WG1093771
Bromodichloromethane	U		0.000284	0.00112	1	04/05/2018 05:23	WG1093771
Bromochloromethane	U		0.000436	0.00560	1	04/05/2018 05:23	WG1093771
Bromoform	U		0.000475	0.00112	1	04/05/2018 05:23	WG1093771
Bromomethane	U		0.00150	0.00560	1	04/05/2018 05:23	WG1093771
n-Butylbenzene	U		0.000289	0.00112	1	04/05/2018 05:23	WG1093771
sec-Butylbenzene	U		0.000225	0.00112	1	04/05/2018 05:23	WG1093771
tert-Butylbenzene	U		0.000231	0.00112	1	04/05/2018 05:23	WG1093771
Carbon disulfide	U		0.000247	0.00112	1	04/05/2018 05:23	WG1093771
Carbon tetrachloride	U		0.000367	0.00112	1	04/05/2018 05:23	WG1093771
Chlorobenzene	U		0.000237	0.00112	1	04/05/2018 05:23	WG1093771
Chlorodibromomethane	U		0.000417	0.00112	1	04/05/2018 05:23	WG1093771
Chloroethane	U		0.00106	0.00560	1	04/05/2018 05:23	WG1093771
Chloroform	U		0.000256	0.00560	1	04/05/2018 05:23	WG1093771
Chloromethane	U		0.000420	0.00280	1	04/05/2018 05:23	WG1093771
2-Chlorotoluene	U		0.000337	0.00112	1	04/05/2018 05:23	WG1093771
4-Chlorotoluene	U		0.000269	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00560	1	04/05/2018 05:23	WG1093771
1,2-Dibromoethane	U		0.000384	0.00112	1	04/05/2018 05:23	WG1093771
Dibromomethane	U		0.000428	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dichlorobenzene	U		0.000341	0.00112	1	04/05/2018 05:23	WG1093771
1,3-Dichlorobenzene	U		0.000267	0.00112	1	04/05/2018 05:23	WG1093771
1,4-Dichlorobenzene	U		0.000253	0.00112	1	04/05/2018 05:23	WG1093771
Dichlorodifluoromethane	U		0.000798	0.00560	1	04/05/2018 05:23	WG1093771
1,1-Dichloroethane	U		0.000223	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dichloroethane	U		0.000297	0.00112	1	04/05/2018 05:23	WG1093771
1,1-Dichloroethene	U		0.000339	0.00112	1	04/05/2018 05:23	WG1093771
cis-1,2-Dichloroethene	U		0.000263	0.00112	1	04/05/2018 05:23	WG1093771
trans-1,2-Dichloroethene	U		0.000295	0.00112	1	04/05/2018 05:23	WG1093771
1,2-Dichloropropane	U		0.000401	0.00112	1	04/05/2018 05:23	WG1093771
1,1-Dichloropropene	U		0.000355	0.00112	1	04/05/2018 05:23	WG1093771
1,3-Dichloropropane	U		0.000232	0.00112	1	04/05/2018 05:23	WG1093771
cis-1,3-Dichloropropene	U		0.000293	0.00112	1	04/05/2018 05:23	WG1093771
trans-1,3-Dichloropropene	U		0.000299	0.00112	1	04/05/2018 05:23	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000871	0.00280	1	04/05/2018 05:23	WG1093771
2,2-Dichloropropane	U		0.000312	0.00112	1	04/05/2018 05:23	WG1093771
Di-isopropyl ether	U		0.000278	0.00112	1	04/05/2018 05:23	WG1093771
Ethylbenzene	U		0.000332	0.00112	1	04/05/2018 05:23	WG1093771
Hexachloro-1,3-butadiene	U		0.000383	0.00112	1	04/05/2018 05:23	WG1093771
2-Hexanone	U		0.00153	0.0112	1	04/05/2018 05:23	WG1093771
n-Hexane	U		0.000325	0.0112	1	04/05/2018 05:23	WG1093771
Iodomethane	U		0.00283	0.0112	1	04/05/2018 05:23	WG1093771
Isopropylbenzene	U		0.000272	0.00112	1	04/05/2018 05:23	WG1093771
p-Isopropyltoluene	U		0.000228	0.00112	1	04/05/2018 05:23	WG1093771
2-Butanone (MEK)	U		0.00524	0.0112	1	04/05/2018 05:23	WG1093771
Methylene Chloride	U		0.00112	0.00560	1	04/05/2018 05:23	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	04/05/2018 05:23	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 11:45

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/05/2018 05:23	WG1093771
Naphthalene	U		0.00112	0.00560	1	04/05/2018 05:23	WG1093771
n-Propylbenzene	U		0.000231	0.00112	1	04/05/2018 05:23	WG1093771
Styrene	U		0.000262	0.00112	1	04/05/2018 05:23	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/05/2018 05:23	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000408	0.00112	1	04/05/2018 05:23	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000408	0.00112	1	04/05/2018 05:23	WG1093771
Tetrachloroethene	U		0.000309	0.00112	1	04/05/2018 05:23	WG1093771
Toluene	U		0.000486	0.00560	1	04/05/2018 05:23	WG1093771
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/05/2018 05:23	WG1093771
1,2,4-Trichlorobenzene	U		0.000434	0.00112	1	04/05/2018 05:23	WG1093771
1,1,1-Trichloroethane	U		0.000320	0.00112	1	04/05/2018 05:23	WG1093771
1,1,2-Trichloroethane	U		0.000310	0.00112	1	04/05/2018 05:23	WG1093771
Trichloroethene	U		0.000312	0.00112	1	04/05/2018 05:23	WG1093771
Trichlorofluoromethane	U		0.000428	0.00560	1	04/05/2018 05:23	WG1093771
1,2,3-Trichloropropane	U		0.000829	0.00280	1	04/05/2018 05:23	WG1093771
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/05/2018 05:23	WG1093771
1,2,3-Trimethylbenzene	U		0.000321	0.00112	1	04/05/2018 05:23	WG1093771
1,3,5-Trimethylbenzene	U		0.000298	0.00112	1	04/05/2018 05:23	WG1093771
Vinyl acetate	U		0.00267	0.0112	1	04/05/2018 05:23	WG1093771
Vinyl chloride	0.000502	J	0.000326	0.00112	1	04/05/2018 05:23	WG1093771
Xylenes, Total	U		0.000781	0.00336	1	04/05/2018 05:23	WG1093771
(S) Toluene-d8	101			80.0-120		04/05/2018 05:23	WG1093771
(S) Dibromofluoromethane	103			74.0-131		04/05/2018 05:23	WG1093771
(S) 4-Bromofluorobenzene	104			64.0-132		04/05/2018 05:23	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 12:09

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.4		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0159	U	0.0116	0.0579	1	04/05/2018 05:45	WG1093771
Acrylonitrile	U		0.00207	0.0116	1	04/05/2018 05:45	WG1093771
Benzene	U		0.000312	0.00116	1	04/05/2018 05:45	WG1093771
Bromobenzene	U		0.000329	0.00116	1	04/05/2018 05:45	WG1093771
Bromodichloromethane	U		0.000294	0.00116	1	04/05/2018 05:45	WG1093771
Bromochloromethane	U		0.000451	0.00579	1	04/05/2018 05:45	WG1093771
Bromoform	U		0.000491	0.00116	1	04/05/2018 05:45	WG1093771
Bromomethane	U		0.00155	0.00579	1	04/05/2018 05:45	WG1093771
n-Butylbenzene	U		0.000299	0.00116	1	04/05/2018 05:45	WG1093771
sec-Butylbenzene	U		0.000233	0.00116	1	04/05/2018 05:45	WG1093771
tert-Butylbenzene	U		0.000238	0.00116	1	04/05/2018 05:45	WG1093771
Carbon disulfide	U		0.000256	0.00116	1	04/05/2018 05:45	WG1093771
Carbon tetrachloride	U		0.000380	0.00116	1	04/05/2018 05:45	WG1093771
Chlorobenzene	U		0.000245	0.00116	1	04/05/2018 05:45	WG1093771
Chlorodibromomethane	U		0.000432	0.00116	1	04/05/2018 05:45	WG1093771
Chloroethane	U		0.00109	0.00579	1	04/05/2018 05:45	WG1093771
Chloroform	U		0.000265	0.00579	1	04/05/2018 05:45	WG1093771
Chloromethane	U		0.000434	0.00289	1	04/05/2018 05:45	WG1093771
2-Chlorotoluene	U		0.000348	0.00116	1	04/05/2018 05:45	WG1093771
4-Chlorotoluene	U		0.000278	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00579	1	04/05/2018 05:45	WG1093771
1,2-Dibromoethane	U		0.000397	0.00116	1	04/05/2018 05:45	WG1093771
Dibromomethane	U		0.000442	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dichlorobenzene	U		0.000353	0.00116	1	04/05/2018 05:45	WG1093771
1,3-Dichlorobenzene	U		0.000277	0.00116	1	04/05/2018 05:45	WG1093771
1,4-Dichlorobenzene	U		0.000262	0.00116	1	04/05/2018 05:45	WG1093771
Dichlorodifluoromethane	U		0.000825	0.00579	1	04/05/2018 05:45	WG1093771
1,1-Dichloroethane	U		0.000230	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dichloroethane	U		0.000307	0.00116	1	04/05/2018 05:45	WG1093771
1,1-Dichloroethene	U		0.000351	0.00116	1	04/05/2018 05:45	WG1093771
cis-1,2-Dichloroethene	U		0.000272	0.00116	1	04/05/2018 05:45	WG1093771
trans-1,2-Dichloroethene	U		0.000305	0.00116	1	04/05/2018 05:45	WG1093771
1,2-Dichloropropane	U		0.000414	0.00116	1	04/05/2018 05:45	WG1093771
1,1-Dichloropropene	U		0.000367	0.00116	1	04/05/2018 05:45	WG1093771
1,3-Dichloropropane	U		0.000240	0.00116	1	04/05/2018 05:45	WG1093771
cis-1,3-Dichloropropene	U		0.000303	0.00116	1	04/05/2018 05:45	WG1093771
trans-1,3-Dichloropropene	U		0.000309	0.00116	1	04/05/2018 05:45	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000900	0.00289	1	04/05/2018 05:45	WG1093771
2,2-Dichloropropane	U		0.000323	0.00116	1	04/05/2018 05:45	WG1093771
Di-isopropyl ether	U		0.000287	0.00116	1	04/05/2018 05:45	WG1093771
Ethylbenzene	U		0.000344	0.00116	1	04/05/2018 05:45	WG1093771
Hexachloro-1,3-butadiene	U		0.000396	0.00116	1	04/05/2018 05:45	WG1093771
2-Hexanone	U		0.00159	0.0116	1	04/05/2018 05:45	WG1093771
n-Hexane	U		0.000336	0.0116	1	04/05/2018 05:45	WG1093771
Iodomethane	U		0.00293	0.0116	1	04/05/2018 05:45	WG1093771
Isopropylbenzene	U		0.000281	0.00116	1	04/05/2018 05:45	WG1093771
p-Isopropyltoluene	U		0.000236	0.00116	1	04/05/2018 05:45	WG1093771
2-Butanone (MEK)	U		0.00542	0.0116	1	04/05/2018 05:45	WG1093771
Methylene Chloride	U		0.00116	0.00579	1	04/05/2018 05:45	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	04/05/2018 05:45	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 12:09

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00116	1	04/05/2018 05:45	WG1093771
Naphthalene	U		0.00116	0.00579	1	04/05/2018 05:45	WG1093771
n-Propylbenzene	U		0.000238	0.00116	1	04/05/2018 05:45	WG1093771
Styrene	U		0.000271	0.00116	1	04/05/2018 05:45	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000305	0.00116	1	04/05/2018 05:45	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000422	0.00116	1	04/05/2018 05:45	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000422	0.00116	1	04/05/2018 05:45	WG1093771
Tetrachloroethene	U		0.000319	0.00116	1	04/05/2018 05:45	WG1093771
Toluene	U		0.000502	0.00579	1	04/05/2018 05:45	WG1093771
1,2,3-Trichlorobenzene	U		0.000354	0.00116	1	04/05/2018 05:45	WG1093771
1,2,4-Trichlorobenzene	U		0.000449	0.00116	1	04/05/2018 05:45	WG1093771
1,1,1-Trichloroethane	U		0.000331	0.00116	1	04/05/2018 05:45	WG1093771
1,1,2-Trichloroethane	U		0.000321	0.00116	1	04/05/2018 05:45	WG1093771
Trichloroethene	U		0.000323	0.00116	1	04/05/2018 05:45	WG1093771
Trichlorofluoromethane	U		0.000442	0.00579	1	04/05/2018 05:45	WG1093771
1,2,3-Trichloropropane	U		0.000857	0.00289	1	04/05/2018 05:45	WG1093771
1,2,4-Trimethylbenzene	U		0.000244	0.00116	1	04/05/2018 05:45	WG1093771
1,2,3-Trimethylbenzene	U		0.000332	0.00116	1	04/05/2018 05:45	WG1093771
1,3,5-Trimethylbenzene	U		0.000308	0.00116	1	04/05/2018 05:45	WG1093771
Vinyl acetate	U		0.00277	0.0116	1	04/05/2018 05:45	WG1093771
Vinyl chloride	U		0.000337	0.00116	1	04/05/2018 05:45	WG1093771
Xylenes, Total	U		0.000808	0.00347	1	04/05/2018 05:45	WG1093771
(S) Toluene-d8	99.7			80.0-120		04/05/2018 05:45	WG1093771
(S) Dibromofluoromethane	104			74.0-131		04/05/2018 05:45	WG1093771
(S) 4-Bromofluorobenzene	101			64.0-132		04/05/2018 05:45	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 00:00

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.19	J	1.05	25.0	1	04/04/2018 20:36	WG1093766
Acrylonitrile	U		0.873	5.00	1	04/04/2018 20:36	WG1093766
Benzene	U		0.0896	0.500	1	04/04/2018 20:36	WG1093766
Bromobenzene	U		0.133	0.500	1	04/04/2018 20:36	WG1093766
Bromodichloromethane	U		0.0800	0.500	1	04/04/2018 20:36	WG1093766
Bromochloromethane	U		0.145	0.500	1	04/04/2018 20:36	WG1093766
Bromoform	U		0.186	0.500	1	04/04/2018 20:36	WG1093766
Bromomethane	U		0.157	2.50	1	04/04/2018 20:36	WG1093766
n-Butylbenzene	U		0.143	0.500	1	04/04/2018 20:36	WG1093766
sec-Butylbenzene	U		0.134	0.500	1	04/04/2018 20:36	WG1093766
tert-Butylbenzene	U		0.183	0.500	1	04/04/2018 20:36	WG1093766
Carbon disulfide	U		0.101	0.500	1	04/04/2018 20:36	WG1093766
Carbon tetrachloride	U		0.159	0.500	1	04/04/2018 20:36	WG1093766
Chlorobenzene	U		0.140	0.500	1	04/04/2018 20:36	WG1093766
Chlorodibromomethane	U		0.128	0.500	1	04/04/2018 20:36	WG1093766
Chloroethane	U		0.141	2.50	1	04/04/2018 20:36	WG1093766
Chloroform	U		0.0860	0.500	1	04/04/2018 20:36	WG1093766
Chloromethane	U	J4	0.153	1.25	1	04/04/2018 20:36	WG1093766
2-Chlorotoluene	U		0.111	0.500	1	04/04/2018 20:36	WG1093766
4-Chlorotoluene	U		0.0972	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/04/2018 20:36	WG1093766
1,2-Dibromoethane	U		0.193	0.500	1	04/04/2018 20:36	WG1093766
Dibromomethane	U		0.117	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dichlorobenzene	U		0.101	0.500	1	04/04/2018 20:36	WG1093766
1,3-Dichlorobenzene	U		0.130	0.500	1	04/04/2018 20:36	WG1093766
1,4-Dichlorobenzene	U		0.121	0.500	1	04/04/2018 20:36	WG1093766
Dichlorodifluoromethane	U		0.127	2.50	1	04/04/2018 20:36	WG1093766
1,1-Dichloroethane	U		0.114	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dichloroethane	U		0.108	0.500	1	04/04/2018 20:36	WG1093766
1,1-Dichloroethene	U		0.188	0.500	1	04/04/2018 20:36	WG1093766
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/04/2018 20:36	WG1093766
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/04/2018 20:36	WG1093766
1,2-Dichloropropane	U		0.190	0.500	1	04/04/2018 20:36	WG1093766
1,1-Dichloropropene	U		0.128	0.500	1	04/04/2018 20:36	WG1093766
1,3-Dichloropropane	U		0.147	1.00	1	04/04/2018 20:36	WG1093766
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/04/2018 20:36	WG1093766
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/04/2018 20:36	WG1093766
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/04/2018 20:36	WG1093766
2,2-Dichloropropane	U		0.0929	0.500	1	04/04/2018 20:36	WG1093766
Di-isopropyl ether	U		0.0924	0.500	1	04/04/2018 20:36	WG1093766
Ethylbenzene	U		0.158	0.500	1	04/04/2018 20:36	WG1093766
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/04/2018 20:36	WG1093766
2-Hexanone	U		0.757	5.00	1	04/04/2018 20:36	WG1093766
n-Hexane	U		0.305	5.00	1	04/04/2018 20:36	WG1093766
Iodomethane	U		0.377	10.0	1	04/04/2018 20:36	WG1093766
Isopropylbenzene	U		0.126	0.500	1	04/04/2018 20:36	WG1093766
p-Isopropyltoluene	U		0.138	0.500	1	04/04/2018 20:36	WG1093766
2-Butanone (MEK)	U		1.28	5.00	1	04/04/2018 20:36	WG1093766
Methylene Chloride	U		1.07	2.50	1	04/04/2018 20:36	WG1093766
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/04/2018 20:36	WG1093766
Methyl tert-butyl ether	U		0.102	0.500	1	04/04/2018 20:36	WG1093766
Naphthalene	U		0.174	2.50	1	04/04/2018 20:36	WG1093766
n-Propylbenzene	U		0.162	0.500	1	04/04/2018 20:36	WG1093766
Styrene	U	J4	0.117	0.500	1	04/04/2018 20:36	WG1093766
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/04/2018 20:36	WG1093766
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/04/2018 20:36	WG1093766

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
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- 7 Gl
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- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 00:00

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/04/2018 20:36	WG1093766
Tetrachloroethene	U		0.199	0.500	1	04/04/2018 20:36	WG1093766
Toluene	U		0.412	0.500	1	04/04/2018 20:36	WG1093766
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/04/2018 20:36	WG1093766
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/04/2018 20:36	WG1093766
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/04/2018 20:36	WG1093766
1,1,2-Trichloroethane	U		0.186	0.500	1	04/04/2018 20:36	WG1093766
Trichloroethene	U		0.153	0.500	1	04/04/2018 20:36	WG1093766
Trichlorofluoromethane	U		0.130	2.50	1	04/04/2018 20:36	WG1093766
1,2,3-Trichloropropane	U		0.247	2.50	1	04/04/2018 20:36	WG1093766
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/04/2018 20:36	WG1093766
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/04/2018 20:36	WG1093766
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/04/2018 20:36	WG1093766
Vinyl acetate	U		0.645	5.00	1	04/04/2018 20:36	WG1093766
Vinyl chloride	U		0.118	0.500	1	04/04/2018 20:36	WG1093766
Xylenes, Total	U		0.316	1.50	1	04/04/2018 20:36	WG1093766
(S) Toluene-d8	98.9			80.0-120		04/04/2018 20:36	WG1093766
(S) Dibromofluoromethane	100			76.0-123		04/04/2018 20:36	WG1093766
(S) 4-Bromofluorobenzene	103			80.0-120		04/04/2018 20:36	WG1093766

- 1 Cp
- 2 Tc
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JC 4/25/18



Collected date/time: 04/02/18 14:00

L982616

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.9		1	04/06/2018 11:25	WG1094356

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0193	U	0.0108	0.0538	1	04/10/2018 12:03	WG1093771
Acrylonitrile	U		0.00193	0.0108	1	04/10/2018 12:03	WG1093771
Benzene	U		0.000291	0.00108	1	04/10/2018 12:03	WG1093771
Bromobenzene	U		0.000306	0.00108	1	04/10/2018 12:03	WG1093771
Bromodichloromethane	U		0.000274	0.00108	1	04/10/2018 12:03	WG1093771
Bromochloromethane	U		0.000420	0.00538	1	04/10/2018 12:03	WG1093771
Bromoform	U		0.000457	0.00108	1	04/10/2018 12:03	WG1093771
Bromomethane	U		0.00144	0.00538	1	04/10/2018 12:03	WG1093771
n-Butylbenzene	U		0.000278	0.00108	1	04/10/2018 12:03	WG1093771
sec-Butylbenzene	U		0.000216	0.00108	1	04/10/2018 12:03	WG1093771
tert-Butylbenzene	U		0.000222	0.00108	1	04/10/2018 12:03	WG1093771
Carbon disulfide	0.000480	J	0.000238	0.00108	1	04/10/2018 12:03	WG1093771
Carbon tetrachloride	U		0.000353	0.00108	1	04/10/2018 12:03	WG1093771
Chlorobenzene	U		0.000228	0.00108	1	04/10/2018 12:03	WG1093771
Chlorodibromomethane	U		0.000402	0.00108	1	04/10/2018 12:03	WG1093771
Chloroethane	U		0.00102	0.00538	1	04/10/2018 12:03	WG1093771
Chloroform	U		0.000247	0.00538	1	04/10/2018 12:03	WG1093771
Chloromethane	0.00101	J	0.000404	0.00269	1	04/10/2018 12:03	WG1093771
2-Chlorotoluene	U		0.000324	0.00108	1	04/10/2018 12:03	WG1093771
4-Chlorotoluene	U		0.000258	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dibromo-3-Chloropropane	U		0.00113	0.00538	1	04/10/2018 12:03	WG1093771
1,2-Dibromoethane	U		0.000369	0.00108	1	04/10/2018 12:03	WG1093771
Dibromomethane	U		0.000411	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dichlorobenzene	U		0.000328	0.00108	1	04/10/2018 12:03	WG1093771
1,3-Dichlorobenzene	U		0.000257	0.00108	1	04/10/2018 12:03	WG1093771
1,4-Dichlorobenzene	U		0.000243	0.00108	1	04/10/2018 12:03	WG1093771
Dichlorodifluoromethane	U		0.000768	0.00538	1	04/10/2018 12:03	WG1093771
1,1-Dichloroethane	U		0.000214	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dichloroethane	U		0.000285	0.00108	1	04/10/2018 12:03	WG1093771
1,1-Dichloroethene	U		0.000326	0.00108	1	04/10/2018 12:03	WG1093771
cis-1,2-Dichloroethene	U		0.000253	0.00108	1	04/10/2018 12:03	WG1093771
trans-1,2-Dichloroethene	U		0.000284	0.00108	1	04/10/2018 12:03	WG1093771
1,2-Dichloropropane	U		0.000386	0.00108	1	04/10/2018 12:03	WG1093771
1,1-Dichloropropene	U		0.000341	0.00108	1	04/10/2018 12:03	WG1093771
1,3-Dichloropropane	U		0.000223	0.00108	1	04/10/2018 12:03	WG1093771
cis-1,3-Dichloropropene	U		0.000282	0.00108	1	04/10/2018 12:03	WG1093771
trans-1,3-Dichloropropene	U		0.000288	0.00108	1	04/10/2018 12:03	WG1093771
trans-1,4-Dichloro-2-butene	U		0.000838	0.00269	1	04/10/2018 12:03	WG1093771
2,2-Dichloropropane	U		0.000300	0.00108	1	04/10/2018 12:03	WG1093771
Di-isopropyl ether	U		0.000267	0.00108	1	04/10/2018 12:03	WG1093771
Ethylbenzene	U		0.000320	0.00108	1	04/10/2018 12:03	WG1093771
Hexachloro-1,3-butadiene	U		0.000368	0.00108	1	04/10/2018 12:03	WG1093771
2-Hexanone	U		0.00148	0.0108	1	04/10/2018 12:03	WG1093771
n-Hexane	0.00203	J	0.000312	0.0108	1	04/10/2018 12:03	WG1093771
Iodomethane	U		0.00272	0.0108	1	04/10/2018 12:03	WG1093771
Isopropylbenzene	U		0.000262	0.00108	1	04/10/2018 12:03	WG1093771
p-Isopropyltoluene	U		0.000220	0.00108	1	04/10/2018 12:03	WG1093771
2-Butanone (MEK)	U		0.00504	0.0108	1	04/10/2018 12:03	WG1093771
Methylene Chloride	U		0.00108	0.00538	1	04/10/2018 12:03	WG1093771
4-Methyl-2-pentanone (MIBK)	U		0.00202	0.0108	1	04/10/2018 12:03	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/25/18



Collected date/time: 04/02/18 14:00

L982616

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000228	0.00108	1	04/10/2018 12:03	WG1093771
Naphthalene	U		0.00108	0.00538	1	04/10/2018 12:03	WG1093771
n-Propylbenzene	U		0.000222	0.00108	1	04/10/2018 12:03	WG1093771
Styrene	U		0.000252	0.00108	1	04/10/2018 12:03	WG1093771
1,1,1,2-Tetrachloroethane	U		0.000284	0.00108	1	04/10/2018 12:03	WG1093771
1,1,2,2-Tetrachloroethane	U		0.000393	0.00108	1	04/10/2018 12:03	WG1093771
1,1,2-Trichlorotrifluoroethane	U		0.000393	0.00108	1	04/10/2018 12:03	WG1093771
Tetrachloroethene	0.000377	J	0.000297	0.00108	1	04/10/2018 12:03	WG1093771
Toluene	U		0.000467	0.00538	1	04/10/2018 12:03	WG1093771
1,2,3-Trichlorobenzene	U		0.000330	0.00108	1	04/10/2018 12:03	WG1093771
1,2,4-Trichlorobenzene	U		0.000418	0.00108	1	04/10/2018 12:03	WG1093771
1,1,1-Trichloroethane	U		0.000308	0.00108	1	04/10/2018 12:03	WG1093771
1,1,2-Trichloroethane	U		0.000298	0.00108	1	04/10/2018 12:03	WG1093771
Trichloroethene	U		0.000300	0.00108	1	04/10/2018 12:03	WG1093771
Trichlorofluoromethane	U		0.000411	0.00538	1	04/10/2018 12:03	WG1093771
1,2,3-Trichloropropane	U		0.000798	0.00269	1	04/10/2018 12:03	WG1093771 JC 4/25/18
1,2,4-Trimethylbenzene	U		0.000227	0.00108	1	04/10/2018 12:03	WG1093771
1,2,3-Trimethylbenzene	U		0.000309	0.00108	1	04/10/2018 12:03	WG1093771
1,3,5-Trimethylbenzene	U		0.000286	0.00108	1	04/10/2018 12:03	WG1093771
Vinyl acetate	U		0.00257	0.0108	1	04/10/2018 12:03	WG1093771
Vinyl chloride	U		0.000313	0.00108	1	04/10/2018 12:03	WG1093771
Xylenes, Total	U		0.000752	0.00323	1	04/10/2018 12:03	WG1093771
(S) Toluene-d8	102			80.0-120		04/10/2018 12:03	WG1093771
(S) Dibromofluoromethane	101			74.0-131		04/10/2018 12:03	WG1093771
(S) 4-Bromofluorobenzene	103			64.0-132		04/10/2018 12:03	WG1093771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

April 16, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L984034
Samples Received: 04/07/2018
Project Number: 1413.001.05.601
Description: American Linen Supply

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



IW-9D-040418 L984034-01 GW

Collected by Jeff Dobbins
 Collected date/time 04/04/18 08:35
 Received date/time 04/07/18 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/09/18 01:08	04/09/18 01:08	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	200	04/12/18 23:15	04/12/18 23:15	LRL

2 Tc

3 Ss

IW-8D-040418 L984034-02 GW

Collected by Jeff Dobbins
 Collected date/time 04/04/18 10:05
 Received date/time 04/07/18 08:45

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/09/18 01:27	04/09/18 01:27	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	250	04/12/18 23:35	04/12/18 23:35	LRL

5 Sr

6 Qc

IW-8C-040418 L984034-03 GW

Collected by Jeff Dobbins
 Collected date/time 04/04/18 11:06
 Received date/time 04/07/18 08:45

7 Gl

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/09/18 01:47	04/09/18 01:47	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1000	04/12/18 23:55	04/12/18 23:55	LRL

8 Al

9 Sc

IW-45A-040418 L984034-04 GW

Collected by Jeff Dobbins
 Collected date/time 04/04/18 13:26
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/09/18 02:06	04/09/18 02:06	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	250	04/13/18 00:15	04/13/18 00:15	LRL

R-MW3-040418 L984034-05 GW

Collected by Jeff Dobbins
 Collected date/time 04/04/18 16:15
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 03:45	04/11/18 03:45	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/09/18 02:25	04/09/18 02:25	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/13/18 00:35	04/13/18 00:35	LRL

J15-040518 L984034-06 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 08:27
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 04:08	04/11/18 04:08	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/09/18 02:44	04/09/18 02:44	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095362	1	04/13/18 00:55	04/13/18 00:55	LRL

F13-040518 L984034-07 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 09:22
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 04:31	04/11/18 04:31	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 20:49	04/08/18 20:49	JAH



J5-040518 L984034-08 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 10:10
 Received date/time 04/07/18 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 04:54	04/11/18 04:54	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 21:09	04/08/18 21:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	10	04/10/18 01:54	04/10/18 01:54	BMB

2 Tc

3 Ss

MW-9-040518 L984034-09 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 14:18
 Received date/time 04/07/18 08:45

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 05:18	04/11/18 05:18	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 21:29	04/08/18 21:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/10/18 02:13	04/10/18 02:13	BMB

5 Sr

6 Qc

7 Gl

MW121-040518 L984034-10 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 15:21
 Received date/time 04/07/18 08:45

8 Al

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 05:41	04/11/18 05:41	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 21:49	04/08/18 21:49	JAH

9 Sc

MW119-040518 L984034-11 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 16:29
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 22:09	04/08/18 22:09	JAH

K8-4518 L984034-12 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 12:11
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 06:05	04/11/18 06:05	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 22:29	04/08/18 22:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	5	04/10/18 02:33	04/10/18 02:33	BMB

MW15-4-5+18 L984034-13 GW

Collected by Jeff Dobbins
 Collected date/time 04/05/18 11:15
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 06:29	04/11/18 06:29	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 22:49	04/08/18 22:49	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/10/18 02:53	04/10/18 02:53	BMB

MW108-040618 L984034-14 GW

Collected by Jeff Dobbins
 Collected date/time 04/06/18 09:15
 Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 23:09	04/08/18 23:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	50	04/10/18 03:13	04/10/18 03:13	BMB



MW109-040618 L984034-15 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by				Collected date/time	Received date/time
				Jeff Dobbins	04/06/18 10:12 04/07/18 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 23:29	04/08/18 23:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	10	04/10/18 03:32	04/10/18 03:32	BMB

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW103-040618 L984034-16 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by				Collected date/time	Received date/time
				Jeff Dobbins	04/06/18 11:17 04/07/18 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 23:49	04/08/18 23:49	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/10/18 03:52	04/10/18 03:52	BMB

MW126-040618 L984034-17 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by				Collected date/time	Received date/time
				Jeff Dobbins	04/06/18 09:37 04/07/18 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/09/18 00:09	04/09/18 00:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/10/18 04:12	04/10/18 04:12	BMB

MW101-040618 L984034-18 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by				Collected date/time	Received date/time
				Jeff Dobbins	04/06/18 11:23 04/07/18 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/10/18 04:32	04/10/18 04:32	BMB

MW111-040618 L984034-19 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by				Collected date/time	Received date/time
				Jeff Dobbins	04/06/18 11:57 04/07/18 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/09/18 00:50	04/09/18 00:50	JAH

MW902-040618 L984034-20 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by				Collected date/time	Received date/time
				Jeff Dobbins	04/06/18 12:10 04/07/18 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/09/18 01:10	04/09/18 01:10	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	50	04/10/18 04:52	04/10/18 04:52	BMB

SCL-MW105-040618 L984034-21 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by				Collected date/time	Received date/time
				Jeff Dobbins	04/06/18 12:21 04/07/18 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	10	04/09/18 01:30	04/09/18 01:30	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	10	04/10/18 05:12	04/10/18 05:12	BMB



MW122-040618 L984034-22 GW

Collected by Jeff Dobbins
Collected date/time 04/06/18 12:50
Received date/time 04/07/18 08:45



Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/09/18 01:50	04/09/18 01:50	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/10/18 05:32	04/10/18 05:32	BMB



R-MW6-040618 L984034-23 GW

Collected by Jeff Dobbins
Collected date/time 04/06/18 14:48
Received date/time 04/07/18 08:45



Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 06:52	04/11/18 06:52	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/09/18 02:10	04/09/18 02:10	JAH



MW125-040618 L984034-24 GW

Collected by Jeff Dobbins
Collected date/time 04/06/18 15:09
Received date/time 04/07/18 08:45



Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 07:16	04/11/18 07:16	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/09/18 02:30	04/09/18 02:30	JAH



TRIP BLANK L984034-25 GW

Collected by Jeff Dobbins
Collected date/time 04/06/18 00:00
Received date/time 04/07/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1095836	1	04/11/18 01:49	04/11/18 01:49	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1095442	1	04/08/18 19:43	04/08/18 19:43	JAH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.46	J	1.05	25.0	1	04/09/2018 01:08	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:08	WG1095362
Benzene	U		0.0896	0.500	1	04/09/2018 01:08	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:08	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:08	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:08	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 01:08	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 01:08	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:08	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:08	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:08	WG1095362
Carbon disulfide	0.969		0.101	0.500	1	04/09/2018 01:08	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:08	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:08	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:08	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 01:08	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 01:08	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 01:08	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:08	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:08	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:08	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:08	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:08	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:08	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:08	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:08	WG1095362
1,1-Dichloroethene	30.8		0.188	0.500	1	04/09/2018 01:08	WG1095362
cis-1,2-Dichloroethene	3380		18.7	100	200	04/12/2018 23:15	WG1095362
trans-1,2-Dichloroethene	10.0		0.152	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:08	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:08	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:08	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:08	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:08	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:08	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:08	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:08	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:08	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:08	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:08	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 01:08	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 01:08	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:08	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:08	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:08	WG1095362
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:08	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:08	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:08	WG1095362
Naphthalene	U		0.174	2.50	1	04/09/2018 01:08	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:08	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 01:08	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:08	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:08	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/04/18 08:35

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:08	WG1095362
Tetrachloroethene	3610		39.8	100	200	04/12/2018 23:15	WG1095362
Toluene	1.12		0.412	0.500	1	04/09/2018 01:08	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:08	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:08	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:08	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:08	WG1095362
Trichloroethene	1510		30.6	100	200	04/12/2018 23:15	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:08	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:08	WG1095362
1,2,4-Trimethylbenzene	0.142	<u>J</u>	0.123	0.500	1	04/09/2018 01:08	WG1095362
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 01:08	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:08	WG1095362
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/09/2018 01:08	WG1095362
Vinyl chloride	31.6		0.118	0.500	1	04/09/2018 01:08	WG1095362
Xylenes, Total	U		0.316	1.50	1	04/09/2018 01:08	WG1095362
(S) Toluene-d8	104			80.0-120		04/12/2018 23:15	WG1095362
(S) Toluene-d8	96.6			80.0-120		04/09/2018 01:08	WG1095362
(S) Dibromofluoromethane	106			76.0-123		04/12/2018 23:15	WG1095362
(S) Dibromofluoromethane	95.5			76.0-123		04/09/2018 01:08	WG1095362
(S) 4-Bromofluorobenzene	107			80.0-120		04/12/2018 23:15	WG1095362
(S) 4-Bromofluorobenzene	102			80.0-120		04/09/2018 01:08	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/09/2018 01:27	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:27	WG1095362
Benzene	U		0.0896	0.500	1	04/09/2018 01:27	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:27	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:27	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:27	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 01:27	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 01:27	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:27	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:27	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:27	WG1095362
Carbon disulfide	1.17		0.101	0.500	1	04/09/2018 01:27	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:27	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:27	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:27	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 01:27	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 01:27	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 01:27	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:27	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:27	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:27	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:27	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:27	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:27	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:27	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:27	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:27	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:27	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:27	WG1095362
1,1-Dichloroethene	50.3		0.188	0.500	1	04/09/2018 01:27	WG1095362
cis-1,2-Dichloroethene	3200		23.3	125	250	04/12/2018 23:35	WG1095362
trans-1,2-Dichloroethene	39.1		0.152	0.500	1	04/09/2018 01:27	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:27	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:27	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:27	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:27	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:27	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:27	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:27	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:27	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:27	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:27	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:27	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 01:27	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 01:27	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:27	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:27	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:27	WG1095362
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:27	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:27	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:27	WG1095362
Naphthalene	U		0.174	2.50	1	04/09/2018 01:27	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:27	WG1095362
Styrene	0.188	J	0.117	0.500	1	04/09/2018 01:27	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:27	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:27	WG1095362

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/04/18 10:05

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:27	WG1095362
Tetrachloroethene	6010		49.8	125	250	04/12/2018 23:35	WG1095362
Toluene	U		0.412	0.500	1	04/09/2018 01:27	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:27	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:27	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:27	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:27	WG1095362
Trichloroethene	4320		38.2	125	250	04/12/2018 23:35	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:27	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:27	WG1095362
1,2,4-Trimethylbenzene	0.289	U	0.123	0.500	1	04/09/2018 01:27	WG1095362
1,2,3-Trimethylbenzene	0.201	U	0.0739	0.500	1	04/09/2018 01:27	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:27	WG1095362
Vinyl acetate	U	JO	0.645	5.00	1	04/09/2018 01:27	WG1095362
Vinyl chloride	631		29.5	125	250	04/12/2018 23:35	WG1095362
Xylenes, Total	0.384	U	0.316	1.50	1	04/09/2018 01:27	WG1095362
(S) Toluene-d8	105			80.0-120		04/12/2018 23:35	WG1095362
(S) Toluene-d8	101			80.0-120		04/09/2018 01:27	WG1095362
(S) Dibromofluoromethane	92.8			76.0-123		04/09/2018 01:27	WG1095362
(S) Dibromofluoromethane	105			76.0-123		04/12/2018 23:35	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/09/2018 01:27	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/12/2018 23:35	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	8.17	J	1.05	25.0	1	04/09/2018 01:47	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:47	WG1095362
Benzene	0.276	J	0.0896	0.500	1	04/09/2018 01:47	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:47	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:47	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:47	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 01:47	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 01:47	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:47	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:47	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:47	WG1095362
Carbon disulfide	0.850		0.101	0.500	1	04/09/2018 01:47	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:47	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:47	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:47	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 01:47	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 01:47	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 01:47	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:47	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:47	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:47	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:47	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:47	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:47	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:47	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:47	WG1095362
1,1-Dichloroethene	11.3		0.188	0.500	1	04/09/2018 01:47	WG1095362
cis-1,2-Dichloroethene	4160		93.3	500	1000	04/12/2018 23:55	WG1095362
trans-1,2-Dichloroethene	9.22		0.152	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:47	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:47	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:47	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:47	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:47	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:47	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:47	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:47	WG1095362
Ethylbenzene	0.206	J	0.158	0.500	1	04/09/2018 01:47	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:47	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:47	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 01:47	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 01:47	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:47	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:47	WG1095362
2-Butanone (MEK)	2.06	J	1.28	5.00	1	04/09/2018 01:47	WG1095362
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:47	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:47	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:47	WG1095362
Naphthalene	0.580	J	0.174	2.50	1	04/09/2018 01:47	WG1095362
n-Propylbenzene	0.164	J	0.162	0.500	1	04/09/2018 01:47	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 01:47	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:47	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:47	WG1095362

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/04/18 11:06

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:47	WG1095362
Tetrachloroethene	27400		199	500	1000	04/12/2018 23:55	WG1095362
Toluene	2.77		0.412	0.500	1	04/09/2018 01:47	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:47	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:47	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:47	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:47	WG1095362
Trichloroethene	1160		153	500	1000	04/12/2018 23:55	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:47	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:47	WG1095362
1,2,4-Trimethylbenzene	1.28		0.123	0.500	1	04/09/2018 01:47	WG1095362
1,2,3-Trimethylbenzene	0.712		0.0739	0.500	1	04/09/2018 01:47	WG1095362
1,3,5-Trimethylbenzene	0.376	J	0.124	0.500	1	04/09/2018 01:47	WG1095362
Vinyl acetate	U	JO	0.645	5.00	1	04/09/2018 01:47	WG1095362
Vinyl chloride	169		0.118	0.500	1	04/09/2018 01:47	WG1095362
Xylenes, Total	1.54		0.316	1.50	1	04/09/2018 01:47	WG1095362
(S) Toluene-d8	104			80.0-120		04/12/2018 23:55	WG1095362
(S) Toluene-d8	89.2			80.0-120		04/09/2018 01:47	WG1095362
(S) Dibromofluoromethane	106			76.0-123		04/12/2018 23:55	WG1095362
(S) Dibromofluoromethane	93.8			76.0-123		04/09/2018 01:47	WG1095362
(S) 4-Bromofluorobenzene	101			80.0-120		04/09/2018 01:47	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/12/2018 23:55	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/09/2018 02:06	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:06	WG1095362
Benzene	0.202	J	0.0896	0.500	1	04/09/2018 02:06	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:06	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:06	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:06	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 02:06	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 02:06	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:06	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:06	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:06	WG1095362
Carbon disulfide	0.143	J	0.101	0.500	1	04/09/2018 02:06	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:06	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:06	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:06	WG1095362
Chloroethane	4.93		0.141	2.50	1	04/09/2018 02:06	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 02:06	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 02:06	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:06	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:06	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:06	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:06	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:06	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 02:06	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:06	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:06	WG1095362
1,1-Dichloroethene	19.6		0.188	0.500	1	04/09/2018 02:06	WG1095362
cis-1,2-Dichloroethene	18800		23.3	125	250	04/13/2018 00:15	WG1095362
trans-1,2-Dichloroethene	14.5		0.152	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:06	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:06	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:06	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:06	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:06	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:06	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:06	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:06	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:06	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:06	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:06	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 02:06	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 02:06	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:06	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:06	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:06	WG1095362
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:06	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:06	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:06	WG1095362
Naphthalene	0.235	J	0.174	2.50	1	04/09/2018 02:06	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:06	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 02:06	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:06	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:06	WG1095362

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/04/18 13:26

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:06	WG1095362
Tetrachloroethene	9250		49.8	125	250	04/13/2018 00:15	WG1095362
Toluene	0.749		0.412	0.500	1	04/09/2018 02:06	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:06	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:06	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:06	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:06	WG1095362
Trichloroethene	7460		38.2	125	250	04/13/2018 00:15	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:06	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:06	WG1095362
1,2,4-Trimethylbenzene	0.490	U	0.123	0.500	1	04/09/2018 02:06	WG1095362
1,2,3-Trimethylbenzene	0.289	U	0.0739	0.500	1	04/09/2018 02:06	WG1095362
1,3,5-Trimethylbenzene	0.138	U	0.124	0.500	1	04/09/2018 02:06	WG1095362
Vinyl acetate	U	UO	0.645	5.00	1	04/09/2018 02:06	WG1095362
Vinyl chloride	2020		29.5	125	250	04/13/2018 00:15	WG1095362
Xylenes, Total	0.361	U	0.316	1.50	1	04/09/2018 02:06	WG1095362
(S) Toluene-d8	104			80.0-120		04/13/2018 00:15	WG1095362
(S) Toluene-d8	95.8			80.0-120		04/09/2018 02:06	WG1095362
(S) Dibromofluoromethane	105			76.0-123		04/13/2018 00:15	WG1095362
(S) Dibromofluoromethane	91.7			76.0-123		04/09/2018 02:06	WG1095362
(S) 4-Bromofluorobenzene	106			80.0-120		04/09/2018 02:06	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/13/2018 00:15	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/04/18 16:15

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	33.7	J	31.6	100	1	04/11/2018 03:45	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 03:45	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/09/2018 02:25	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:25	WG1095362
Benzene	U		0.0896	0.500	1	04/09/2018 02:25	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:25	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:25	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:25	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 02:25	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 02:25	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:25	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:25	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:25	WG1095362
Carbon disulfide	U		0.101	0.500	1	04/09/2018 02:25	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:25	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:25	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:25	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 02:25	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 02:25	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 02:25	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:25	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:25	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:25	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:25	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:25	WG1095362
1,4-Dichlorobenzene	0.144	J	0.121	0.500	1	04/09/2018 02:25	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:25	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:25	WG1095362
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 02:25	WG1095362
cis-1,2-Dichloroethene	1.35		0.0933	0.500	1	04/13/2018 00:35	WG1095362
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:25	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:25	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:25	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:25	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:25	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:25	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:25	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:25	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:25	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:25	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:25	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 02:25	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 02:25	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:25	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:25	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:25	WG1095362



Collected date/time: 04/04/18 16:15

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:25	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:25	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:25	WG1095362
Naphthalene	U		0.174	2.50	1	04/09/2018 02:25	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:25	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 02:25	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:25	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:25	WG1095362
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:25	WG1095362
Tetrachloroethene	16.4		0.199	0.500	1	04/13/2018 00:35	WG1095362
Toluene	U		0.412	0.500	1	04/09/2018 02:25	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:25	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:25	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:25	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:25	WG1095362
Trichloroethene	0.972		0.153	0.500	1	04/13/2018 00:35	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:25	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:25	WG1095362
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:25	WG1095362
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:25	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:25	WG1095362
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/09/2018 02:25	WG1095362
Vinyl chloride	0.214	<u>J</u>	0.118	0.500	1	04/13/2018 00:35	WG1095362
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:25	WG1095362
(S) Toluene-d8	106			80.0-120		04/13/2018 00:35	WG1095362
(S) Toluene-d8	95.7			80.0-120		04/09/2018 02:25	WG1095362
(S) Dibromofluoromethane	93.5			76.0-123		04/09/2018 02:25	WG1095362
(S) Dibromofluoromethane	104			76.0-123		04/13/2018 00:35	WG1095362
(S) 4-Bromofluorobenzene	97.7			80.0-120		04/09/2018 02:25	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/13/2018 00:35	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/05/18 08:27

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.2	J	31.6	100	1	04/11/2018 04:08	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 04:08	WG1095836

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	7.35	J	1.05	25.0	1	04/09/2018 02:44	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:44	WG1095362
Benzene	U		0.0896	0.500	1	04/09/2018 02:44	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:44	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:44	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:44	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 02:44	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 02:44	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:44	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:44	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:44	WG1095362
Carbon disulfide	U		0.101	0.500	1	04/09/2018 02:44	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:44	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:44	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:44	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 02:44	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 02:44	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 02:44	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:44	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:44	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:44	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:44	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:44	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 02:44	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:44	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:44	WG1095362
1,1-Dichloroethene	1.10		0.188	0.500	1	04/09/2018 02:44	WG1095362
cis-1,2-Dichloroethene	26.3		0.0933	0.500	1	04/09/2018 02:44	WG1095362
trans-1,2-Dichloroethene	0.709		0.152	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:44	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:44	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:44	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:44	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:44	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:44	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:44	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:44	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:44	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:44	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:44	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 02:44	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 02:44	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:44	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:44	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:44	WG1095362

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/05/18 08:27

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:44	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:44	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:44	WG1095362
Naphthalene	U		0.174	2.50	1	04/09/2018 02:44	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:44	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 02:44	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:44	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:44	WG1095362
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:44	WG1095362
Tetrachloroethene	12.8		0.199	0.500	1	04/13/2018 00:55	WG1095362
Toluene	U		0.412	0.500	1	04/09/2018 02:44	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:44	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:44	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:44	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:44	WG1095362
Trichloroethene	0.358	<u>J</u>	0.153	0.500	1	04/13/2018 00:55	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:44	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:44	WG1095362
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:44	WG1095362
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:44	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:44	WG1095362
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/09/2018 02:44	WG1095362
Vinyl chloride	6.07		0.118	0.500	1	04/09/2018 02:44	WG1095362
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:44	WG1095362
(S) Toluene-d8	95.3			80.0-120		04/09/2018 02:44	WG1095362
(S) Toluene-d8	101			80.0-120		04/13/2018 00:55	WG1095362
(S) Dibromofluoromethane	95.1			76.0-123		04/09/2018 02:44	WG1095362
(S) Dibromofluoromethane	107			76.0-123		04/13/2018 00:55	WG1095362
(S) 4-Bromofluorobenzene	104			80.0-120		04/13/2018 00:55	WG1095362
(S) 4-Bromofluorobenzene	97.3			80.0-120		04/09/2018 02:44	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 04:31	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 04:31	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.35	<u>B J</u>	1.05	25.0	1	04/08/2018 20:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 20:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 20:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 20:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 20:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 20:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 20:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 20:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 20:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 20:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 20:49	WG1095442
Carbon disulfide	0.136	<u>B J</u>	0.101	0.500	1	04/08/2018 20:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 20:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 20:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 20:49	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 20:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 20:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 20:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 20:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 20:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 20:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 20:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 20:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 20:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 20:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 20:49	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 20:49	WG1095442
cis-1,2-Dichloroethene	0.375	<u>J</u>	0.0933	0.500	1	04/08/2018 20:49	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 20:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 20:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 20:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 20:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 20:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 20:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 20:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 20:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 20:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 20:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 20:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 20:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 20:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 20:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 20:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 20:49	WG1095442



Collected date/time: 04/05/18 09:22

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 20:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 20:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 20:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 20:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 20:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 20:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 20:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 20:49	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 20:49	WG1095442
Tetrachloroethene	20.3		0.199	0.500	1	04/08/2018 20:49	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 20:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 20:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 20:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 20:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 20:49	WG1095442
Trichloroethene	0.346	J	0.153	0.500	1	04/08/2018 20:49	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 20:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 20:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 20:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 20:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 20:49	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 20:49	WG1095442
Vinyl chloride	0.843		0.118	0.500	1	04/08/2018 20:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 20:49	WG1095442
(S) Toluene-d8	104			80.0-120		04/08/2018 20:49	WG1095442
(S) Dibromofluoromethane	106			76.0-123		04/08/2018 20:49	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/08/2018 20:49	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/05/18 10:10

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	207		31.6	100	1	04/11/2018 04:54	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 04:54	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.25	<u>B</u> <u>J</u>	1.05	25.0	1	04/08/2018 21:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 21:09	WG1095442
Benzene	0.638		0.0896	0.500	1	04/08/2018 21:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 21:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 21:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 21:09	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 21:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 21:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 21:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 21:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 21:09	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 21:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 21:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 21:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 21:09	WG1095442
Chloroethane	1.09	<u>J</u>	0.141	2.50	1	04/08/2018 21:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 21:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 21:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 21:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 21:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 21:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 21:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 21:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 21:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 21:09	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 21:09	WG1095442
1,1-Dichloroethene	0.371	<u>J</u>	0.188	0.500	1	04/08/2018 21:09	WG1095442
cis-1,2-Dichloroethene	222		0.933	5.00	10	04/10/2018 01:54	WG1095442
trans-1,2-Dichloroethene	1.00		0.152	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 21:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 21:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 21:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 21:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 21:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 21:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 21:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 21:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 21:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 21:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 21:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 21:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 21:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 21:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 21:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 21:09	WG1095442



Collected date/time: 04/05/18 10:10

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 21:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 21:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 21:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 21:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 21:09	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 21:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 21:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 21:09	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 21:09	WG1095442
Tetrachloroethene	267		1.99	5.00	10	04/10/2018 01:54	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 21:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 21:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 21:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 21:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 21:09	WG1095442
Trichloroethene	70.5		0.153	0.500	1	04/08/2018 21:09	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 21:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 21:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 21:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 21:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 21:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 21:09	WG1095442
Vinyl chloride	17.6		0.118	0.500	1	04/08/2018 21:09	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 21:09	WG1095442
(S) Toluene-d8	101			80.0-120		04/08/2018 21:09	WG1095442
(S) Toluene-d8	98.1			80.0-120		04/10/2018 01:54	WG1095442
(S) Dibromofluoromethane	106			76.0-123		04/08/2018 21:09	WG1095442
(S) Dibromofluoromethane	104			76.0-123		04/10/2018 01:54	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/10/2018 01:54	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 21:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	32.9	J	31.6	100	1	04/11/2018 05:18	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 05:18	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/08/2018 21:29	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 21:29	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 21:29	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 21:29	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 21:29	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 21:29	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 21:29	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 21:29	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 21:29	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 21:29	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 21:29	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 21:29	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 21:29	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 21:29	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 21:29	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 21:29	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 21:29	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 21:29	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 21:29	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 21:29	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 21:29	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 21:29	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 21:29	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 21:29	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 21:29	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 21:29	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 21:29	WG1095442
cis-1,2-Dichloroethene	0.246	J	0.0933	0.500	1	04/10/2018 02:13	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 21:29	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 21:29	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 21:29	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 21:29	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 21:29	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 21:29	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 21:29	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 21:29	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 21:29	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 21:29	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 21:29	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 21:29	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 21:29	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 21:29	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 21:29	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 21:29	WG1095442



Collected date/time: 04/05/18 14:18

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 21:29	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 21:29	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 21:29	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 21:29	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 21:29	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 21:29	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 21:29	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 21:29	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 21:29	WG1095442
Tetrachloroethene	1.58		0.199	0.500	1	04/10/2018 02:13	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 21:29	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 21:29	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 21:29	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 21:29	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 21:29	WG1095442
Trichloroethene	U		0.153	0.500	1	04/08/2018 21:29	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 21:29	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 21:29	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 21:29	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 21:29	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 21:29	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 21:29	WG1095442
Vinyl chloride	0.210	J	0.118	0.500	1	04/08/2018 21:29	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 21:29	WG1095442
(S) Toluene-d8	102			80.0-120		04/08/2018 21:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/10/2018 02:13	WG1095442
(S) Dibromofluoromethane	102			76.0-123		04/10/2018 02:13	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/08/2018 21:29	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 02:13	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/08/2018 21:29	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 05:41	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 05:41	WG1095836

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.74	<u>B</u> <u>J</u>	1.05	25.0	1	04/08/2018 21:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 21:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 21:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 21:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 21:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 21:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 21:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 21:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 21:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 21:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 21:49	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 21:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 21:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 21:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 21:49	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 21:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 21:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 21:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 21:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 21:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 21:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 21:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 21:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 21:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 21:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 21:49	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 21:49	WG1095442
cis-1,2-Dichloroethene	0.959		0.0933	0.500	1	04/08/2018 21:49	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 21:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 21:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 21:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 21:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 21:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 21:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 21:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 21:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 21:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 21:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 21:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 21:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 21:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 21:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 21:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 21:49	WG1095442

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 21:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 21:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 21:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 21:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 21:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 21:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 21:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 21:49	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 21:49	WG1095442
Tetrachloroethene	2.93		0.199	0.500	1	04/08/2018 21:49	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 21:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 21:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 21:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 21:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 21:49	WG1095442
Trichloroethene	U		0.153	0.500	1	04/08/2018 21:49	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 21:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 21:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 21:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 21:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 21:49	WG1095442
Vinyl acetate	U	<u>J4</u>	0.645	5.00	1	04/08/2018 21:49	WG1095442
Vinyl chloride	6.45		0.118	0.500	1	04/08/2018 21:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 21:49	WG1095442
(S) Toluene-d8	106			80.0-120		04/08/2018 21:49	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/08/2018 21:49	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 21:49	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.04	<u>B</u> <u>J</u>	1.05	25.0	1	04/08/2018 22:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 22:09	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 22:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 22:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 22:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 22:09	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 22:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 22:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 22:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 22:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 22:09	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 22:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 22:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 22:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 22:09	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 22:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 22:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 22:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 22:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 22:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 22:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 22:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 22:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 22:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 22:09	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 22:09	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 22:09	WG1095442
cis-1,2-Dichloroethene	18.3		0.0933	0.500	1	04/08/2018 22:09	WG1095442
trans-1,2-Dichloroethene	0.203	<u>J</u>	0.152	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 22:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 22:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 22:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 22:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 22:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 22:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 22:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 22:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 22:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 22:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 22:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 22:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 22:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 22:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 22:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 22:09	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 22:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 22:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 22:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 22:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 22:09	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 22:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 22:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 22:09	WG1095442

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/05/18 16:29

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 22:09	WG1095442
Tetrachloroethene	2.14		0.199	0.500	1	04/08/2018 22:09	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 22:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 22:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 22:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 22:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 22:09	WG1095442
Trichloroethene	3.02		0.153	0.500	1	04/08/2018 22:09	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 22:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 22:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 22:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 22:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 22:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 22:09	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/08/2018 22:09	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 22:09	WG1095442
(S) Toluene-d8	103			80.0-120		04/08/2018 22:09	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/08/2018 22:09	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 22:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/05/18 12:11

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	156		31.6	100	1	04/11/2018 06:05	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 06:05	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.89	<u>B</u> <u>J</u>	1.05	25.0	1	04/08/2018 22:29	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 22:29	WG1095442
Benzene	0.251	<u>J</u>	0.0896	0.500	1	04/08/2018 22:29	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 22:29	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 22:29	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 22:29	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 22:29	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 22:29	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 22:29	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 22:29	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 22:29	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 22:29	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 22:29	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 22:29	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 22:29	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 22:29	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 22:29	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 22:29	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 22:29	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 22:29	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 22:29	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 22:29	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 22:29	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 22:29	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 22:29	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 22:29	WG1095442
1,1-Dichloroethene	0.822		0.188	0.500	1	04/08/2018 22:29	WG1095442
cis-1,2-Dichloroethene	104		0.0933	0.500	1	04/08/2018 22:29	WG1095442
trans-1,2-Dichloroethene	0.750		0.152	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 22:29	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 22:29	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 22:29	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 22:29	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 22:29	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 22:29	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 22:29	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 22:29	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 22:29	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 22:29	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 22:29	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 22:29	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 22:29	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 22:29	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 22:29	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 22:29	WG1095442



Collected date/time: 04/05/18 12:11

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 22:29	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 22:29	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 22:29	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 22:29	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 22:29	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 22:29	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 22:29	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 22:29	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 22:29	WG1095442
Tetrachloroethene	229		0.995	2.50	5	04/10/2018 02:33	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 22:29	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 22:29	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 22:29	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 22:29	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 22:29	WG1095442
Trichloroethene	26.3		0.153	0.500	1	04/08/2018 22:29	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 22:29	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 22:29	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 22:29	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 22:29	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 22:29	WG1095442
Vinyl acetate	U	<u>J4</u>	0.645	5.00	1	04/08/2018 22:29	WG1095442
Vinyl chloride	1.45		0.118	0.500	1	04/08/2018 22:29	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 22:29	WG1095442
(S) Toluene-d8	96.2			80.0-120		04/10/2018 02:33	WG1095442
(S) Toluene-d8	107			80.0-120		04/08/2018 22:29	WG1095442
(S) Dibromofluoromethane	99.0			76.0-123		04/10/2018 02:33	WG1095442
(S) Dibromofluoromethane	111			76.0-123		04/08/2018 22:29	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/08/2018 22:29	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 02:33	WG1095442

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 06:29	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 06:29	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.37	<u>B J</u>	1.05	25.0	1	04/08/2018 22:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 22:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 22:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 22:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 22:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 22:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 22:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 22:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 22:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 22:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 22:49	WG1095442
Carbon disulfide	0.144	<u>B J</u>	0.101	0.500	1	04/08/2018 22:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 22:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 22:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 22:49	WG1095442
Chloroethane	2.81		0.141	2.50	1	04/08/2018 22:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 22:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 22:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 22:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 22:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 22:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 22:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 22:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 22:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 22:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 22:49	WG1095442
1,1-Dichloroethene	0.198	<u>J</u>	0.188	0.500	1	04/08/2018 22:49	WG1095442
cis-1,2-Dichloroethene	8.89		0.0933	0.500	1	04/08/2018 22:49	WG1095442
trans-1,2-Dichloroethene	0.300	<u>J</u>	0.152	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 22:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 22:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 22:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 22:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 22:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 22:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 22:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 22:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 22:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 22:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 22:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 22:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 22:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 22:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 22:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 22:49	WG1095442



Collected date/time: 04/05/18 11:15

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 22:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 22:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 22:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 22:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 22:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 22:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 22:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 22:49	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 22:49	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 02:53	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 22:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 22:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 22:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 22:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 22:49	WG1095442
Trichloroethene	0.563		0.153	0.500	1	04/08/2018 22:49	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 22:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 22:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 22:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 22:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 22:49	WG1095442
Vinyl acetate	U	<u>J4</u>	0.645	5.00	1	04/08/2018 22:49	WG1095442
Vinyl chloride	11.1		0.118	0.500	1	04/08/2018 22:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 22:49	WG1095442
(S) Toluene-d8	100			80.0-120		04/10/2018 02:53	WG1095442
(S) Toluene-d8	105			80.0-120		04/08/2018 22:49	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/08/2018 22:49	WG1095442
(S) Dibromofluoromethane	98.8			76.0-123		04/10/2018 02:53	WG1095442
(S) 4-Bromofluorobenzene	113			80.0-120		04/08/2018 22:49	WG1095442
(S) 4-Bromofluorobenzene	104			80.0-120		04/10/2018 02:53	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.16	<u>B</u> <u>J</u>	1.05	25.0	1	04/08/2018 23:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 23:09	WG1095442
Benzene	4.00		0.0896	0.500	1	04/08/2018 23:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 23:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 23:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 23:09	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 23:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 23:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 23:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 23:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 23:09	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 23:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 23:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 23:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 23:09	WG1095442
Chloroethane	0.595	<u>J</u>	0.141	2.50	1	04/08/2018 23:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 23:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 23:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 23:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 23:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 23:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 23:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 23:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 23:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 23:09	WG1095442
1,1-Dichloroethane	0.285	<u>J</u>	0.114	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 23:09	WG1095442
1,1-Dichloroethene	11.9		0.188	0.500	1	04/08/2018 23:09	WG1095442
cis-1,2-Dichloroethene	1030		4.66	25.0	50	04/10/2018 03:13	WG1095442
trans-1,2-Dichloroethene	7.13		0.152	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 23:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 23:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 23:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 23:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 23:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 23:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 23:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 23:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 23:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 23:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 23:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 23:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 23:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 23:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 23:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 23:09	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 23:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 23:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 23:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 23:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 23:09	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 23:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 23:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 23:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/06/18 09:15

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 23:09	WG1095442
Tetrachloroethene	1970		9.95	25.0	50	04/10/2018 03:13	WG1095442
Toluene	0.599		0.412	0.500	1	04/08/2018 23:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 23:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 23:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 23:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 23:09	WG1095442
Trichloroethene	284		7.65	25.0	50	04/10/2018 03:13	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 23:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 23:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 23:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 23:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 23:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 23:09	WG1095442
Vinyl chloride	217		5.90	25.0	50	04/10/2018 03:13	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 23:09	WG1095442
(S) Toluene-d8	101			80.0-120		04/08/2018 23:09	WG1095442
(S) Toluene-d8	98.4			80.0-120		04/10/2018 03:13	WG1095442
(S) Dibromofluoromethane	107			76.0-123		04/08/2018 23:09	WG1095442
(S) Dibromofluoromethane	101			76.0-123		04/10/2018 03:13	WG1095442
(S) 4-Bromofluorobenzene	111			80.0-120		04/08/2018 23:09	WG1095442
(S) 4-Bromofluorobenzene	102			80.0-120		04/10/2018 03:13	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/08/2018 23:29	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 23:29	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 23:29	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 23:29	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 23:29	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 23:29	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 23:29	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 23:29	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 23:29	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 23:29	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 23:29	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 23:29	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 23:29	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 23:29	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 23:29	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 23:29	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 23:29	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 23:29	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 23:29	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 23:29	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 23:29	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 23:29	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 23:29	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 23:29	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 23:29	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 23:29	WG1095442
1,1-Dichloroethene	1.21		0.188	0.500	1	04/08/2018 23:29	WG1095442
cis-1,2-Dichloroethene	629		0.933	5.00	10	04/10/2018 03:32	WG1095442
trans-1,2-Dichloroethene	3.34		0.152	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 23:29	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 23:29	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 23:29	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 23:29	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 23:29	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 23:29	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 23:29	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 23:29	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 23:29	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 23:29	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 23:29	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 23:29	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 23:29	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 23:29	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 23:29	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 23:29	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 23:29	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 23:29	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 23:29	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 23:29	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 23:29	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 23:29	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 23:29	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 23:29	WG1095442

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 23:29	WG1095442
Tetrachloroethene	U		1.99	5.00	10	04/10/2018 03:32	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 23:29	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 23:29	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 23:29	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 23:29	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 23:29	WG1095442
Trichloroethene	210		1.53	5.00	10	04/10/2018 03:32	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 23:29	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 23:29	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 23:29	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 23:29	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 23:29	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 23:29	WG1095442
Vinyl chloride	42.2		0.118	0.500	1	04/08/2018 23:29	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 23:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/08/2018 23:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/10/2018 03:32	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/08/2018 23:29	WG1095442
(S) Dibromofluoromethane	100			76.0-123		04/10/2018 03:32	WG1095442
(S) 4-Bromofluorobenzene	107			80.0-120		04/08/2018 23:29	WG1095442
(S) 4-Bromofluorobenzene	102			80.0-120		04/10/2018 03:32	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L984034-15 WG1095442: PCE not reportable at 1x due to possible carryover.
 L984034-15 WG1095442: PCE cannot be reported at a lower dilution due to high levels of target analytes.



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.25	<u>B</u> <u>J</u>	1.05	25.0	1	04/08/2018 23:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 23:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 23:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 23:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 23:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 23:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 23:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 23:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 23:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 23:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 23:49	WG1095442
Carbon disulfide	0.132	<u>B</u> <u>J</u>	0.101	0.500	1	04/08/2018 23:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 23:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 23:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 23:49	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 23:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 23:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 23:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 23:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 23:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 23:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 23:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 23:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 23:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 23:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 23:49	WG1095442
1,1-Dichloroethene	0.396	<u>J</u>	0.188	0.500	1	04/08/2018 23:49	WG1095442
cis-1,2-Dichloroethene	32.4		0.0933	0.500	1	04/10/2018 03:52	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 23:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 23:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 23:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 23:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 23:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 23:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 23:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 23:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 23:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 23:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 23:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 23:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 23:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 23:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 23:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 23:49	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 23:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 23:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 23:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 23:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 23:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 23:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 23:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 23:49	WG1095442

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/06/18 11:17

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 23:49	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 03:52	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 23:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 23:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 23:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 23:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 23:49	WG1095442
Trichloroethene	1.81		0.153	0.500	1	04/10/2018 03:52	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 23:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 23:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 23:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 23:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 23:49	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 23:49	WG1095442
Vinyl chloride	22.4		0.118	0.500	1	04/08/2018 23:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 23:49	WG1095442
(S) Toluene-d8	104			80.0-120		04/08/2018 23:49	WG1095442
(S) Toluene-d8	98.0			80.0-120		04/10/2018 03:52	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/08/2018 23:49	WG1095442
(S) Dibromofluoromethane	100			76.0-123		04/10/2018 03:52	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/08/2018 23:49	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/10/2018 03:52	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.06	<u>BJ</u>	1.05	25.0	1	04/09/2018 00:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 00:09	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 00:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 00:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 00:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 00:09	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 00:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 00:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 00:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 00:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 00:09	WG1095442
Carbon disulfide	0.155	<u>BJ</u>	0.101	0.500	1	04/09/2018 00:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 00:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 00:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 00:09	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 00:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 00:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 00:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 00:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 00:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 00:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 00:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 00:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 00:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 00:09	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 00:09	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 00:09	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2018 04:12	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 00:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 00:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 00:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 00:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 00:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 00:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 00:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 00:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 00:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 00:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 00:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 00:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 00:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 00:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 00:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 00:09	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 00:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 00:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 00:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 00:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 00:09	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 00:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 00:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 00:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/06/18 09:37

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 00:09	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 04:12	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 00:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 00:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 00:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 00:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 00:09	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 00:09	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 00:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 00:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 00:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 00:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 00:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 00:09	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/09/2018 00:09	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 00:09	WG1095442
(S) Toluene-d8	106			80.0-120		04/09/2018 00:09	WG1095442
(S) Toluene-d8	102			80.0-120		04/10/2018 04:12	WG1095442
(S) Dibromofluoromethane	99.0			76.0-123		04/10/2018 04:12	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 00:09	WG1095442
(S) 4-Bromofluorobenzene	106			80.0-120		04/09/2018 00:09	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 04:12	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/10/2018 04:32	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/10/2018 04:32	WG1095442
Benzene	10.6		0.0896	0.500	1	04/10/2018 04:32	WG1095442
Bromobenzene	U		0.133	0.500	1	04/10/2018 04:32	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/10/2018 04:32	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/10/2018 04:32	WG1095442
Bromoform	U		0.186	0.500	1	04/10/2018 04:32	WG1095442
Bromomethane	U		0.157	2.50	1	04/10/2018 04:32	WG1095442
n-Butylbenzene	8.28		0.143	0.500	1	04/10/2018 04:32	WG1095442
sec-Butylbenzene	10.1		0.134	0.500	1	04/10/2018 04:32	WG1095442
tert-Butylbenzene	0.248	J	0.183	0.500	1	04/10/2018 04:32	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/10/2018 04:32	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/10/2018 04:32	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/10/2018 04:32	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/10/2018 04:32	WG1095442
Chloroethane	U		0.141	2.50	1	04/10/2018 04:32	WG1095442
Chloroform	U		0.0860	0.500	1	04/10/2018 04:32	WG1095442
Chloromethane	U		0.153	1.25	1	04/10/2018 04:32	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/10/2018 04:32	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2018 04:32	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2018 04:32	WG1095442
Dibromomethane	U		0.117	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2018 04:32	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2018 04:32	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2018 04:32	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2018 04:32	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2018 04:32	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2018 04:32	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2018 04:32	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2018 04:32	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2018 04:32	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2018 04:32	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2018 04:32	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2018 04:32	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/10/2018 04:32	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2018 04:32	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2018 04:32	WG1095442
Ethylbenzene	11.7		0.158	0.500	1	04/10/2018 04:32	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2018 04:32	WG1095442
2-Hexanone	U		0.757	5.00	1	04/10/2018 04:32	WG1095442
n-Hexane	4.87	J	0.305	5.00	1	04/10/2018 04:32	WG1095442
Iodomethane	U		0.377	10.0	1	04/10/2018 04:32	WG1095442
Isopropylbenzene	29.7		0.126	0.500	1	04/10/2018 04:32	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2018 04:32	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2018 04:32	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/10/2018 04:32	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2018 04:32	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2018 04:32	WG1095442
Naphthalene	6.70		0.174	2.50	1	04/10/2018 04:32	WG1095442
n-Propylbenzene	92.3		0.162	0.500	1	04/10/2018 04:32	WG1095442
Styrene	U		0.117	0.500	1	04/10/2018 04:32	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2018 04:32	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2018 04:32	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/06/18 11:23

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2018 04:32	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 04:32	WG1095442
Toluene	1.24		0.412	0.500	1	04/10/2018 04:32	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2018 04:32	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2018 04:32	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2018 04:32	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2018 04:32	WG1095442
Trichloroethene	U		0.153	0.500	1	04/10/2018 04:32	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2018 04:32	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2018 04:32	WG1095442
1,2,4-Trimethylbenzene	1.70		0.123	0.500	1	04/10/2018 04:32	WG1095442
1,2,3-Trimethylbenzene	3.51		0.0739	0.500	1	04/10/2018 04:32	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2018 04:32	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/10/2018 04:32	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/10/2018 04:32	WG1095442
Xylenes, Total	3.32		0.316	1.50	1	04/10/2018 04:32	WG1095442
(S) Toluene-d8	91.3			80.0-120		04/10/2018 04:32	WG1095442
(S) Dibromofluoromethane	104			76.0-123		04/10/2018 04:32	WG1095442
(S) 4-Bromofluorobenzene	102			80.0-120		04/10/2018 04:32	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/09/2018 00:50	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 00:50	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 00:50	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 00:50	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 00:50	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 00:50	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 00:50	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 00:50	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 00:50	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 00:50	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 00:50	WG1095442
Carbon disulfide	0.201	<u>BJ</u>	0.101	0.500	1	04/09/2018 00:50	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 00:50	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 00:50	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 00:50	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 00:50	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 00:50	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 00:50	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 00:50	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 00:50	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 00:50	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 00:50	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 00:50	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 00:50	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 00:50	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 00:50	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 00:50	WG1095442
cis-1,2-Dichloroethene	16.5		0.0933	0.500	1	04/09/2018 00:50	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 00:50	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 00:50	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 00:50	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 00:50	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 00:50	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 00:50	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 00:50	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 00:50	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 00:50	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 00:50	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 00:50	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 00:50	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 00:50	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 00:50	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 00:50	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 00:50	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 00:50	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 00:50	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 00:50	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 00:50	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 00:50	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 00:50	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 00:50	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 00:50	WG1095442

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/06/18 11:57

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 00:50	WG1095442
Tetrachloroethene	0.618		0.199	0.500	1	04/09/2018 00:50	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 00:50	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 00:50	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 00:50	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 00:50	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 00:50	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 00:50	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 00:50	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 00:50	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 00:50	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 00:50	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 00:50	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 00:50	WG1095442
Vinyl chloride	121		0.118	0.500	1	04/09/2018 00:50	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 00:50	WG1095442
(S) Toluene-d8	104			80.0-120		04/09/2018 00:50	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 00:50	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/09/2018 00:50	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.11	<u>B</u> <u>J</u>	1.05	25.0	1	04/09/2018 01:10	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:10	WG1095442
Benzene	3.83		0.0896	0.500	1	04/09/2018 01:10	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:10	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:10	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:10	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 01:10	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 01:10	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:10	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:10	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:10	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/09/2018 01:10	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:10	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:10	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:10	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 01:10	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 01:10	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 01:10	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:10	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:10	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:10	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:10	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:10	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:10	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:10	WG1095442
1,1-Dichloroethane	0.251	<u>J</u>	0.114	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:10	WG1095442
1,1-Dichloroethene	11.2		0.188	0.500	1	04/09/2018 01:10	WG1095442
cis-1,2-Dichloroethene	1020		4.66	25.0	50	04/10/2018 04:52	WG1095442
trans-1,2-Dichloroethene	7.91		0.152	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:10	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:10	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:10	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:10	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:10	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:10	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:10	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:10	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:10	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:10	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:10	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 01:10	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 01:10	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:10	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:10	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:10	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:10	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:10	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:10	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 01:10	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:10	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 01:10	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:10	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:10	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:10	WG1095442
Tetrachloroethene	1980		9.95	25.0	50	04/10/2018 04:52	WG1095442
Toluene	0.597		0.412	0.500	1	04/09/2018 01:10	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:10	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:10	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:10	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:10	WG1095442
Trichloroethene	287		7.65	25.0	50	04/10/2018 04:52	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:10	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:10	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 01:10	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 01:10	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:10	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 01:10	WG1095442
Vinyl chloride	231		5.90	25.0	50	04/10/2018 04:52	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 01:10	WG1095442
(S) Toluene-d8	104			80.0-120		04/09/2018 01:10	WG1095442
(S) Toluene-d8	108			80.0-120		04/10/2018 04:52	WG1095442
(S) Dibromofluoromethane	97.0			76.0-123		04/10/2018 04:52	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 01:10	WG1095442
(S) 4-Bromofluorobenzene	106			80.0-120		04/10/2018 04:52	WG1095442
(S) 4-Bromofluorobenzene	107			80.0-120		04/09/2018 01:10	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.5	250	10	04/09/2018 01:30	WG1095442
Acrylonitrile	U		8.73	50.0	10	04/09/2018 01:30	WG1095442
Benzene	181		0.896	5.00	10	04/09/2018 01:30	WG1095442
Bromobenzene	U		1.33	5.00	10	04/09/2018 01:30	WG1095442
Bromodichloromethane	U		0.800	5.00	10	04/09/2018 01:30	WG1095442
Bromochloromethane	U		1.45	5.00	10	04/09/2018 01:30	WG1095442
Bromoform	U		1.86	5.00	10	04/09/2018 01:30	WG1095442
Bromomethane	U		1.57	25.0	10	04/09/2018 01:30	WG1095442
n-Butylbenzene	U		1.43	5.00	10	04/09/2018 01:30	WG1095442
sec-Butylbenzene	2.31	J	1.34	5.00	10	04/09/2018 01:30	WG1095442
tert-Butylbenzene	U		1.83	5.00	10	04/09/2018 01:30	WG1095442
Carbon disulfide	U		1.01	5.00	10	04/09/2018 01:30	WG1095442
Carbon tetrachloride	U		1.59	5.00	10	04/09/2018 01:30	WG1095442
Chlorobenzene	U		1.40	5.00	10	04/09/2018 01:30	WG1095442
Chlorodibromomethane	U		1.28	5.00	10	04/09/2018 01:30	WG1095442
Chloroethane	U		1.41	25.0	10	04/09/2018 01:30	WG1095442
Chloroform	U		0.860	5.00	10	04/09/2018 01:30	WG1095442
Chloromethane	U		1.53	12.5	10	04/09/2018 01:30	WG1095442
2-Chlorotoluene	U		1.11	5.00	10	04/09/2018 01:30	WG1095442
4-Chlorotoluene	U		0.972	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dibromo-3-Chloropropane	U		3.25	25.0	10	04/09/2018 01:30	WG1095442
1,2-Dibromoethane	U		1.93	5.00	10	04/09/2018 01:30	WG1095442
Dibromomethane	U		1.17	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dichlorobenzene	U		1.01	5.00	10	04/09/2018 01:30	WG1095442
1,3-Dichlorobenzene	U		1.30	5.00	10	04/09/2018 01:30	WG1095442
1,4-Dichlorobenzene	U		1.21	5.00	10	04/09/2018 01:30	WG1095442
Dichlorodifluoromethane	U		1.27	25.0	10	04/09/2018 01:30	WG1095442
1,1-Dichloroethane	U		1.14	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dichloroethane	U		1.08	5.00	10	04/09/2018 01:30	WG1095442
1,1-Dichloroethene	U		1.88	5.00	10	04/09/2018 01:30	WG1095442
cis-1,2-Dichloroethene	U		0.933	5.00	10	04/10/2018 05:12	WG1095442
trans-1,2-Dichloroethene	U		1.52	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dichloropropane	U		1.90	5.00	10	04/09/2018 01:30	WG1095442
1,1-Dichloropropene	U		1.28	5.00	10	04/09/2018 01:30	WG1095442
1,3-Dichloropropane	U		1.47	10.0	10	04/09/2018 01:30	WG1095442
cis-1,3-Dichloropropene	U		0.976	5.00	10	04/09/2018 01:30	WG1095442
trans-1,3-Dichloropropene	U		2.22	5.00	10	04/09/2018 01:30	WG1095442
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	04/09/2018 01:30	WG1095442
2,2-Dichloropropane	U		0.929	5.00	10	04/09/2018 01:30	WG1095442
Di-isopropyl ether	U		0.924	5.00	10	04/09/2018 01:30	WG1095442
Ethylbenzene	26.6		1.58	5.00	10	04/09/2018 01:30	WG1095442
Hexachloro-1,3-butadiene	U		1.57	10.0	10	04/09/2018 01:30	WG1095442
2-Hexanone	U		7.57	50.0	10	04/09/2018 01:30	WG1095442
n-Hexane	36.9	J	3.05	50.0	10	04/09/2018 01:30	WG1095442
Iodomethane	U		3.77	100	10	04/09/2018 01:30	WG1095442
Isopropylbenzene	53.2		1.26	5.00	10	04/09/2018 01:30	WG1095442
p-Isopropyltoluene	U		1.38	5.00	10	04/09/2018 01:30	WG1095442
2-Butanone (MEK)	U		12.8	50.0	10	04/09/2018 01:30	WG1095442
Methylene Chloride	U		10.7	25.0	10	04/09/2018 01:30	WG1095442
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	04/09/2018 01:30	WG1095442
Methyl tert-butyl ether	U		1.02	5.00	10	04/09/2018 01:30	WG1095442
Naphthalene	4.50	B J	1.74	25.0	10	04/09/2018 01:30	WG1095442
n-Propylbenzene	88.0		1.62	5.00	10	04/09/2018 01:30	WG1095442
Styrene	U		1.17	5.00	10	04/09/2018 01:30	WG1095442
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	04/09/2018 01:30	WG1095442
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	04/09/2018 01:30	WG1095442

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/06/18 12:21

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	04/09/2018 01:30	WG1095442
Tetrachloroethene	U		1.99	5.00	10	04/10/2018 05:12	WG1095442
Toluene	12.1		4.12	5.00	10	04/09/2018 01:30	WG1095442
1,2,3-Trichlorobenzene	U		1.64	5.00	10	04/09/2018 01:30	WG1095442
1,2,4-Trichlorobenzene	U		3.55	5.00	10	04/09/2018 01:30	WG1095442
1,1,1-Trichloroethane	U		0.940	5.00	10	04/09/2018 01:30	WG1095442
1,1,2-Trichloroethane	U		1.86	5.00	10	04/09/2018 01:30	WG1095442
Trichloroethene	U		1.53	5.00	10	04/10/2018 05:12	WG1095442
Trichlorofluoromethane	U		1.30	25.0	10	04/09/2018 01:30	WG1095442
1,2,3-Trichloropropane	U		2.47	25.0	10	04/09/2018 01:30	WG1095442
1,2,4-Trimethylbenzene	U		1.23	5.00	10	04/09/2018 01:30	WG1095442
1,2,3-Trimethylbenzene	7.86		0.739	5.00	10	04/09/2018 01:30	WG1095442
1,3,5-Trimethylbenzene	2.77	J	1.24	5.00	10	04/09/2018 01:30	WG1095442
Vinyl acetate	U	J4	6.45	50.0	10	04/09/2018 01:30	WG1095442
Vinyl chloride	U		1.18	5.00	10	04/09/2018 01:30	WG1095442
Xylenes, Total	28.4		3.16	15.0	10	04/09/2018 01:30	WG1095442
(S) Toluene-d8	99.2			80.0-120		04/10/2018 05:12	WG1095442
(S) Toluene-d8	105			80.0-120		04/09/2018 01:30	WG1095442
(S) Dibromofluoromethane	107			76.0-123		04/09/2018 01:30	WG1095442
(S) Dibromofluoromethane	98.8			76.0-123		04/10/2018 05:12	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 05:12	WG1095442
(S) 4-Bromofluorobenzene	107			80.0-120		04/09/2018 01:30	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L984034-21 WG1095442: Cannot be analyzed at a lower dilution due to high levels of target analytes.



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/09/2018 01:50	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:50	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 01:50	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:50	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:50	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:50	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 01:50	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 01:50	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:50	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:50	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:50	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/09/2018 01:50	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:50	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:50	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:50	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 01:50	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 01:50	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 01:50	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:50	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:50	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:50	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:50	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:50	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:50	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:50	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:50	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 01:50	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2018 05:32	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:50	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:50	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:50	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:50	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:50	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:50	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:50	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:50	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:50	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:50	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:50	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 01:50	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 01:50	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:50	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:50	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:50	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:50	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:50	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:50	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 01:50	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:50	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 01:50	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:50	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:50	WG1095442

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/06/18 12:50

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:50	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 05:32	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 01:50	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:50	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:50	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:50	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:50	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 01:50	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:50	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:50	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 01:50	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 01:50	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:50	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 01:50	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/09/2018 01:50	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 01:50	WG1095442
(S) Toluene-d8	100			80.0-120		04/10/2018 05:32	WG1095442
(S) Toluene-d8	104			80.0-120		04/09/2018 01:50	WG1095442
(S) Dibromofluoromethane	101			76.0-123		04/10/2018 05:32	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/09/2018 01:50	WG1095442
(S) 4-Bromofluorobenzene	104			80.0-120		04/10/2018 05:32	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/09/2018 01:50	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/06/18 14:48

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 06:52	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 06:52	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.55	<u>B</u> <u>J</u>	1.05	25.0	1	04/09/2018 02:10	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:10	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 02:10	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:10	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:10	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:10	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 02:10	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 02:10	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:10	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:10	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:10	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/09/2018 02:10	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:10	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:10	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:10	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 02:10	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 02:10	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 02:10	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:10	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:10	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:10	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:10	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:10	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 02:10	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:10	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:10	WG1095442
1,1-Dichloroethene	0.347	<u>J</u>	0.188	0.500	1	04/09/2018 02:10	WG1095442
cis-1,2-Dichloroethene	19.4		0.0933	0.500	1	04/09/2018 02:10	WG1095442
trans-1,2-Dichloroethene	0.277	<u>J</u>	0.152	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:10	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:10	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:10	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:10	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:10	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:10	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:10	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:10	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:10	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:10	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:10	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 02:10	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 02:10	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:10	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:10	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:10	WG1095442



Collected date/time: 04/06/18 14:48

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:10	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:10	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:10	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 02:10	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:10	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 02:10	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:10	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:10	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:10	WG1095442
Tetrachloroethene	1.85		0.199	0.500	1	04/09/2018 02:10	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 02:10	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:10	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:10	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:10	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:10	WG1095442
Trichloroethene	2.24		0.153	0.500	1	04/09/2018 02:10	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:10	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:10	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:10	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:10	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:10	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 02:10	WG1095442
Vinyl chloride	26.9		0.118	0.500	1	04/09/2018 02:10	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:10	WG1095442
(S) Toluene-d8	105			80.0-120		04/09/2018 02:10	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/09/2018 02:10	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/09/2018 02:10	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/06/18 15:09

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 07:16	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 07:16	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.33	<u>B</u> <u>J</u>	1.05	25.0	1	04/09/2018 02:30	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:30	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 02:30	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:30	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:30	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:30	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 02:30	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 02:30	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:30	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:30	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:30	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/09/2018 02:30	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:30	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:30	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:30	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 02:30	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 02:30	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 02:30	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:30	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:30	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:30	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:30	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:30	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 02:30	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:30	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:30	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 02:30	WG1095442
cis-1,2-Dichloroethene	0.278	<u>J</u>	0.0933	0.500	1	04/09/2018 02:30	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:30	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:30	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:30	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:30	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:30	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:30	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:30	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:30	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:30	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:30	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:30	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 02:30	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 02:30	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:30	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:30	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:30	WG1095442



Collected date/time: 04/06/18 15:09

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:30	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:30	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:30	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 02:30	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:30	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 02:30	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:30	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:30	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:30	WG1095442
Tetrachloroethene	0.580		0.199	0.500	1	04/09/2018 02:30	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 02:30	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:30	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:30	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:30	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:30	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 02:30	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:30	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:30	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:30	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:30	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:30	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 02:30	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/09/2018 02:30	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:30	WG1095442
(S) Toluene-d8	106			80.0-120		04/09/2018 02:30	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 02:30	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/09/2018 02:30	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 01:49	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 01:49	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/08/2018 19:43	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 19:43	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 19:43	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 19:43	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 19:43	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 19:43	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 19:43	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 19:43	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 19:43	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 19:43	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 19:43	WG1095442
Carbon disulfide	0.153	<u>B J</u>	0.101	0.500	1	04/08/2018 19:43	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 19:43	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 19:43	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 19:43	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 19:43	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 19:43	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 19:43	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 19:43	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 19:43	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 19:43	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 19:43	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 19:43	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 19:43	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 19:43	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 19:43	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 19:43	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/08/2018 19:43	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 19:43	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 19:43	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 19:43	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 19:43	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 19:43	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 19:43	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 19:43	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 19:43	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 19:43	WG1095442
Hexachloro-1,3-butadiene	0.279	<u>B J</u>	0.157	1.00	1	04/08/2018 19:43	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 19:43	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 19:43	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 19:43	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 19:43	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 19:43	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 19:43	WG1095442



Collected date/time: 04/06/18 00:00

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 19:43	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 19:43	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 19:43	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 19:43	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 19:43	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 19:43	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 19:43	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 19:43	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 19:43	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/08/2018 19:43	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 19:43	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 19:43	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 19:43	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 19:43	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 19:43	WG1095442
Trichloroethene	U		0.153	0.500	1	04/08/2018 19:43	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 19:43	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 19:43	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 19:43	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 19:43	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 19:43	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 19:43	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/08/2018 19:43	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 19:43	WG1095442
(S) Toluene-d8	105			80.0-120		04/08/2018 19:43	WG1095442
(S) Dibromofluoromethane	107			76.0-123		04/08/2018 19:43	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 19:43	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L984034-05.06.07.08.09.10.12.13.23.24.25](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	105			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	Spike Amount	ug/l	LCS Result	ug/l							
Gasoline Range Organics-NWTPH	5500	4770	4930	86.6	89.7	72.0-134			3.49	20	
^(S) <i>a,a</i> -Trifluorotoluene(FID)				98.3	98.3	77.0-122					

L983865-56 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	Spike Amount	ug/l	Original Result	MS Result	MSD Result	MS Rec.						
Gasoline Range Organics-NWTPH	5500	5500	2250	2300	41.0	41.8	1	23.0-159			2.01	20
^(S) <i>a,a</i> -Trifluorotoluene(FID)					95.5	95.4			77.0-122			



Public Review Draft



Method Blank (MB)

(MB) R3301372-3 04/08/18 20:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
n-Hexane	U		0.305	5.00

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.05.601

SDG:

L984034

DATE/TIME:

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Method Blank (MB)

(MB) R3301372-3 04/08/18 20:55

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	5.00
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	96.7			80.0-120
(S) Dibromofluoromethane	93.7			76.0-123
(S) 4-Bromofluorobenzene	98.8			80.0-120

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301372-1 04/08/18 19:33 • (LCSD) R3301372-2 04/08/18 19:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	132	132	105	106	10.0-160			0.274	23
Acrylonitrile	125	105	108	83.7	86.1	60.0-142			2.89	20
Benzene	25.0	22.9	23.0	91.6	91.9	69.0-123			0.296	20
trans-1,4-Dichloro-2-butene	25.0	25.3	25.9	101	103	55.0-134			2.08	20
Bromobenzene	25.0	24.9	25.3	99.4	101	79.0-120			1.76	20
Bromodichloromethane	25.0	27.4	26.5	110	106	76.0-120			3.34	20
Bromochloromethane	25.0	22.7	23.4	90.8	93.5	76.0-122			2.94	20
Bromoform	25.0	25.9	26.2	104	105	67.0-132			0.954	20
Bromomethane	25.0	24.3	25.9	97.1	104	18.0-160			6.46	20
n-Hexane	25.0	20.5	19.6	82.1	78.5	56.0-124			4.52	20
Iodomethane	125	125	127	99.7	102	57.0-140			2.29	20
n-Butylbenzene	25.0	24.9	24.6	99.6	98.4	72.0-126			1.17	20
sec-Butylbenzene	25.0	25.3	25.5	101	102	74.0-121			0.623	20
tert-Butylbenzene	25.0	25.0	24.9	99.9	99.8	75.0-122			0.139	20
Carbon disulfide	25.0	22.8	23.2	91.2	92.7	55.0-127			1.62	20
Carbon tetrachloride	25.0	27.5	27.3	110	109	63.0-122			0.841	20
Chlorobenzene	25.0	26.4	26.3	106	105	79.0-121			0.395	20
Chlorodibromomethane	25.0	27.3	27.0	109	108	75.0-125			1.20	20
Chloroethane	25.0	20.1	21.3	80.2	85.1	47.0-152			5.95	20
Chloroform	25.0	24.7	24.8	98.6	99.0	72.0-121			0.413	20
Chloromethane	25.0	23.1	22.5	92.2	89.9	48.0-139			2.52	20
2-Chlorotoluene	25.0	26.9	26.6	107	106	74.0-122			1.08	20
4-Chlorotoluene	25.0	25.6	25.9	103	104	79.0-120			1.17	20
1,2-Dibromo-3-Chloropropane	25.0	24.5	24.1	97.9	96.2	64.0-127			1.68	20
1,2-Dibromoethane	25.0	25.7	26.1	103	104	77.0-123			1.69	20
Dibromomethane	25.0	29.1	29.0	116	116	78.0-120			0.425	20
1,2-Dichlorobenzene	25.0	25.6	25.1	102	101	80.0-120			1.90	20
1,3-Dichlorobenzene	25.0	25.5	26.1	102	104	72.0-123			2.20	20
1,4-Dichlorobenzene	25.0	25.8	25.2	103	101	77.0-120			2.19	20
Dichlorodifluoromethane	25.0	29.7	30.4	119	122	49.0-155			2.36	20
1,1-Dichloroethane	25.0	23.1	23.7	92.3	95.0	70.0-126			2.85	20
1,2-Dichloroethane	25.0	26.9	27.3	108	109	67.0-126			1.42	20
1,1-Dichloroethene	25.0	20.9	22.5	83.5	90.1	64.0-129			7.57	20
cis-1,2-Dichloroethene	25.0	22.7	22.4	90.8	89.7	73.0-120			1.16	20
Vinyl acetate	125	83.2	85.1	66.6	68.1	46.0-160			2.21	20
trans-1,2-Dichloroethene	25.0	22.2	23.0	88.6	92.0	71.0-121			3.66	20
1,2-Dichloropropane	25.0	25.0	24.7	100	98.6	75.0-125			1.55	20
1,1-Dichloropropene	25.0	25.2	25.0	101	99.9	71.0-129			0.691	20
1,3-Dichloropropene	25.0	26.6	26.6	106	106	80.0-121			0.00511	20
cis-1,3-Dichloropropene	25.0	27.6	27.1	110	108	79.0-123			2.00	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R330137Z-1 04/08/18 19:33 • (LCSD) R330137Z-2 04/08/18 19:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	25.0	28.2	28.0	113	112	74.0-127			0.592	20
2,2-Dichloropropane	25.0	26.5	24.5	106	97.9	60.0-125			7.91	20
Di-isopropyl ether	25.0	20.5	20.6	82.0	82.2	59.0-133			0.302	20
Ethylbenzene	25.0	25.9	25.0	103	100	77.0-120			3.31	20
Hexachloro-1,3-butadiene	25.0	28.7	27.6	115	110	64.0-131			3.91	20
2-Hexanone	125	139	138	111	111	58.0-147			0.495	20
Isopropylbenzene	25.0	25.8	25.5	103	102	75.0-120			1.38	20
p-Isopropyltoluene	25.0	25.1	25.0	100	100	74.0-126			0.352	20
2-Butanone (MEK)	125	123	125	98.5	100	37.0-158			1.54	20
Methylene Chloride	25.0	21.5	21.4	86.2	85.8	66.0-121			0.448	20
4-Methyl-2-pentanone (MIBK)	125	123	122	98.1	97.7	59.0-143			0.348	20
Methyl tert-butyl ether	25.0	24.9	25.0	99.6	99.9	64.0-123			0.389	20
Naphthalene	25.0	23.6	23.6	94.5	94.6	62.0-128			0.0473	20
n-Propylbenzene	25.0	25.6	25.1	102	100	79.0-120			2.14	20
Styrene	25.0	24.2	24.1	96.7	96.3	78.0-124			0.455	20
1,1,1,2-Tetrachloroethane	25.0	28.0	27.1	112	108	75.0-122			3.14	20
1,1,2,2-Tetrachloroethane	25.0	23.1	22.6	92.3	90.5	71.0-122			1.98	20
Tetrachloroethene	25.0	28.1	29.5	113	118	70.0-127			4.81	20
Toluene	25.0	25.8	25.8	103	103	77.0-120			0.292	20
1,1,2-Trichlorotrifluoroethane	25.0	25.5	25.2	102	101	61.0-136			1.17	20
1,2,3-Trichlorobenzene	25.0	25.0	25.9	100	103	61.0-133			3.22	20
1,2,4-Trichlorobenzene	25.0	27.6	26.8	110	107	69.0-129			2.96	20
1,1,1-Trichloroethane	25.0	25.9	25.9	104	103	68.0-122			0.326	20
1,1,2-Trichloroethane	25.0	24.3	24.4	97.4	97.7	78.0-120			0.325	20
Trichloroethene	25.0	26.7	25.7	107	103	78.0-120			3.60	20
Trichlorofluoromethane	25.0	27.7	27.6	111	110	56.0-137			0.362	20
1,2,3-Trichloropropane	25.0	24.8	24.9	99.3	99.5	72.0-124			0.231	20
1,2,3-Trimethylbenzene	25.0	26.2	25.5	105	102	75.0-120			2.64	20
1,2,4-Trimethylbenzene	25.0	25.0	24.6	100	98.5	75.0-120			1.45	20
1,3,5-Trimethylbenzene	25.0	25.4	25.4	102	102	75.0-120			0.0995	20
Vinyl chloride	25.0	24.8	25.0	99.1	100	64.0-133			0.866	20
Xylenes, Total	75.0	76.4	76.4	102	102	77.0-120			0.000	20
(S) Toluene-d8				96.7	96.6	80.0-120				
(S) Dibromofluoromethane				93.4	96.1	76.0-123				
(S) 4-Bromofluorobenzene				96.6	95.3	80.0-120				

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Method Blank (MB)

(MB) R3300184-2_04/08/18.19.23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	139	J	1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	0.162	J	0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
2-Chlorotoluene	U		0.111	0.500
Chloromethane	U		0.153	1.25
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
Dibromomethane	U		0.117	0.500
1,2-Dibromoethane	U		0.193	0.500
1,3-Dichlorobenzene	U		0.130	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,4-Dichlorobenzene	U		0.121	0.500
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
Hexachloro-1,3-butadiene	0.726	J	0.157	1.00

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Method Blank (MB)

(MB) R3300184-2_04/08/18.19.23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Di-isopropyl ether	U		0.0924	0.500
n-Hexane	U		0.305	5.00
Ethylbenzene	U		0.158	0.500
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Hexanone	U		0.757	5.00
n-Propylbenzene	U		0.162	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
2-Butanone (MEK)	U		1.28	5.00
1,2,3-Trichlorobenzene	0.300	J	0.164	0.500
Methylene Chloride	U		1.07	2.50
1,2,4-Trichlorobenzene	U		0.355	0.500
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.237	J	0.174	2.50
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Styrene	U		0.117	0.500
Vinyl acetate	U		0.645	5.00
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	106			80.0-120
(S) Dibromofluoromethane	106			76.0-123
(S) 4-Bromofluorobenzene	108			80.0-120

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Laboratory Control Sample (LCS)

(LCS) R3300184-1 04/08/18 18:42

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Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	125	73	138	60.0-142	
Bromobenzene	25.0	24.5	98.0	79.0-120	
Bromochloromethane	25.0	28.7	115	76.0-122	
n-Butylbenzene	25.0	24.1	96.4	72.0-126	
sec-Butylbenzene	25.0	24.2	96.9	74.0-121	
tert-Butylbenzene	25.0	25.0	100	75.0-122	
2-Chlorotoluene	25.0	24.6	98.3	74.0-122	
4-Chlorotoluene	25.0	23.6	94.5	79.0-120	
Dibromomethane	25.0	25.0	99.9	78.0-120	
Dichlorodifluoromethane	25.0	27.7	111	49.0-155	
1,1-Dichloropropene	25.0	27.0	108	71.0-129	
Acetone	125	112	89.9	10.0-160	
1,3-Dichloropropane	25.0	25.9	104	80.0-121	
Benzene	25.0	24.5	98.2	69.0-123	
trans-1,4-Dichloro-2-butene	25.0	31.3	125	55.0-134	
2,2-Dichloropropane	25.0	25.9	104	60.0-125	
Bromodichloromethane	25.0	20.1	80.3	76.0-120	
Bromoform	25.0	29.4	118	67.0-132	
Bromomethane	25.0	26.6	106	18.0-160	
Hexachloro-1,3-butadiene	25.0	25.0	100	64.0-131	
n-Hexane	25.0	27.0	108	56.0-124	
Iodomethane	125	123	98.3	57.0-140	
Isopropylbenzene	25.0	26.9	108	75.0-120	
Carbon disulfide	25.0	23.1	92.4	55.0-127	
p-Isopropyltoluene	25.0	25.1	100	74.0-126	
Carbon tetrachloride	25.0	26.2	105	63.0-122	
Chlorobenzene	25.0	25.3	101	79.0-121	
Chlorodibromomethane	25.0	26.7	107	75.0-125	
Chloroethane	25.0	26.0	104	47.0-152	
Chloroform	25.0	23.9	95.4	72.0-121	
n-Propylbenzene	25.0	26.2	105	79.0-120	
Chloromethane	25.0	26.9	108	48.0-139	
1,1,1,2-Tetrachloroethane	25.0	24.9	99.6	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	26.4	105	64.0-127	
1,2-Dibromoethane	25.0	27.5	110	77.0-123	
1,2,3-Trichlorobenzene	25.0	27.7	111	61.0-133	
1,2-Dichlorobenzene	25.0	27.0	108	80.0-120	
1,2,4-Trichlorobenzene	25.0	27.4	109	69.0-129	
1,3-Dichlorobenzene	25.0	25.5	102	72.0-123	
1,4-Dichlorobenzene	25.0	25.5	102	77.0-120	

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Laboratory Control Sample (LCS)

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Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Trichlorofluoromethane	25.0	26.7	107	56.0-137	
1,1-Dichloroethane	25.0	27.4	110	70.0-126	
1,2,3-Trichloropropane	25.0	28.0	112	72.0-124	
1,2,4-Trimethylbenzene	25.0	23.8	95.2	75.0-120	
1,2-Dichloroethane	25.0	28.0	112	67.0-126	
1,1-Dichloroethane	25.0	24.8	99.3	64.0-129	
1,3,5-Trimethylbenzene	25.0	24.8	99.1	75.0-120	
cis-1,2-Dichloroethane	25.0	23.7	94.7	73.0-120	
trans-1,2-Dichloroethane	25.0	24.9	99.6	71.0-121	
Vinyl acetate	125	270	216	46.0-160	J4
1,2-Dichloropropane	25.0	26.1	104	75.0-125	
cis-1,3-Dichloropropene	25.0	27.8	111	79.0-123	
trans-1,3-Dichloropropene	25.0	26.6	106	74.0-127	
Diisopropyl ether	25.0	27.8	111	59.0-133	
Ethylbenzene	25.0	24.6	98.4	77.0-120	
2-Hexanone	125	142	113	58.0-147	
2-Butanone (MEK)	125	135	108	37.0-158	
Methylene Chloride	25.0	24.7	98.8	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	140	112	59.0-143	
Methyl tert-butyl ether	25.0	24.0	96.0	64.0-123	
Naphthalene	25.0	26.7	107	62.0-128	
Styrene	25.0	27.1	108	78.0-124	
1,1,2,2-Tetrachloroethane	25.0	25.4	102	71.0-122	
Tetrachloroethene	25.0	25.7	103	70.0-127	
Toluene	25.0	23.1	92.4	77.0-120	
1,1,2-Trichlorotrifluoroethane	25.0	27.5	110	61.0-136	
1,1,1-Trichloroethane	25.0	23.0	92.2	68.0-122	
1,1,2-Trichloroethane	25.0	23.5	94.1	78.0-120	
Trichloroethene	25.0	25.1	100	78.0-120	
1,2,3-Trimethylbenzene	25.0	26.2	105	75.0-120	
Vinyl chloride	25.0	29.5	118	64.0-133	
Xylenes, Total	75.0	72.6	96.8	77.0-120	
(S) Toluene-d8			104	80.0-120	
(S) Dibromofluoromethane			107	76.0-123	
(S) 4-Bromofluorobenzene			111	80.0-120	

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J4	The associated batch QC was outside the established quality control range for accuracy.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

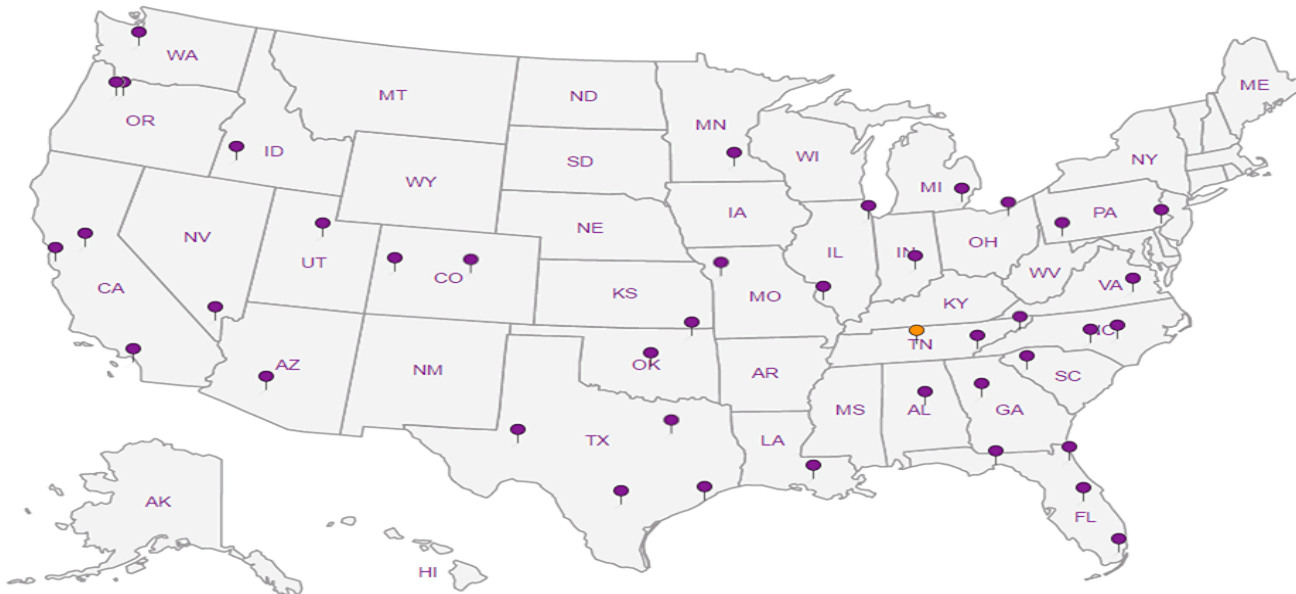
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹Drinking Water ²Underground Storage Tanks ³Aquatic Toxicity ⁴Chemical/Microbiological ⁵Mold ⁶Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: bhoneal@pesenv.com;
bhaldeman@pesenv.com

Project:
American Linen Supply

Client Project #
1413.001.05.601

City/State Collected:
Seattle, WA

Lab Project #
PESENVSWA-ALP

Phone: **206-529-3980**
Fax: **206-529-3985**

Collected by (print):
Jeff Dahbins

Site/Facility ID #

P.O. #

Quote #

Immediately Packed on Ice N Y X

Rush? (Lab MUST be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Date Results Needed

No. of

Containers

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Containers

NO3,SO4,Cl,Alk 250mlHDPE-NoPres

NWTPHGX 40mlAmb HCl

RSK175LL (EEM) 40mlAmb-HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

V8260LLC VOCs 40mlAmb-HCl

Analysis / Container / Preservative

Pres
Chk

Chain of Custody

Page 1 of 3



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-707-5859
Fax: 615-758-5859



L# **984034**

Tel# **F138**

Account: **PESENVSWA**

Template: **T134175**

Prelogin: **P645197**

TSR: **110 - Brian Ford**

PG: **3-22-18CS**

Shipped Via: **FedEx Ground**

Remarks

Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Containers	*NO3,SO4,Cl,Alk* 250mlHDPE-NoPres	NWTPHGX 40mlAmb HCl	RSK175LL (EEM) 40mlAmb-HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	V8260LLC VOCs 40mlAmb-HCl
IW-9D-040418	Grab	GW		4/4/18	0835	3						X
IW-8D-040418		GW		4/4/18	1005	3						X
IW-8C-040418		GW		4/4/18	1106	3						X
IW-4SA-040418		GW		4/4/18	1326	3						X
R-IW03-040418		GW		4/4/18	1615	6						X
JIS-040518		GW		4/5/18	0827	6						X
FIS-040518		GW		4/5/18	0922	6						X
J5-040518		GW		4/5/18	1010	6						X
IW-9-040518		GW		4/5/18	1418	6						X
IW121-040518		GW		4/5/18	1521	6						X

Remarks: * Nitrate has a 48 hour hold time *

Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
 UPS FedEx Courier

Tracking # **4146 3255 8846**

Trip Blank Received: No
 HCl/MeOH

Sample Receipt Checklist
COC Seal Present/Intact: NP X N
Bottles Signed/Accurate: NP X N
Bottles active intact: NP X N
Correct bottles used: NP X N
Sufficient volume sent: NP X N
IL Applicable: NP X N
VQA zero headspace: NP X N
Preservation Correct/Checked: NP X N

Received by: (Signature) *[Signature]*

Temp: **21.0** °C bottles received: **100 + 178**

If preservation required by LogIn: Date/Time

Received for Lab by: (Signature) *[Signature]*

Date: **4/7/18** Time: **0845**

Hold: NCF ON

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
bhaldeman@pesenv.com

Project Description: **American Linen Supply**

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

City/State Collected: **Seattle, WA**
Lab Project #
PESENVSWA-ALP

Collected by (print):
Jeff Dobkins

Site/Facility ID #

P.O. #

Collected by (signature):
Jeff Dobkins

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on Ice N ___ Y **X**

Same Day ___ Five Day ___
Next Day ___ 5 Day (Rad Only) ___
Two Day ___ 10 Day (Rad Only) ___
Three Day ___

Date Results Needed

No. of Cnts

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cnts

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cnts
MW119-040514	Grab	GW		4/5/18	1629	3
K8-4514		GW		4/5/18	1211	6
MW15-4-5+14		GW		4/5/18	1115	6
MW108-040614		GW		4/6/18	0915	3
MW109-040614		GW		4/6/18	1012	3
MW103-040614		GW		4/6/18	1117	3
MW126-040614		GW		4/6/18	0937	3
MW101-040614		GW		4/6/18	1123	3
MW111-040614		GW		4/6/18	1157	3
MW902-040614		GW		4/6/18	1210	3

Remarks: *Nitrate has a 48 hour hold time

Pres Chk

Analysis / Container / Preservative

Analysis / Container / Preservative	Pres Chk
NO3,SO4,Cl,Alk 250mlHDPE-NoPres	
NWTPHGX 40mlAmb HCl	X
RSK175LL (EEM) 40mlAmb-HCl	
TOC 250mlAmb-HCl	
Total Fe Mn 6020 250mlHDPE-HNO3	
V8260LLC VOCs 40mlAmb-HCl	X

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
DW - Drinking Water
OT - Other

Samples returned via:
UPS FedEx ___ Courier ___

pH ___ Temp ___
Flow ___ Other ___

Sample Receipt Checklist
COC Seal Present/Intact: Y ___ N ___
COC Signed/Accurate: Y ___ N ___
Bottles arrive intact: Y ___ N ___
Correct bottles used: Y ___ N ___
Sufficient volume sent: Y ___ N ___
11. Applicable
VOA zero Headspace: Y ___ N ___
Preservation Correct/Checked: Y ___ N ___

Relinquished by: (Signature) _____ Date: _____ Time: _____
Relinquished by: (Signature) _____ Date: _____ Time: _____
Relinquished by: (Signature) _____ Date: _____ Time: _____

Tracking # **4196 3255 8846**
Received by: (Signature) _____
Temp: **20°C** Bottles Received: **100 + 1 TB**
Date: **4/7/18** Time: **0845**

Received by Lab by: (Signature) _____
Hold: _____
Condition: OK / NCF

Chain of Custody Page 2 of 3

ESC Environmental Sciences

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-9858
Phone: 800-767-5859
Fax: 615-758-5859

Accnum: PESENVSWA
Template: T134175
Prelogin: P645197
TSR: 110 - Brian Ford
PB: 8-22-18CS
Shipped Via: **FedEx Ground**

Remarks: _____ Sample # (lab only) _____

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeeman

Email To: boneal@pesenv.com;
bhaldeeman@pesenv.com

Project Description: **American Linen Supply**

City/State Collected: **Seattle, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
Jeff Dehans

Site/Facility ID #

P.O. #

Collected by (signature):
Jeff Dehans

Rush? (Lab MUST be Notified)

Quote #

Immediately Packed on ice **N** **Y** X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of Ctr's

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Ctr's
SL-MU105-010618	Grab	GW		4/6/18	1221	3
MU122-040618		GW		4/6/18	1250	3
P-MU126-040618		GW		4/6/18	1448	6
MU125-040618		GW		4/6/18	1509	6
TRP BLANK		GW				1
		GW				
		GW				
		GW				
		GW				
		GW				

* Matrix: **SS - Soil AIR - Air F - Filter**
GW - Groundwater B - Biossary
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks: *Nitrate has a 48 hour hold time*

Samples returned via:
UPS FedEx Courier

Tracking # **4146 3255 8846**

Trip Blank Received: **Keen** No **MCD/Mesh** **BS**

Temp: **21.6** °C bottles received: **100 + 178**

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Date: Time:

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Date: Time:

Analysis / Container / Preservative

NO3,SO4,Cl,Alk 250mlHDPE-NoPres	
NWTPHGX 40mlAmb HCl	
RSK175LL (EEM) 40mlAmb-HCl	
TOC 250mlAmb-HCl	
Total Fe Mn 6020 250mlHDPE-HNO3	
V8260LLC VOCs 40mlAmb-HCl	

Chain of Custody Page 3 of 3



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-798-8858
Phone: 800-767-5859
Fax: 615-798-5859



L# **984634**

Table # **F138**

Account: **PESENVSWA**

Template: **T134175**

Prelogin: **P645197**

TSR: **110 - Brian Ford**

PB: **8-22-18CS**

Shipped Via: **FedEx Ground**

Remarks

Sample # (lab only)

-21

-22

-23

-24

-25

Sample Receipt Checklist

COC Seal Present/Intact: Y N
 COC Signed/Accurate: Y N
 Bottles signed/Intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 I.C. Applicable: Y N
 VOA zero headspace: Y N
 Preservation Correct/Checked: Y N

If preservation required by Login: Date/Time

Hold: Condition: Y N / OK

Andy Vann

ESC Lab Sciences
Non-Conformance Form

Login #:984034	Client:PESENVSWA	Date:04/07/18	Evaluated by: Matthew Lockhart
----------------	------------------	---------------	--------------------------------

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification		
Parameter(s) past holding time	Login Clarification Needed		If Broken Container:
Improper temperature	Chain of custody is incomplete	X	Insufficient packing material around container
Improper container type	Please specify Metals requested.		Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.		Improper handling by carrier (FedEx / UPS / Cou
Insufficient sample volume.	Received additional samples not listed on coc.		Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc		Container lid not intact
Vials received with headspace.	Trip Blank not received.		If no Chain of Custody:
X Broken container	Client did not "X" analysis.		Received by:
Broken container:	Chain of Custody is missing		Date/Time:
Sufficient sample remains			Temp./Cont. Rec./pH:
			Carrier:
			Tracking#

Login Comments:Received 1 broken contianer for each id MW111-040618 and MW109-040618.

Client informed by:	Call	Email	Voice Mail	Date:	Time:
TSR Initials:bjf	Client Contact:				

Login Instructions:

Proceed with remaining sample containers.

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.46	J	1.05	25.0	1	04/09/2018 01:08	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:08	WG1095362
Benzene	U		0.0896	0.500	1	04/09/2018 01:08	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:08	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:08	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:08	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 01:08	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 01:08	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:08	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:08	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:08	WG1095362
Carbon disulfide	0.969		0.101	0.500	1	04/09/2018 01:08	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:08	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:08	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:08	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 01:08	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 01:08	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 01:08	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:08	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:08	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:08	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:08	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:08	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:08	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:08	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:08	WG1095362
1,1-Dichloroethene	30.8		0.188	0.500	1	04/09/2018 01:08	WG1095362
cis-1,2-Dichloroethene	3380		18.7	100	200	04/12/2018 23:15	WG1095362
trans-1,2-Dichloroethene	10.0		0.152	0.500	1	04/09/2018 01:08	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:08	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:08	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:08	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:08	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:08	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:08	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:08	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:08	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:08	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:08	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:08	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 01:08	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 01:08	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:08	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:08	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:08	WG1095362
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:08	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:08	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:08	WG1095362
Naphthalene	U		0.174	2.50	1	04/09/2018 01:08	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:08	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 01:08	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:08	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:08	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:08	WG1095362
Tetrachloroethene	3610		39.8	100	200	04/12/2018 23:15	WG1095362
Toluene	1.12		0.412	0.500	1	04/09/2018 01:08	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:08	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:08	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:08	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:08	WG1095362
Trichloroethene	1510		30.6	100	200	04/12/2018 23:15	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:08	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:08	WG1095362
1,2,4-Trimethylbenzene	0.142	J J	0.123	0.500	1	04/09/2018 01:08	WG1095362
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 01:08	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:08	WG1095362
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/09/2018 01:08	WG1095362
Vinyl chloride	31.6		0.118	0.500	1	04/09/2018 01:08	WG1095362
Xylenes, Total	U		0.316	1.50	1	04/09/2018 01:08	WG1095362
(S) Toluene-d8	104			80.0-120		04/12/2018 23:15	WG1095362
(S) Toluene-d8	96.6			80.0-120		04/09/2018 01:08	WG1095362
(S) Dibromofluoromethane	106			76.0-123		04/12/2018 23:15	WG1095362
(S) Dibromofluoromethane	95.5			76.0-123		04/09/2018 01:08	WG1095362
(S) 4-Bromofluorobenzene	107			80.0-120		04/12/2018 23:15	WG1095362
(S) 4-Bromofluorobenzene	102			80.0-120		04/09/2018 01:08	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	U		1.05	25.0	1	04/09/2018 01:27	WG1095362	
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:27	WG1095362	
Benzene	U		0.0896	0.500	1	04/09/2018 01:27	WG1095362	
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:27	WG1095362	
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:27	WG1095362	
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:27	WG1095362	
Bromoform	U		0.186	0.500	1	04/09/2018 01:27	WG1095362	
Bromomethane	U		0.157	2.50	1	04/09/2018 01:27	WG1095362	
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:27	WG1095362	
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:27	WG1095362	
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:27	WG1095362	
Carbon disulfide	1.17		0.101	0.500	1	04/09/2018 01:27	WG1095362	
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:27	WG1095362	
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:27	WG1095362	
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:27	WG1095362	
Chloroethane	U		0.141	2.50	1	04/09/2018 01:27	WG1095362	
Chloroform	U		0.0860	0.500	1	04/09/2018 01:27	WG1095362	
Chloromethane	U		0.153	1.25	1	04/09/2018 01:27	WG1095362	
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:27	WG1095362	
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:27	WG1095362	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:27	WG1095362	
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:27	WG1095362	
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:27	WG1095362	
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:27	WG1095362	
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:27	WG1095362	
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:27	WG1095362	
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:27	WG1095362	
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:27	WG1095362	
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:27	WG1095362	
1,1-Dichloroethene	50.3		0.188	0.500	1	04/09/2018 01:27	WG1095362	
cis-1,2-Dichloroethene	3200		23.3	125	250	04/12/2018 23:35	WG1095362	
trans-1,2-Dichloroethene	39.1		0.152	0.500	1	04/09/2018 01:27	WG1095362	
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:27	WG1095362	
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:27	WG1095362	
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:27	WG1095362	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:27	WG1095362	
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:27	WG1095362	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:27	WG1095362	
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:27	WG1095362	
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:27	WG1095362	
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:27	WG1095362	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:27	WG1095362	
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:27	WG1095362	
n-Hexane	U		0.305	5.00	1	04/09/2018 01:27	WG1095362	
Iodomethane	U		0.377	10.0	1	04/09/2018 01:27	WG1095362	
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:27	WG1095362	
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:27	WG1095362	
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:27	WG1095362	
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:27	WG1095362	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:27	WG1095362	
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:27	WG1095362	
Naphthalene	U		0.174	2.50	1	04/09/2018 01:27	WG1095362	
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:27	WG1095362	
Styrene	0.188	J	J	0.117	0.500	1	04/09/2018 01:27	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:27	WG1095362	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:27	WG1095362	

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/04/18 10:05

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:27	WG1095362
Tetrachloroethene	6010		49.8	125	250	04/12/2018 23:35	WG1095362
Toluene	U		0.412	0.500	1	04/09/2018 01:27	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:27	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:27	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:27	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:27	WG1095362
Trichloroethene	4320		38.2	125	250	04/12/2018 23:35	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:27	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:27	WG1095362
1,2,4-Trimethylbenzene	0.289	J U	0.123	0.500	1	04/09/2018 01:27	WG1095362
1,2,3-Trimethylbenzene	0.201	J U	0.0739	0.500	1	04/09/2018 01:27	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:27	WG1095362
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/09/2018 01:27	WG1095362
Vinyl chloride	631		29.5	125	250	04/12/2018 23:35	WG1095362
Xylenes, Total	0.384	J U	0.316	1.50	1	04/09/2018 01:27	WG1095362
(S) Toluene-d8	105			80.0-120		04/12/2018 23:35	WG1095362
(S) Toluene-d8	101			80.0-120		04/09/2018 01:27	WG1095362
(S) Dibromofluoromethane	92.8			76.0-123		04/09/2018 01:27	WG1095362
(S) Dibromofluoromethane	105			76.0-123		04/12/2018 23:35	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/09/2018 01:27	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/12/2018 23:35	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	8.17	J J	1.05	25.0	1	04/09/2018 01:47	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:47	WG1095362
Benzene	0.276	J J	0.0896	0.500	1	04/09/2018 01:47	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:47	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:47	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:47	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 01:47	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 01:47	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:47	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:47	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:47	WG1095362
Carbon disulfide	0.850		0.101	0.500	1	04/09/2018 01:47	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:47	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:47	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:47	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 01:47	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 01:47	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 01:47	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:47	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:47	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:47	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:47	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:47	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:47	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:47	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:47	WG1095362
1,1-Dichloroethene	11.3		0.188	0.500	1	04/09/2018 01:47	WG1095362
cis-1,2-Dichloroethene	4160		93.3	500	1000	04/12/2018 23:55	WG1095362
trans-1,2-Dichloroethene	9.22		0.152	0.500	1	04/09/2018 01:47	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:47	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:47	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:47	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:47	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:47	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:47	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:47	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:47	WG1095362
Ethylbenzene	0.206	J J	0.158	0.500	1	04/09/2018 01:47	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:47	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:47	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 01:47	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 01:47	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:47	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:47	WG1095362
2-Butanone (MEK)	2.06	J J	1.28	5.00	1	04/09/2018 01:47	WG1095362
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:47	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:47	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:47	WG1095362
Naphthalene	0.580	J J	0.174	2.50	1	04/09/2018 01:47	WG1095362
n-Propylbenzene	0.164	J J	0.162	0.500	1	04/09/2018 01:47	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 01:47	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:47	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:47	WG1095362

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 4/24/18



Collected date/time: 04/04/18 11:06

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:47	WG1095362
Tetrachloroethene	27400		199	500	1000	04/12/2018 23:55	WG1095362
Toluene	2.77		0.412	0.500	1	04/09/2018 01:47	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:47	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:47	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:47	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:47	WG1095362
Trichloroethene	1160		153	500	1000	04/12/2018 23:55	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:47	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:47	WG1095362
1,2,4-Trimethylbenzene	1.28		0.123	0.500	1	04/09/2018 01:47	WG1095362
1,2,3-Trimethylbenzene	0.712		0.0739	0.500	1	04/09/2018 01:47	WG1095362
1,3,5-Trimethylbenzene	0.376	J ↓	0.124	0.500	1	04/09/2018 01:47	WG1095362
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/09/2018 01:47	WG1095362
Vinyl chloride	169		0.118	0.500	1	04/09/2018 01:47	WG1095362
Xylenes, Total	1.54		0.316	1.50	1	04/09/2018 01:47	WG1095362
(S) Toluene-d8	104			80.0-120		04/12/2018 23:55	WG1095362
(S) Toluene-d8	89.2			80.0-120		04/09/2018 01:47	WG1095362
(S) Dibromofluoromethane	106			76.0-123		04/12/2018 23:55	WG1095362
(S) Dibromofluoromethane	93.8			76.0-123		04/09/2018 01:47	WG1095362
(S) 4-Bromofluorobenzene	101			80.0-120		04/09/2018 01:47	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/12/2018 23:55	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/09/2018 02:06	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:06	WG1095362
Benzene	0.202	J U	0.0896	0.500	1	04/09/2018 02:06	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:06	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:06	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:06	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 02:06	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 02:06	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:06	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:06	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:06	WG1095362
Carbon disulfide	0.143	J U	0.101	0.500	1	04/09/2018 02:06	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:06	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:06	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:06	WG1095362
Chloroethane	4.93		0.141	2.50	1	04/09/2018 02:06	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 02:06	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 02:06	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:06	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:06	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:06	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:06	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:06	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 02:06	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:06	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:06	WG1095362
1,1-Dichloroethene	19.6		0.188	0.500	1	04/09/2018 02:06	WG1095362
cis-1,2-Dichloroethene	18800		23.3	125	250	04/13/2018 00:15	WG1095362
trans-1,2-Dichloroethene	14.5		0.152	0.500	1	04/09/2018 02:06	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:06	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:06	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:06	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:06	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:06	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:06	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:06	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:06	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:06	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:06	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:06	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 02:06	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 02:06	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:06	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:06	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:06	WG1095362
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:06	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:06	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:06	WG1095362
Naphthalene	0.235	J U	0.174	2.50	1	04/09/2018 02:06	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:06	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 02:06	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:06	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:06	WG1095362

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:06	WG1095362
Tetrachloroethene	9250		49.8	125	250	04/13/2018 00:15	WG1095362
Toluene	0.749		0.412	0.500	1	04/09/2018 02:06	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:06	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:06	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:06	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:06	WG1095362
Trichloroethene	7460		38.2	125	250	04/13/2018 00:15	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:06	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:06	WG1095362
1,2,4-Trimethylbenzene	0.490	J U	0.123	0.500	1	04/09/2018 02:06	WG1095362
1,2,3-Trimethylbenzene	0.289	J U	0.0739	0.500	1	04/09/2018 02:06	WG1095362
1,3,5-Trimethylbenzene	0.138	J U	0.124	0.500	1	04/09/2018 02:06	WG1095362
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/09/2018 02:06	WG1095362
Vinyl chloride	2020		29.5	125	250	04/13/2018 00:15	WG1095362
Xylenes, Total	0.361	J U	0.316	1.50	1	04/09/2018 02:06	WG1095362
(S) Toluene-d8	104			80.0-120		04/13/2018 00:15	WG1095362
(S) Toluene-d8	95.8			80.0-120		04/09/2018 02:06	WG1095362
(S) Dibromofluoromethane	105			76.0-123		04/13/2018 00:15	WG1095362
(S) Dibromofluoromethane	91.7			76.0-123		04/09/2018 02:06	WG1095362
(S) 4-Bromofluorobenzene	106			80.0-120		04/09/2018 02:06	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/13/2018 00:15	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/04/18 16:15

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	33.7	J	31.6	100	1	04/11/2018 03:45	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 03:45	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/09/2018 02:25	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:25	WG1095362
Benzene	U		0.0896	0.500	1	04/09/2018 02:25	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:25	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:25	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:25	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 02:25	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 02:25	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:25	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:25	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:25	WG1095362
Carbon disulfide	U		0.101	0.500	1	04/09/2018 02:25	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:25	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:25	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:25	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 02:25	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 02:25	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 02:25	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:25	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:25	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:25	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:25	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:25	WG1095362
1,4-Dichlorobenzene	0.144	J	0.121	0.500	1	04/09/2018 02:25	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:25	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:25	WG1095362
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 02:25	WG1095362
cis-1,2-Dichloroethene	1.35		0.0933	0.500	1	04/13/2018 00:35	WG1095362
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 02:25	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:25	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:25	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:25	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:25	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:25	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:25	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:25	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:25	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:25	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:25	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:25	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 02:25	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 02:25	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:25	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:25	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:25	WG1095362

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:25	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:25	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:25	WG1095362
Naphthalene	U		0.174	2.50	1	04/09/2018 02:25	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:25	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 02:25	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:25	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:25	WG1095362
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:25	WG1095362
Tetrachloroethene	16.4		0.199	0.500	1	04/13/2018 00:35	WG1095362
Toluene	U		0.412	0.500	1	04/09/2018 02:25	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:25	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:25	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:25	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:25	WG1095362
Trichloroethene	0.972		0.153	0.500	1	04/13/2018 00:35	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:25	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:25	WG1095362
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:25	WG1095362
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:25	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:25	WG1095362
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/09/2018 02:25	WG1095362
Vinyl chloride	0.214	J J	0.118	0.500	1	04/13/2018 00:35	WG1095362
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:25	WG1095362
(S) Toluene-d8	106			80.0-120		04/13/2018 00:35	WG1095362
(S) Toluene-d8	95.7			80.0-120		04/09/2018 02:25	WG1095362
(S) Dibromofluoromethane	93.5			76.0-123		04/09/2018 02:25	WG1095362
(S) Dibromofluoromethane	104			76.0-123		04/13/2018 00:35	WG1095362
(S) 4-Bromofluorobenzene	97.7			80.0-120		04/09/2018 02:25	WG1095362
(S) 4-Bromofluorobenzene	105			80.0-120		04/13/2018 00:35	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/05/18 08:27

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.2	J J	31.6	100	1	04/11/2018 04:08	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 04:08	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	7.35	J J	1.05	25.0	1	04/09/2018 02:44	WG1095362
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:44	WG1095362
Benzene	U		0.0896	0.500	1	04/09/2018 02:44	WG1095362
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:44	WG1095362
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:44	WG1095362
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:44	WG1095362
Bromoform	U		0.186	0.500	1	04/09/2018 02:44	WG1095362
Bromomethane	U		0.157	2.50	1	04/09/2018 02:44	WG1095362
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:44	WG1095362
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:44	WG1095362
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:44	WG1095362
Carbon disulfide	U		0.101	0.500	1	04/09/2018 02:44	WG1095362
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:44	WG1095362
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:44	WG1095362
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:44	WG1095362
Chloroethane	U		0.141	2.50	1	04/09/2018 02:44	WG1095362
Chloroform	U		0.0860	0.500	1	04/09/2018 02:44	WG1095362
Chloromethane	U		0.153	1.25	1	04/09/2018 02:44	WG1095362
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:44	WG1095362
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:44	WG1095362
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:44	WG1095362
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:44	WG1095362
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:44	WG1095362
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 02:44	WG1095362
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:44	WG1095362
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:44	WG1095362
1,1-Dichloroethene	1.10		0.188	0.500	1	04/09/2018 02:44	WG1095362
cis-1,2-Dichloroethene	26.3		0.0933	0.500	1	04/09/2018 02:44	WG1095362
trans-1,2-Dichloroethene	0.709		0.152	0.500	1	04/09/2018 02:44	WG1095362
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:44	WG1095362
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:44	WG1095362
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:44	WG1095362
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:44	WG1095362
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:44	WG1095362
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:44	WG1095362
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:44	WG1095362
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:44	WG1095362
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:44	WG1095362
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:44	WG1095362
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:44	WG1095362
n-Hexane	U		0.305	5.00	1	04/09/2018 02:44	WG1095362
Iodomethane	U		0.377	10.0	1	04/09/2018 02:44	WG1095362
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:44	WG1095362
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:44	WG1095362
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:44	WG1095362

JC 4/24/18



Collected date/time: 04/05/18 08:27

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:44	WG1095362
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:44	WG1095362
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:44	WG1095362
Naphthalene	U		0.174	2.50	1	04/09/2018 02:44	WG1095362
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:44	WG1095362
Styrene	U		0.117	0.500	1	04/09/2018 02:44	WG1095362
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:44	WG1095362
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:44	WG1095362
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:44	WG1095362
Tetrachloroethene	12.8		0.199	0.500	1	04/13/2018 00:55	WG1095362
Toluene	U		0.412	0.500	1	04/09/2018 02:44	WG1095362
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:44	WG1095362
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:44	WG1095362
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:44	WG1095362
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:44	WG1095362
Trichloroethene	0.358	J J	0.153	0.500	1	04/13/2018 00:55	WG1095362
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:44	WG1095362
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:44	WG1095362
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:44	WG1095362
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:44	WG1095362
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:44	WG1095362
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/09/2018 02:44	WG1095362
Vinyl chloride	6.07		0.118	0.500	1	04/09/2018 02:44	WG1095362
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:44	WG1095362
(S) Toluene-d8	95.3			80.0-120		04/09/2018 02:44	WG1095362
(S) Toluene-d8	101			80.0-120		04/13/2018 00:55	WG1095362
(S) Dibromofluoromethane	95.1			76.0-123		04/09/2018 02:44	WG1095362
(S) Dibromofluoromethane	107			76.0-123		04/13/2018 00:55	WG1095362
(S) 4-Bromofluorobenzene	104			80.0-120		04/13/2018 00:55	WG1095362
(S) 4-Bromofluorobenzene	97.3			80.0-120		04/09/2018 02:44	WG1095362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/05/18 09:22

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 04:31	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 04:31	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.35	U B J	1.05	25.0	1	04/08/2018 20:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 20:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 20:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 20:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 20:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 20:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 20:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 20:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 20:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 20:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 20:49	WG1095442
Carbon disulfide	0.136	U B J	0.101	0.500	1	04/08/2018 20:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 20:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 20:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 20:49	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 20:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 20:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 20:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 20:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 20:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 20:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 20:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 20:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 20:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 20:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 20:49	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 20:49	WG1095442
cis-1,2-Dichloroethene	0.375	J J	0.0933	0.500	1	04/08/2018 20:49	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 20:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 20:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 20:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 20:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 20:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 20:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 20:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 20:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 20:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 20:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 20:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 20:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 20:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 20:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 20:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 20:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 20:49	WG1095442

JC 4/24/18



Collected date/time: 04/05/18 09:22

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 20:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 20:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 20:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 20:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 20:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 20:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 20:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 20:49	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 20:49	WG1095442
Tetrachloroethene	20.3		0.199	0.500	1	04/08/2018 20:49	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 20:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 20:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 20:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 20:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 20:49	WG1095442
Trichloroethene	0.346	J	0.153	0.500	1	04/08/2018 20:49	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 20:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 20:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 20:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 20:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 20:49	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 20:49	WG1095442
Vinyl chloride	0.843		0.118	0.500	1	04/08/2018 20:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 20:49	WG1095442
(S) Toluene-d8	104			80.0-120		04/08/2018 20:49	WG1095442
(S) Dibromofluoromethane	106			76.0-123		04/08/2018 20:49	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/08/2018 20:49	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/05/18 10:10

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	207		31.6	100	1	04/11/2018 04:54	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 04:54	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.25	U B J	1.05	25.0	1	04/08/2018 21:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 21:09	WG1095442
Benzene	0.638		0.0896	0.500	1	04/08/2018 21:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 21:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 21:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 21:09	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 21:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 21:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 21:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 21:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 21:09	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 21:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 21:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 21:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 21:09	WG1095442
Chloroethane	1.09	J J	0.141	2.50	1	04/08/2018 21:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 21:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 21:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 21:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 21:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 21:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 21:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 21:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 21:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 21:09	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 21:09	WG1095442
1,1-Dichloroethene	0.371	J J	0.188	0.500	1	04/08/2018 21:09	WG1095442
cis-1,2-Dichloroethene	222		0.933	5.00	10	04/10/2018 01:54	WG1095442
trans-1,2-Dichloroethene	1.00		0.152	0.500	1	04/08/2018 21:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 21:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 21:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 21:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 21:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 21:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 21:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 21:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 21:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 21:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 21:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 21:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 21:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 21:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 21:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 21:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 21:09	WG1095442

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Collected date/time: 04/05/18 10:10

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 21:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 21:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 21:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 21:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 21:09	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 21:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 21:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 21:09	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 21:09	WG1095442
Tetrachloroethene	267		1.99	5.00	10	04/10/2018 01:54	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 21:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 21:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 21:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 21:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 21:09	WG1095442
Trichloroethene	70.5		0.153	0.500	1	04/08/2018 21:09	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 21:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 21:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 21:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 21:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 21:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 21:09	WG1095442
Vinyl chloride	17.6		0.118	0.500	1	04/08/2018 21:09	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 21:09	WG1095442
(S) Toluene-d8	101			80.0-120		04/08/2018 21:09	WG1095442
(S) Toluene-d8	98.1			80.0-120		04/10/2018 01:54	WG1095442
(S) Dibromofluoromethane	106			76.0-123		04/08/2018 21:09	WG1095442
(S) Dibromofluoromethane	104			76.0-123		04/10/2018 01:54	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/10/2018 01:54	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 21:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	32.9	J	31.6	100	1	04/11/2018 05:18	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104	J		77.0-122		04/11/2018 05:18	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/08/2018 21:29	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 21:29	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 21:29	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 21:29	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 21:29	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 21:29	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 21:29	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 21:29	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 21:29	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 21:29	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 21:29	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 21:29	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 21:29	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 21:29	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 21:29	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 21:29	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 21:29	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 21:29	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 21:29	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 21:29	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 21:29	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 21:29	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 21:29	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 21:29	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 21:29	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 21:29	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 21:29	WG1095442
cis-1,2-Dichloroethene	0.246	J	0.0933	0.500	1	04/10/2018 02:13	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 21:29	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 21:29	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 21:29	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 21:29	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 21:29	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 21:29	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 21:29	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 21:29	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 21:29	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 21:29	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 21:29	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 21:29	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 21:29	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 21:29	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 21:29	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 21:29	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 21:29	WG1095442

JC 4/24/18



Collected date/time: 04/05/18 14:18

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 21:29	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 21:29	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 21:29	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 21:29	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 21:29	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 21:29	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 21:29	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 21:29	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 21:29	WG1095442
Tetrachloroethene	1.58		0.199	0.500	1	04/10/2018 02:13	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 21:29	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 21:29	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 21:29	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 21:29	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 21:29	WG1095442
Trichloroethene	U		0.153	0.500	1	04/08/2018 21:29	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 21:29	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 21:29	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 21:29	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 21:29	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 21:29	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 21:29	WG1095442
Vinyl chloride	0.210	J	0.118	0.500	1	04/08/2018 21:29	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 21:29	WG1095442
(S) Toluene-d8	102			80.0-120		04/08/2018 21:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/10/2018 02:13	WG1095442
(S) Dibromofluoromethane	102			76.0-123		04/10/2018 02:13	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/08/2018 21:29	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 02:13	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/08/2018 21:29	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 05:41	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 05:41	WG1095836

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.74	U B_J	1.05	25.0	1	04/08/2018 21:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 21:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 21:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 21:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 21:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 21:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 21:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 21:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 21:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 21:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 21:49	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 21:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 21:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 21:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 21:49	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 21:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 21:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 21:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 21:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 21:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 21:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 21:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 21:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 21:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 21:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 21:49	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 21:49	WG1095442
cis-1,2-Dichloroethene	0.959		0.0933	0.500	1	04/08/2018 21:49	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 21:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 21:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 21:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 21:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 21:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 21:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 21:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 21:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 21:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 21:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 21:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 21:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 21:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 21:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 21:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 21:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 21:49	WG1095442

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 21:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 21:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 21:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 21:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 21:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 21:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 21:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 21:49	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 21:49	WG1095442
Tetrachloroethene	2.93		0.199	0.500	1	04/08/2018 21:49	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 21:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 21:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 21:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 21:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 21:49	WG1095442
Trichloroethene	U		0.153	0.500	1	04/08/2018 21:49	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 21:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 21:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 21:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 21:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 21:49	WG1095442
Vinyl acetate	U	<u>J4</u>	0.645	5.00	1	04/08/2018 21:49	WG1095442
Vinyl chloride	6.45		0.118	0.500	1	04/08/2018 21:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 21:49	WG1095442
(S) Toluene-d8	106			80.0-120		04/08/2018 21:49	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/08/2018 21:49	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 21:49	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.04	U B J	1.05	25.0	1	04/08/2018 22:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 22:09	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 22:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 22:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 22:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 22:09	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 22:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 22:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 22:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 22:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 22:09	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 22:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 22:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 22:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 22:09	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 22:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 22:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 22:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 22:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 22:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 22:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 22:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 22:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 22:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 22:09	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 22:09	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 22:09	WG1095442
cis-1,2-Dichloroethene	18.3		0.0933	0.500	1	04/08/2018 22:09	WG1095442
trans-1,2-Dichloroethene	0.203	J J	0.152	0.500	1	04/08/2018 22:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 22:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 22:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 22:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 22:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 22:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 22:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 22:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 22:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 22:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 22:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 22:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 22:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 22:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 22:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 22:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 22:09	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 22:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 22:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 22:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 22:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 22:09	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 22:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 22:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 22:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 22:09	WG1095442
Tetrachloroethene	2.14		0.199	0.500	1	04/08/2018 22:09	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 22:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 22:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 22:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 22:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 22:09	WG1095442
Trichloroethene	3.02		0.153	0.500	1	04/08/2018 22:09	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 22:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 22:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 22:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 22:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 22:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 22:09	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/08/2018 22:09	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 22:09	WG1095442
(S) Toluene-d8	103			80.0-120		04/08/2018 22:09	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/08/2018 22:09	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 22:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/05/18 12:11

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	156		31.6	100	1	04/11/2018 06:05	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 06:05	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.89	U B J	1.05	25.0	1	04/08/2018 22:29	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 22:29	WG1095442
Benzene	0.251	J J	0.0896	0.500	1	04/08/2018 22:29	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 22:29	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 22:29	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 22:29	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 22:29	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 22:29	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 22:29	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 22:29	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 22:29	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 22:29	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 22:29	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 22:29	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 22:29	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 22:29	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 22:29	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 22:29	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 22:29	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 22:29	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 22:29	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 22:29	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 22:29	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 22:29	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 22:29	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 22:29	WG1095442
1,1-Dichloroethene	0.822		0.188	0.500	1	04/08/2018 22:29	WG1095442
cis-1,2-Dichloroethene	104		0.0933	0.500	1	04/08/2018 22:29	WG1095442
trans-1,2-Dichloroethene	0.750		0.152	0.500	1	04/08/2018 22:29	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 22:29	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 22:29	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 22:29	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 22:29	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 22:29	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 22:29	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 22:29	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 22:29	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 22:29	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 22:29	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 22:29	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 22:29	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 22:29	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 22:29	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 22:29	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 22:29	WG1095442

JC 4/24/18



Collected date/time: 04/05/18 12:11

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 22:29	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 22:29	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 22:29	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 22:29	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 22:29	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 22:29	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 22:29	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 22:29	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 22:29	WG1095442
Tetrachloroethene	229		0.995	2.50	5	04/10/2018 02:33	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 22:29	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 22:29	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 22:29	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 22:29	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 22:29	WG1095442
Trichloroethene	26.3		0.153	0.500	1	04/08/2018 22:29	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 22:29	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 22:29	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 22:29	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 22:29	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 22:29	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 22:29	WG1095442
Vinyl chloride	1.45		0.118	0.500	1	04/08/2018 22:29	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 22:29	WG1095442
(S) Toluene-d8	96.2			80.0-120		04/10/2018 02:33	WG1095442
(S) Toluene-d8	107			80.0-120		04/08/2018 22:29	WG1095442
(S) Dibromofluoromethane	99.0			76.0-123		04/10/2018 02:33	WG1095442
(S) Dibromofluoromethane	111			76.0-123		04/08/2018 22:29	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/08/2018 22:29	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 02:33	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 06:29	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	104			77.0-122		04/11/2018 06:29	WG1095836

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.37	U B J	1.05	25.0	1	04/08/2018 22:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 22:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 22:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 22:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 22:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 22:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 22:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 22:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 22:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 22:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 22:49	WG1095442
Carbon disulfide	0.144	U B J	0.101	0.500	1	04/08/2018 22:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 22:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 22:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 22:49	WG1095442
Chloroethane	2.81		0.141	2.50	1	04/08/2018 22:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 22:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 22:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 22:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 22:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 22:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 22:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 22:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 22:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 22:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 22:49	WG1095442
1,1-Dichloroethene	0.198	J J	0.188	0.500	1	04/08/2018 22:49	WG1095442
cis-1,2-Dichloroethene	8.89		0.0933	0.500	1	04/08/2018 22:49	WG1095442
trans-1,2-Dichloroethene	0.300	J J	0.152	0.500	1	04/08/2018 22:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 22:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 22:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 22:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 22:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 22:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 22:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 22:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 22:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 22:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 22:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 22:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 22:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 22:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 22:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 22:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 22:49	WG1095442

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 4/24/18



Collected date/time: 04/05/18 11:15

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 22:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 22:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 22:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 22:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 22:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 22:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 22:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 22:49	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 22:49	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 02:53	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 22:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 22:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 22:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 22:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 22:49	WG1095442
Trichloroethene	0.563		0.153	0.500	1	04/08/2018 22:49	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 22:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 22:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 22:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 22:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 22:49	WG1095442
Vinyl acetate	U	<u>J4</u>	0.645	5.00	1	04/08/2018 22:49	WG1095442
Vinyl chloride	11.1		0.118	0.500	1	04/08/2018 22:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 22:49	WG1095442
(S) Toluene-d8	100			80.0-120		04/10/2018 02:53	WG1095442
(S) Toluene-d8	105			80.0-120		04/08/2018 22:49	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/08/2018 22:49	WG1095442
(S) Dibromofluoromethane	98.8			76.0-123		04/10/2018 02:53	WG1095442
(S) 4-Bromofluorobenzene	113			80.0-120		04/08/2018 22:49	WG1095442
(S) 4-Bromofluorobenzene	104			80.0-120		04/10/2018 02:53	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.16	U B J	1.05	25.0	1	04/08/2018 23:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 23:09	WG1095442
Benzene	4.00		0.0896	0.500	1	04/08/2018 23:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 23:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 23:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 23:09	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 23:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 23:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 23:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 23:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 23:09	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 23:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 23:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 23:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 23:09	WG1095442
Chloroethane	0.595	J J	0.141	2.50	1	04/08/2018 23:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 23:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 23:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 23:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 23:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 23:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 23:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 23:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 23:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 23:09	WG1095442
1,1-Dichloroethane	0.285	J J	0.114	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 23:09	WG1095442
1,1-Dichloroethene	11.9		0.188	0.500	1	04/08/2018 23:09	WG1095442
cis-1,2-Dichloroethene	1030		4.66	25.0	50	04/10/2018 03:13	WG1095442
trans-1,2-Dichloroethene	7.13		0.152	0.500	1	04/08/2018 23:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 23:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 23:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 23:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 23:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 23:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 23:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 23:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 23:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 23:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 23:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 23:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 23:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 23:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 23:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 23:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 23:09	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 23:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 23:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 23:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 23:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 23:09	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 23:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 23:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 23:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 23:09	WG1095442
Tetrachloroethene	1970		9.95	25.0	50	04/10/2018 03:13	WG1095442
Toluene	0.599		0.412	0.500	1	04/08/2018 23:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 23:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 23:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 23:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 23:09	WG1095442
Trichloroethene	284		7.65	25.0	50	04/10/2018 03:13	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 23:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 23:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 23:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 23:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 23:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 23:09	WG1095442
Vinyl chloride	217		5.90	25.0	50	04/10/2018 03:13	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 23:09	WG1095442
(S) Toluene-d8	101			80.0-120		04/08/2018 23:09	WG1095442
(S) Toluene-d8	98.4			80.0-120		04/10/2018 03:13	WG1095442
(S) Dibromofluoromethane	107			76.0-123		04/08/2018 23:09	WG1095442
(S) Dibromofluoromethane	101			76.0-123		04/10/2018 03:13	WG1095442
(S) 4-Bromofluorobenzene	111			80.0-120		04/08/2018 23:09	WG1095442
(S) 4-Bromofluorobenzene	102			80.0-120		04/10/2018 03:13	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/08/2018 23:29	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 23:29	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 23:29	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 23:29	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 23:29	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 23:29	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 23:29	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 23:29	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 23:29	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 23:29	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 23:29	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 23:29	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 23:29	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 23:29	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 23:29	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 23:29	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 23:29	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 23:29	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 23:29	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 23:29	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 23:29	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 23:29	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 23:29	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 23:29	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 23:29	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 23:29	WG1095442
1,1-Dichloroethene	1.21		0.188	0.500	1	04/08/2018 23:29	WG1095442
cis-1,2-Dichloroethene	629		0.933	5.00	10	04/10/2018 03:32	WG1095442
trans-1,2-Dichloroethene	3.34		0.152	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 23:29	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 23:29	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 23:29	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 23:29	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 23:29	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 23:29	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 23:29	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 23:29	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 23:29	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 23:29	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 23:29	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 23:29	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 23:29	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 23:29	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 23:29	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 23:29	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 23:29	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 23:29	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 23:29	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 23:29	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 23:29	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 23:29	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 23:29	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 23:29	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/06/18 10:12

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 23:29	WG1095442
Tetrachloroethene	U		1.99	5.00	10	04/10/2018 03:32	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 23:29	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 23:29	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 23:29	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 23:29	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 23:29	WG1095442
Trichloroethene	210		1.53	5.00	10	04/10/2018 03:32	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 23:29	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 23:29	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 23:29	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 23:29	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 23:29	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 23:29	WG1095442
Vinyl chloride	42.2		0.118	0.500	1	04/08/2018 23:29	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 23:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/08/2018 23:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/10/2018 03:32	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/08/2018 23:29	WG1095442
(S) Dibromofluoromethane	100			76.0-123		04/10/2018 03:32	WG1095442
(S) 4-Bromofluorobenzene	107			80.0-120		04/08/2018 23:29	WG1095442
(S) 4-Bromofluorobenzene	102			80.0-120		04/10/2018 03:32	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L984034-15 WG1095442: PCE not reportable at 1x due to possible carryover.
 L984034-15 WG1095442: PCE cannot be reported at a lower dilution due to high levels of target analytes.

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.25	U B J	1.05	25.0	1	04/08/2018 23:49	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 23:49	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 23:49	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 23:49	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 23:49	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 23:49	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 23:49	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 23:49	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 23:49	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 23:49	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 23:49	WG1095442
Carbon disulfide	0.132	U B J	0.101	0.500	1	04/08/2018 23:49	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 23:49	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 23:49	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 23:49	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 23:49	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 23:49	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 23:49	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 23:49	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 23:49	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 23:49	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 23:49	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 23:49	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 23:49	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 23:49	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 23:49	WG1095442
1,1-Dichloroethene	0.396	J J	0.188	0.500	1	04/08/2018 23:49	WG1095442
cis-1,2-Dichloroethene	32.4		0.0933	0.500	1	04/10/2018 03:52	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 23:49	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 23:49	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 23:49	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 23:49	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 23:49	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 23:49	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 23:49	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 23:49	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 23:49	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 23:49	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 23:49	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 23:49	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 23:49	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 23:49	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 23:49	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 23:49	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 23:49	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 23:49	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 23:49	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 23:49	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 23:49	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 23:49	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 23:49	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 23:49	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 23:49	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 23:49	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 03:52	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 23:49	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 23:49	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 23:49	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 23:49	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 23:49	WG1095442
Trichloroethene	1.81		0.153	0.500	1	04/10/2018 03:52	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 23:49	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 23:49	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 23:49	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 23:49	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 23:49	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 23:49	WG1095442
Vinyl chloride	22.4		0.118	0.500	1	04/08/2018 23:49	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 23:49	WG1095442
(S) Toluene-d8	104			80.0-120		04/08/2018 23:49	WG1095442
(S) Toluene-d8	98.0			80.0-120		04/10/2018 03:52	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/08/2018 23:49	WG1095442
(S) Dibromofluoromethane	100			76.0-123		04/10/2018 03:52	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/08/2018 23:49	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/10/2018 03:52	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.06	U BJ	1.05	25.0	1	04/09/2018 00:09	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 00:09	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 00:09	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 00:09	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 00:09	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 00:09	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 00:09	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 00:09	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 00:09	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 00:09	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 00:09	WG1095442
Carbon disulfide	0.155	U BJ	0.101	0.500	1	04/09/2018 00:09	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 00:09	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 00:09	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 00:09	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 00:09	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 00:09	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 00:09	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 00:09	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 00:09	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 00:09	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 00:09	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 00:09	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 00:09	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 00:09	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 00:09	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 00:09	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2018 04:12	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 00:09	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 00:09	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 00:09	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 00:09	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 00:09	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 00:09	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 00:09	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 00:09	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 00:09	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 00:09	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 00:09	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 00:09	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 00:09	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 00:09	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 00:09	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 00:09	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 00:09	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 00:09	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 00:09	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 00:09	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 00:09	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 00:09	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 00:09	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 00:09	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 00:09	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 00:09	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 04:12	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 00:09	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 00:09	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 00:09	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 00:09	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 00:09	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 00:09	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 00:09	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 00:09	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 00:09	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 00:09	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 00:09	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 00:09	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/09/2018 00:09	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 00:09	WG1095442
(S) Toluene-d8	106			80.0-120		04/09/2018 00:09	WG1095442
(S) Toluene-d8	102			80.0-120		04/10/2018 04:12	WG1095442
(S) Dibromofluoromethane	99.0			76.0-123		04/10/2018 04:12	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 00:09	WG1095442
(S) 4-Bromofluorobenzene	106			80.0-120		04/09/2018 00:09	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 04:12	WG1095442

- 1 Cp
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- 4 Cn
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- 6 Qc
- 7 Gl
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- 9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/10/2018 04:32	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/10/2018 04:32	WG1095442
Benzene	10.6		0.0896	0.500	1	04/10/2018 04:32	WG1095442
Bromobenzene	U		0.133	0.500	1	04/10/2018 04:32	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/10/2018 04:32	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/10/2018 04:32	WG1095442
Bromoform	U		0.186	0.500	1	04/10/2018 04:32	WG1095442
Bromomethane	U		0.157	2.50	1	04/10/2018 04:32	WG1095442
n-Butylbenzene	8.28		0.143	0.500	1	04/10/2018 04:32	WG1095442
sec-Butylbenzene	10.1		0.134	0.500	1	04/10/2018 04:32	WG1095442
tert-Butylbenzene	0.248	J J	0.183	0.500	1	04/10/2018 04:32	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/10/2018 04:32	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/10/2018 04:32	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/10/2018 04:32	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/10/2018 04:32	WG1095442
Chloroethane	U		0.141	2.50	1	04/10/2018 04:32	WG1095442
Chloroform	U		0.0860	0.500	1	04/10/2018 04:32	WG1095442
Chloromethane	U		0.153	1.25	1	04/10/2018 04:32	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/10/2018 04:32	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/10/2018 04:32	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/10/2018 04:32	WG1095442
Dibromomethane	U		0.117	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/10/2018 04:32	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/10/2018 04:32	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/10/2018 04:32	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/10/2018 04:32	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/10/2018 04:32	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/10/2018 04:32	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2018 04:32	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/10/2018 04:32	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/10/2018 04:32	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/10/2018 04:32	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/10/2018 04:32	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/10/2018 04:32	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/10/2018 04:32	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/10/2018 04:32	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/10/2018 04:32	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/10/2018 04:32	WG1095442
Ethylbenzene	11.7		0.158	0.500	1	04/10/2018 04:32	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/10/2018 04:32	WG1095442
2-Hexanone	U		0.757	5.00	1	04/10/2018 04:32	WG1095442
n-Hexane	4.87	J J	0.305	5.00	1	04/10/2018 04:32	WG1095442
Iodomethane	U		0.377	10.0	1	04/10/2018 04:32	WG1095442
Isopropylbenzene	29.7		0.126	0.500	1	04/10/2018 04:32	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/10/2018 04:32	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/10/2018 04:32	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/10/2018 04:32	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/10/2018 04:32	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/10/2018 04:32	WG1095442
Naphthalene	6.70		0.174	2.50	1	04/10/2018 04:32	WG1095442
n-Propylbenzene	92.3		0.162	0.500	1	04/10/2018 04:32	WG1095442
Styrene	U		0.117	0.500	1	04/10/2018 04:32	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/10/2018 04:32	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/10/2018 04:32	WG1095442

- 1 Cp
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- 3 Ss
- 4 Cn
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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/10/2018 04:32	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 04:32	WG1095442
Toluene	1.24		0.412	0.500	1	04/10/2018 04:32	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/10/2018 04:32	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/10/2018 04:32	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/10/2018 04:32	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/10/2018 04:32	WG1095442
Trichloroethene	U		0.153	0.500	1	04/10/2018 04:32	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/10/2018 04:32	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/10/2018 04:32	WG1095442
1,2,4-Trimethylbenzene	1.70		0.123	0.500	1	04/10/2018 04:32	WG1095442
1,2,3-Trimethylbenzene	3.51		0.0739	0.500	1	04/10/2018 04:32	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/10/2018 04:32	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/10/2018 04:32	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/10/2018 04:32	WG1095442
Xylenes, Total	3.32		0.316	1.50	1	04/10/2018 04:32	WG1095442
(S) Toluene-d8	91.3			80.0-120		04/10/2018 04:32	WG1095442
(S) Dibromofluoromethane	104			76.0-123		04/10/2018 04:32	WG1095442
(S) 4-Bromofluorobenzene	102			80.0-120		04/10/2018 04:32	WG1095442

- 1 Cp
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- 4 Cn
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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/09/2018 00:50	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 00:50	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 00:50	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 00:50	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 00:50	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 00:50	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 00:50	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 00:50	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 00:50	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 00:50	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 00:50	WG1095442
Carbon disulfide	0.201	U B J	0.101	0.500	1	04/09/2018 00:50	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 00:50	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 00:50	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 00:50	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 00:50	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 00:50	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 00:50	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 00:50	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 00:50	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 00:50	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 00:50	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 00:50	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 00:50	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 00:50	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 00:50	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 00:50	WG1095442
cis-1,2-Dichloroethene	16.5		0.0933	0.500	1	04/09/2018 00:50	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 00:50	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 00:50	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 00:50	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 00:50	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 00:50	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 00:50	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 00:50	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 00:50	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 00:50	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 00:50	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 00:50	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 00:50	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 00:50	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 00:50	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 00:50	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 00:50	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 00:50	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 00:50	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 00:50	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 00:50	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 00:50	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 00:50	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 00:50	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 00:50	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 00:50	WG1095442

- 1 Cp
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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 00:50	WG1095442
Tetrachloroethene	0.618		0.199	0.500	1	04/09/2018 00:50	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 00:50	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 00:50	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 00:50	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 00:50	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 00:50	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 00:50	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 00:50	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 00:50	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 00:50	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 00:50	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 00:50	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 00:50	WG1095442
Vinyl chloride	121		0.118	0.500	1	04/09/2018 00:50	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 00:50	WG1095442
(S) Toluene-d8	104			80.0-120		04/09/2018 00:50	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 00:50	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/09/2018 00:50	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/06/18 12:10

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.11	U B J	1.05	25.0	1	04/09/2018 01:10	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:10	WG1095442
Benzene	3.83		0.0896	0.500	1	04/09/2018 01:10	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:10	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:10	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:10	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 01:10	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 01:10	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:10	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:10	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:10	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/09/2018 01:10	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:10	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:10	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:10	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 01:10	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 01:10	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 01:10	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:10	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:10	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:10	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:10	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:10	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:10	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:10	WG1095442
1,1-Dichloroethane	0.251	J J	0.114	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:10	WG1095442
1,1-Dichloroethene	11.2		0.188	0.500	1	04/09/2018 01:10	WG1095442
cis-1,2-Dichloroethene	1020		4.66	25.0	50	04/10/2018 04:52	WG1095442
trans-1,2-Dichloroethene	7.91		0.152	0.500	1	04/09/2018 01:10	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:10	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:10	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:10	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:10	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:10	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:10	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:10	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:10	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:10	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:10	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:10	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 01:10	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 01:10	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:10	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:10	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:10	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:10	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:10	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:10	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 01:10	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:10	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 01:10	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:10	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:10	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:10	WG1095442
Tetrachloroethene	1980		9.95	25.0	50	04/10/2018 04:52	WG1095442
Toluene	0.597		0.412	0.500	1	04/09/2018 01:10	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:10	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:10	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:10	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:10	WG1095442
Trichloroethene	287		7.65	25.0	50	04/10/2018 04:52	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:10	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:10	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 01:10	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 01:10	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:10	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 01:10	WG1095442
Vinyl chloride	231		5.90	25.0	50	04/10/2018 04:52	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 01:10	WG1095442
(S) Toluene-d8	104			80.0-120		04/09/2018 01:10	WG1095442
(S) Toluene-d8	108			80.0-120		04/10/2018 04:52	WG1095442
(S) Dibromofluoromethane	97.0			76.0-123		04/10/2018 04:52	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 01:10	WG1095442
(S) 4-Bromofluorobenzene	106			80.0-120		04/10/2018 04:52	WG1095442
(S) 4-Bromofluorobenzene	107			80.0-120		04/09/2018 01:10	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		10.5	250	10	04/09/2018 01:30	WG1095442
Acrylonitrile	U		8.73	50.0	10	04/09/2018 01:30	WG1095442
Benzene	181		0.896	5.00	10	04/09/2018 01:30	WG1095442
Bromobenzene	U		1.33	5.00	10	04/09/2018 01:30	WG1095442
Bromodichloromethane	U		0.800	5.00	10	04/09/2018 01:30	WG1095442
Bromochloromethane	U		1.45	5.00	10	04/09/2018 01:30	WG1095442
Bromoform	U		1.86	5.00	10	04/09/2018 01:30	WG1095442
Bromomethane	U		1.57	25.0	10	04/09/2018 01:30	WG1095442
n-Butylbenzene	U		1.43	5.00	10	04/09/2018 01:30	WG1095442
sec-Butylbenzene	2.31	J J	1.34	5.00	10	04/09/2018 01:30	WG1095442
tert-Butylbenzene	U		1.83	5.00	10	04/09/2018 01:30	WG1095442
Carbon disulfide	U		1.01	5.00	10	04/09/2018 01:30	WG1095442
Carbon tetrachloride	U		1.59	5.00	10	04/09/2018 01:30	WG1095442
Chlorobenzene	U		1.40	5.00	10	04/09/2018 01:30	WG1095442
Chlorodibromomethane	U		1.28	5.00	10	04/09/2018 01:30	WG1095442
Chloroethane	U		1.41	25.0	10	04/09/2018 01:30	WG1095442
Chloroform	U		0.860	5.00	10	04/09/2018 01:30	WG1095442
Chloromethane	U		1.53	12.5	10	04/09/2018 01:30	WG1095442
2-Chlorotoluene	U		1.11	5.00	10	04/09/2018 01:30	WG1095442
4-Chlorotoluene	U		0.972	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dibromo-3-Chloropropane	U		3.25	25.0	10	04/09/2018 01:30	WG1095442
1,2-Dibromoethane	U		1.93	5.00	10	04/09/2018 01:30	WG1095442
Dibromomethane	U		1.17	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dichlorobenzene	U		1.01	5.00	10	04/09/2018 01:30	WG1095442
1,3-Dichlorobenzene	U		1.30	5.00	10	04/09/2018 01:30	WG1095442
1,4-Dichlorobenzene	U		1.21	5.00	10	04/09/2018 01:30	WG1095442
Dichlorodifluoromethane	U		1.27	25.0	10	04/09/2018 01:30	WG1095442
1,1-Dichloroethane	U		1.14	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dichloroethane	U		1.08	5.00	10	04/09/2018 01:30	WG1095442
1,1-Dichloroethene	U		1.88	5.00	10	04/09/2018 01:30	WG1095442
cis-1,2-Dichloroethene	U		0.933	5.00	10	04/10/2018 05:12	WG1095442
trans-1,2-Dichloroethene	U		1.52	5.00	10	04/09/2018 01:30	WG1095442
1,2-Dichloropropane	U		1.90	5.00	10	04/09/2018 01:30	WG1095442
1,1-Dichloropropene	U		1.28	5.00	10	04/09/2018 01:30	WG1095442
1,3-Dichloropropane	U		1.47	10.0	10	04/09/2018 01:30	WG1095442
cis-1,3-Dichloropropene	U		0.976	5.00	10	04/09/2018 01:30	WG1095442
trans-1,3-Dichloropropene	U		2.22	5.00	10	04/09/2018 01:30	WG1095442
trans-1,4-Dichloro-2-butene	U		2.57	50.0	10	04/09/2018 01:30	WG1095442
2,2-Dichloropropane	U		0.929	5.00	10	04/09/2018 01:30	WG1095442
Di-isopropyl ether	U		0.924	5.00	10	04/09/2018 01:30	WG1095442
Ethylbenzene	26.6		1.58	5.00	10	04/09/2018 01:30	WG1095442
Hexachloro-1,3-butadiene	U		1.57	10.0	10	04/09/2018 01:30	WG1095442
2-Hexanone	U		7.57	50.0	10	04/09/2018 01:30	WG1095442
n-Hexane	36.9	J J	3.05	50.0	10	04/09/2018 01:30	WG1095442
Iodomethane	U		3.77	100	10	04/09/2018 01:30	WG1095442
Isopropylbenzene	53.2		1.26	5.00	10	04/09/2018 01:30	WG1095442
p-Isopropyltoluene	U		1.38	5.00	10	04/09/2018 01:30	WG1095442
2-Butanone (MEK)	U		12.8	50.0	10	04/09/2018 01:30	WG1095442
Methylene Chloride	U		10.7	25.0	10	04/09/2018 01:30	WG1095442
4-Methyl-2-pentanone (MIBK)	U		8.23	50.0	10	04/09/2018 01:30	WG1095442
Methyl tert-butyl ether	U		1.02	5.00	10	04/09/2018 01:30	WG1095442
Naphthalene	4.50	U B J	1.74	25.0	10	04/09/2018 01:30	WG1095442
n-Propylbenzene	88.0		1.62	5.00	10	04/09/2018 01:30	WG1095442
Styrene	U		1.17	5.00	10	04/09/2018 01:30	WG1095442
1,1,1,2-Tetrachloroethane	U		1.20	5.00	10	04/09/2018 01:30	WG1095442
1,1,2,2-Tetrachloroethane	U		1.30	5.00	10	04/09/2018 01:30	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		1.64	5.00	10	04/09/2018 01:30	WG1095442
Tetrachloroethene	U		1.99	5.00	10	04/10/2018 05:12	WG1095442
Toluene	12.1		4.12	5.00	10	04/09/2018 01:30	WG1095442
1,2,3-Trichlorobenzene	U		1.64	5.00	10	04/09/2018 01:30	WG1095442
1,2,4-Trichlorobenzene	U		3.55	5.00	10	04/09/2018 01:30	WG1095442
1,1,1-Trichloroethane	U		0.940	5.00	10	04/09/2018 01:30	WG1095442
1,1,2-Trichloroethane	U		1.86	5.00	10	04/09/2018 01:30	WG1095442
Trichloroethene	U		1.53	5.00	10	04/10/2018 05:12	WG1095442
Trichlorofluoromethane	U		1.30	25.0	10	04/09/2018 01:30	WG1095442
1,2,3-Trichloropropane	U		2.47	25.0	10	04/09/2018 01:30	WG1095442
1,2,4-Trimethylbenzene	U		1.23	5.00	10	04/09/2018 01:30	WG1095442
1,2,3-Trimethylbenzene	7.86		0.739	5.00	10	04/09/2018 01:30	WG1095442
1,3,5-Trimethylbenzene	2.77	J	1.24	5.00	10	04/09/2018 01:30	WG1095442
Vinyl acetate	U	J4	6.45	50.0	10	04/09/2018 01:30	WG1095442
Vinyl chloride	U		1.18	5.00	10	04/09/2018 01:30	WG1095442
Xylenes, Total	28.4		3.16	15.0	10	04/09/2018 01:30	WG1095442
(S) Toluene-d8	99.2			80.0-120		04/10/2018 05:12	WG1095442
(S) Toluene-d8	105			80.0-120		04/09/2018 01:30	WG1095442
(S) Dibromofluoromethane	107			76.0-123		04/09/2018 01:30	WG1095442
(S) Dibromofluoromethane	98.8			76.0-123		04/10/2018 05:12	WG1095442
(S) 4-Bromofluorobenzene	103			80.0-120		04/10/2018 05:12	WG1095442
(S) 4-Bromofluorobenzene	107			80.0-120		04/09/2018 01:30	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L984034-21 WG1095442: Cannot be analyzed at a lower dilution due to high levels of target analytes.

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/09/2018 01:50	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 01:50	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 01:50	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 01:50	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 01:50	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 01:50	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 01:50	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 01:50	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 01:50	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 01:50	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 01:50	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/09/2018 01:50	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 01:50	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 01:50	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 01:50	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 01:50	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 01:50	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 01:50	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 01:50	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 01:50	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 01:50	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 01:50	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 01:50	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 01:50	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 01:50	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 01:50	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 01:50	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/10/2018 05:32	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 01:50	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 01:50	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 01:50	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 01:50	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 01:50	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 01:50	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 01:50	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 01:50	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 01:50	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 01:50	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 01:50	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 01:50	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 01:50	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 01:50	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 01:50	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 01:50	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 01:50	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/09/2018 01:50	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 01:50	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 01:50	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 01:50	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 01:50	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 01:50	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 01:50	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 01:50	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/06/18 12:50

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 01:50	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/10/2018 05:32	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 01:50	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 01:50	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 01:50	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 01:50	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 01:50	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 01:50	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 01:50	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 01:50	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 01:50	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 01:50	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 01:50	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 01:50	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/09/2018 01:50	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 01:50	WG1095442
(S) Toluene-d8	100			80.0-120		04/10/2018 05:32	WG1095442
(S) Toluene-d8	104			80.0-120		04/09/2018 01:50	WG1095442
(S) Dibromofluoromethane	101			76.0-123		04/10/2018 05:32	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/09/2018 01:50	WG1095442
(S) 4-Bromofluorobenzene	104			80.0-120		04/10/2018 05:32	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/09/2018 01:50	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/06/18 14:48

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 06:52	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 06:52	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	1.55	U	B_J	1.05	25.0	1	04/09/2018 02:10	WG1095442
Acrylonitrile	U			0.873	5.00	1	04/09/2018 02:10	WG1095442
Benzene	U			0.0896	0.500	1	04/09/2018 02:10	WG1095442
Bromobenzene	U			0.133	0.500	1	04/09/2018 02:10	WG1095442
Bromodichloromethane	U			0.0800	0.500	1	04/09/2018 02:10	WG1095442
Bromochloromethane	U			0.145	0.500	1	04/09/2018 02:10	WG1095442
Bromoform	U			0.186	0.500	1	04/09/2018 02:10	WG1095442
Bromomethane	U			0.157	2.50	1	04/09/2018 02:10	WG1095442
n-Butylbenzene	U			0.143	0.500	1	04/09/2018 02:10	WG1095442
sec-Butylbenzene	U			0.134	0.500	1	04/09/2018 02:10	WG1095442
tert-Butylbenzene	U			0.183	0.500	1	04/09/2018 02:10	WG1095442
Carbon disulfide	U			0.101	0.500	1	04/09/2018 02:10	WG1095442
Carbon tetrachloride	U			0.159	0.500	1	04/09/2018 02:10	WG1095442
Chlorobenzene	U			0.140	0.500	1	04/09/2018 02:10	WG1095442
Chlorodibromomethane	U			0.128	0.500	1	04/09/2018 02:10	WG1095442
Chloroethane	U			0.141	2.50	1	04/09/2018 02:10	WG1095442
Chloroform	U			0.0860	0.500	1	04/09/2018 02:10	WG1095442
Chloromethane	U			0.153	1.25	1	04/09/2018 02:10	WG1095442
2-Chlorotoluene	U			0.111	0.500	1	04/09/2018 02:10	WG1095442
4-Chlorotoluene	U			0.0972	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dibromo-3-Chloropropane	U			0.325	2.50	1	04/09/2018 02:10	WG1095442
1,2-Dibromoethane	U			0.193	0.500	1	04/09/2018 02:10	WG1095442
Dibromomethane	U			0.117	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dichlorobenzene	U			0.101	0.500	1	04/09/2018 02:10	WG1095442
1,3-Dichlorobenzene	U			0.130	0.500	1	04/09/2018 02:10	WG1095442
1,4-Dichlorobenzene	U			0.121	0.500	1	04/09/2018 02:10	WG1095442
Dichlorodifluoromethane	U			0.127	2.50	1	04/09/2018 02:10	WG1095442
1,1-Dichloroethane	U			0.114	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dichloroethane	U			0.108	0.500	1	04/09/2018 02:10	WG1095442
1,1-Dichloroethene	0.347	J	J	0.188	0.500	1	04/09/2018 02:10	WG1095442
cis-1,2-Dichloroethene	19.4			0.0933	0.500	1	04/09/2018 02:10	WG1095442
trans-1,2-Dichloroethene	0.277	J	J	0.152	0.500	1	04/09/2018 02:10	WG1095442
1,2-Dichloropropane	U			0.190	0.500	1	04/09/2018 02:10	WG1095442
1,1-Dichloropropene	U			0.128	0.500	1	04/09/2018 02:10	WG1095442
1,3-Dichloropropane	U			0.147	1.00	1	04/09/2018 02:10	WG1095442
cis-1,3-Dichloropropene	U			0.0976	0.500	1	04/09/2018 02:10	WG1095442
trans-1,3-Dichloropropene	U			0.222	0.500	1	04/09/2018 02:10	WG1095442
trans-1,4-Dichloro-2-butene	U			0.257	5.00	1	04/09/2018 02:10	WG1095442
2,2-Dichloropropane	U			0.0929	0.500	1	04/09/2018 02:10	WG1095442
Di-isopropyl ether	U			0.0924	0.500	1	04/09/2018 02:10	WG1095442
Ethylbenzene	U			0.158	0.500	1	04/09/2018 02:10	WG1095442
Hexachloro-1,3-butadiene	U			0.157	1.00	1	04/09/2018 02:10	WG1095442
2-Hexanone	U			0.757	5.00	1	04/09/2018 02:10	WG1095442
n-Hexane	U			0.305	5.00	1	04/09/2018 02:10	WG1095442
Iodomethane	U			0.377	10.0	1	04/09/2018 02:10	WG1095442
Isopropylbenzene	U			0.126	0.500	1	04/09/2018 02:10	WG1095442
p-Isopropyltoluene	U			0.138	0.500	1	04/09/2018 02:10	WG1095442
2-Butanone (MEK)	U			1.28	5.00	1	04/09/2018 02:10	WG1095442

JC 4/24/18



Collected date/time: 04/06/18 14:48

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:10	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:10	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:10	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 02:10	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:10	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 02:10	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:10	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:10	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:10	WG1095442
Tetrachloroethene	1.85		0.199	0.500	1	04/09/2018 02:10	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 02:10	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:10	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:10	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:10	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:10	WG1095442
Trichloroethene	2.24		0.153	0.500	1	04/09/2018 02:10	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:10	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:10	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:10	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:10	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:10	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 02:10	WG1095442
Vinyl chloride	26.9		0.118	0.500	1	04/09/2018 02:10	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:10	WG1095442
(S) Toluene-d8	105			80.0-120		04/09/2018 02:10	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/09/2018 02:10	WG1095442
(S) 4-Bromofluorobenzene	109			80.0-120		04/09/2018 02:10	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Collected date/time: 04/06/18 15:09

L984034

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 07:16	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 07:16	WG1095836

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.33	U B J	1.05	25.0	1	04/09/2018 02:30	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/09/2018 02:30	WG1095442
Benzene	U		0.0896	0.500	1	04/09/2018 02:30	WG1095442
Bromobenzene	U		0.133	0.500	1	04/09/2018 02:30	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/09/2018 02:30	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/09/2018 02:30	WG1095442
Bromoform	U		0.186	0.500	1	04/09/2018 02:30	WG1095442
Bromomethane	U		0.157	2.50	1	04/09/2018 02:30	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/09/2018 02:30	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/09/2018 02:30	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/09/2018 02:30	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/09/2018 02:30	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/09/2018 02:30	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/09/2018 02:30	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/09/2018 02:30	WG1095442
Chloroethane	U		0.141	2.50	1	04/09/2018 02:30	WG1095442
Chloroform	U		0.0860	0.500	1	04/09/2018 02:30	WG1095442
Chloromethane	U		0.153	1.25	1	04/09/2018 02:30	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/09/2018 02:30	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/09/2018 02:30	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/09/2018 02:30	WG1095442
Dibromomethane	U		0.117	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/09/2018 02:30	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/09/2018 02:30	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/09/2018 02:30	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/09/2018 02:30	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/09/2018 02:30	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/09/2018 02:30	WG1095442
cis-1,2-Dichloroethene	0.278	J J	0.0933	0.500	1	04/09/2018 02:30	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/09/2018 02:30	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/09/2018 02:30	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/09/2018 02:30	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/09/2018 02:30	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/09/2018 02:30	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/09/2018 02:30	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/09/2018 02:30	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/09/2018 02:30	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/09/2018 02:30	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/09/2018 02:30	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/09/2018 02:30	WG1095442
2-Hexanone	U		0.757	5.00	1	04/09/2018 02:30	WG1095442
n-Hexane	U		0.305	5.00	1	04/09/2018 02:30	WG1095442
Iodomethane	U		0.377	10.0	1	04/09/2018 02:30	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/09/2018 02:30	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/09/2018 02:30	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/09/2018 02:30	WG1095442

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 4/24/18



Collected date/time: 04/06/18 15:09

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/09/2018 02:30	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/09/2018 02:30	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/09/2018 02:30	WG1095442
Naphthalene	U		0.174	2.50	1	04/09/2018 02:30	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/09/2018 02:30	WG1095442
Styrene	U		0.117	0.500	1	04/09/2018 02:30	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/09/2018 02:30	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/09/2018 02:30	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/09/2018 02:30	WG1095442
Tetrachloroethene	0.580		0.199	0.500	1	04/09/2018 02:30	WG1095442
Toluene	U		0.412	0.500	1	04/09/2018 02:30	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/09/2018 02:30	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/09/2018 02:30	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/09/2018 02:30	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/09/2018 02:30	WG1095442
Trichloroethene	U		0.153	0.500	1	04/09/2018 02:30	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/09/2018 02:30	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/09/2018 02:30	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/09/2018 02:30	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/09/2018 02:30	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/09/2018 02:30	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/09/2018 02:30	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/09/2018 02:30	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/09/2018 02:30	WG1095442
(S) Toluene-d8	106			80.0-120		04/09/2018 02:30	WG1095442
(S) Dibromofluoromethane	108			76.0-123		04/09/2018 02:30	WG1095442
(S) 4-Bromofluorobenzene	108			80.0-120		04/09/2018 02:30	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/11/2018 01:49	WG1095836
(S) a,a,a-Trifluorotoluene(FID)	105			77.0-122		04/11/2018 01:49	WG1095836

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/08/2018 19:43	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 19:43	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 19:43	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 19:43	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 19:43	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 19:43	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 19:43	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 19:43	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 19:43	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 19:43	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 19:43	WG1095442
Carbon disulfide	0.153	U B J	0.101	0.500	1	04/08/2018 19:43	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 19:43	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 19:43	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 19:43	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 19:43	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 19:43	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 19:43	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 19:43	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 19:43	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 19:43	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 19:43	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 19:43	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 19:43	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 19:43	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 19:43	WG1095442
1,1-Dichloroethene	U		0.188	0.500	1	04/08/2018 19:43	WG1095442
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/08/2018 19:43	WG1095442
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/08/2018 19:43	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 19:43	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 19:43	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 19:43	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 19:43	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 19:43	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 19:43	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 19:43	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 19:43	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 19:43	WG1095442
Hexachloro-1,3-butadiene	0.279	U B J	0.157	1.00	1	04/08/2018 19:43	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 19:43	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 19:43	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 19:43	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 19:43	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 19:43	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 19:43	WG1095442

JC 4/24/18



Collected date/time: 04/06/18 00:00

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/08/2018 19:43	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 19:43	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 19:43	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 19:43	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 19:43	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 19:43	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 19:43	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 19:43	WG1095442
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 19:43	WG1095442
Tetrachloroethene	U		0.199	0.500	1	04/08/2018 19:43	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 19:43	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 19:43	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 19:43	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 19:43	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 19:43	WG1095442
Trichloroethene	U		0.153	0.500	1	04/08/2018 19:43	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 19:43	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 19:43	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 19:43	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 19:43	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 19:43	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 19:43	WG1095442
Vinyl chloride	U		0.118	0.500	1	04/08/2018 19:43	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 19:43	WG1095442
(S) Toluene-d8	105			80.0-120		04/08/2018 19:43	WG1095442
(S) Dibromofluoromethane	107			76.0-123		04/08/2018 19:43	WG1095442
(S) 4-Bromofluorobenzene	110			80.0-120		04/08/2018 19:43	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/24/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/08/2018 23:29	WG1095442
Acrylonitrile	U		0.873	5.00	1	04/08/2018 23:29	WG1095442
Benzene	U		0.0896	0.500	1	04/08/2018 23:29	WG1095442
Bromobenzene	U		0.133	0.500	1	04/08/2018 23:29	WG1095442
Bromodichloromethane	U		0.0800	0.500	1	04/08/2018 23:29	WG1095442
Bromochloromethane	U		0.145	0.500	1	04/08/2018 23:29	WG1095442
Bromoform	U		0.186	0.500	1	04/08/2018 23:29	WG1095442
Bromomethane	U		0.157	2.50	1	04/08/2018 23:29	WG1095442
n-Butylbenzene	U		0.143	0.500	1	04/08/2018 23:29	WG1095442
sec-Butylbenzene	U		0.134	0.500	1	04/08/2018 23:29	WG1095442
tert-Butylbenzene	U		0.183	0.500	1	04/08/2018 23:29	WG1095442
Carbon disulfide	U		0.101	0.500	1	04/08/2018 23:29	WG1095442
Carbon tetrachloride	U		0.159	0.500	1	04/08/2018 23:29	WG1095442
Chlorobenzene	U		0.140	0.500	1	04/08/2018 23:29	WG1095442
Chlorodibromomethane	U		0.128	0.500	1	04/08/2018 23:29	WG1095442
Chloroethane	U		0.141	2.50	1	04/08/2018 23:29	WG1095442
Chloroform	U		0.0860	0.500	1	04/08/2018 23:29	WG1095442
Chloromethane	U		0.153	1.25	1	04/08/2018 23:29	WG1095442
2-Chlorotoluene	U		0.111	0.500	1	04/08/2018 23:29	WG1095442
4-Chlorotoluene	U		0.0972	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/08/2018 23:29	WG1095442
1,2-Dibromoethane	U		0.193	0.500	1	04/08/2018 23:29	WG1095442
Dibromomethane	U		0.117	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichlorobenzene	U		0.101	0.500	1	04/08/2018 23:29	WG1095442
1,3-Dichlorobenzene	U		0.130	0.500	1	04/08/2018 23:29	WG1095442
1,4-Dichlorobenzene	U		0.121	0.500	1	04/08/2018 23:29	WG1095442
Dichlorodifluoromethane	U		0.127	2.50	1	04/08/2018 23:29	WG1095442
1,1-Dichloroethane	U		0.114	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichloroethane	U		0.108	0.500	1	04/08/2018 23:29	WG1095442
1,1-Dichloroethene	1.21		0.188	0.500	1	04/08/2018 23:29	WG1095442
cis-1,2-Dichloroethene	629		0.933	5.00	10	04/10/2018 03:32	WG1095442
trans-1,2-Dichloroethene	3.34		0.152	0.500	1	04/08/2018 23:29	WG1095442
1,2-Dichloropropane	U		0.190	0.500	1	04/08/2018 23:29	WG1095442
1,1-Dichloropropene	U		0.128	0.500	1	04/08/2018 23:29	WG1095442
1,3-Dichloropropane	U		0.147	1.00	1	04/08/2018 23:29	WG1095442
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/08/2018 23:29	WG1095442
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/08/2018 23:29	WG1095442
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/08/2018 23:29	WG1095442
2,2-Dichloropropane	U		0.0929	0.500	1	04/08/2018 23:29	WG1095442
Di-isopropyl ether	U		0.0924	0.500	1	04/08/2018 23:29	WG1095442
Ethylbenzene	U		0.158	0.500	1	04/08/2018 23:29	WG1095442
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/08/2018 23:29	WG1095442
2-Hexanone	U		0.757	5.00	1	04/08/2018 23:29	WG1095442
n-Hexane	U		0.305	5.00	1	04/08/2018 23:29	WG1095442
Iodomethane	U		0.377	10.0	1	04/08/2018 23:29	WG1095442
Isopropylbenzene	U		0.126	0.500	1	04/08/2018 23:29	WG1095442
p-Isopropyltoluene	U		0.138	0.500	1	04/08/2018 23:29	WG1095442
2-Butanone (MEK)	U		1.28	5.00	1	04/08/2018 23:29	WG1095442
Methylene Chloride	U		1.07	2.50	1	04/08/2018 23:29	WG1095442
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/08/2018 23:29	WG1095442
Methyl tert-butyl ether	U		0.102	0.500	1	04/08/2018 23:29	WG1095442
Naphthalene	U		0.174	2.50	1	04/08/2018 23:29	WG1095442
n-Propylbenzene	U		0.162	0.500	1	04/08/2018 23:29	WG1095442
Styrene	U		0.117	0.500	1	04/08/2018 23:29	WG1095442
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/08/2018 23:29	WG1095442
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/08/2018 23:29	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 4/27/18

JC 4/24/18



Collected date/time: 04/06/18 10:12

L984034

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/08/2018 23:29	WG1095442
Tetrachloroethene	U	UJ	1.99	5.00	10	04/10/2018 03:32	WG1095442
Toluene	U		0.412	0.500	1	04/08/2018 23:29	WG1095442
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/08/2018 23:29	WG1095442
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/08/2018 23:29	WG1095442
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/08/2018 23:29	WG1095442
1,1,2-Trichloroethane	U		0.186	0.500	1	04/08/2018 23:29	WG1095442
Trichloroethene	210		1.53	5.00	10	04/10/2018 03:32	WG1095442
Trichlorofluoromethane	U		0.130	2.50	1	04/08/2018 23:29	WG1095442
1,2,3-Trichloropropane	U		0.247	2.50	1	04/08/2018 23:29	WG1095442
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/08/2018 23:29	WG1095442
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/08/2018 23:29	WG1095442
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/08/2018 23:29	WG1095442
Vinyl acetate	U	J4	0.645	5.00	1	04/08/2018 23:29	WG1095442
Vinyl chloride	42.2		0.118	0.500	1	04/08/2018 23:29	WG1095442
Xylenes, Total	U		0.316	1.50	1	04/08/2018 23:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/08/2018 23:29	WG1095442
(S) Toluene-d8	101			80.0-120		04/10/2018 03:32	WG1095442
(S) Dibromofluoromethane	109			76.0-123		04/08/2018 23:29	WG1095442
(S) Dibromofluoromethane	100			76.0-123		04/10/2018 03:32	WG1095442
(S) 4-Bromofluorobenzene	107			80.0-120		04/08/2018 23:29	WG1095442
(S) 4-Bromofluorobenzene	102			80.0-120		04/10/2018 03:32	WG1095442

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L984034-15 WG1095442: PCE not reportable at 1x due to possible carryover.

L984034-15 WG1095442: PCE cannot be reported at a lower dilution due to high levels of target analytes.

JC 4/27/18

JC 4/24/18

April 19, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L984988
Samples Received: 04/12/2018
Project Number: 1413.001.05.601
Description: American Linen
Site: 1413.001.05.601
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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BB-8-041118 L984988-01 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 09:45
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097253	1	04/13/18 21:51	04/13/18 21:51	MCG
Wet Chemistry by Method 9056A	WG1097077	1	04/12/18 21:13	04/12/18 21:13	MAJ
Wet Chemistry by Method 9060A	WG1097605	1	04/13/18 11:52	04/13/18 11:52	EG
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/15/18 22:41	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097649	1	04/13/18 12:34	04/13/18 12:34	JAH
Volatile Organic Compounds (GC) by Method RSK175	WG1099029	1	04/17/18 12:14	04/17/18 12:14	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 14:09	04/12/18 14:09	JAH

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW-116-041118 L984988-02 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 12:21
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 14:29	04/12/18 14:29	JAH

MW-115-041118 L984988-03 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 11:51
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 14:49	04/12/18 14:49	JAH

MW113-041118 L984988-04 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 12:18
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 15:09	04/12/18 15:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	200	04/16/18 11:29	04/16/18 11:29	ACG

MW105-041118 L984988-05 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 10:35
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097253	1	04/13/18 21:57	04/13/18 21:57	MCG
Wet Chemistry by Method 9056A	WG1097077	1	04/12/18 21:25	04/12/18 21:25	MAJ
Wet Chemistry by Method 9060A	WG1097605	1	04/13/18 12:04	04/13/18 12:04	EG
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/16/18 00:19	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097649-1	1	04/17/18 13:44	04/17/18 13:44	JAH
Volatile Organic Compounds (GC) by Method RSK175	WG1099029	1	04/17/18 12:17	04/17/18 12:17	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 15:29	04/12/18 15:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/16/18 11:49	04/16/18 11:49	ACG

MW903-041118 L984988-06 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 10:51
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097253	1	04/13/18 22:03	04/13/18 22:03	MCG
Wet Chemistry by Method 9056A	WG1097077	1	04/12/18 21:38	04/12/18 21:38	MAJ
Wet Chemistry by Method 9060A	WG1097605	1	04/13/18 13:10	04/13/18 13:10	EG
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/15/18 22:22	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097649	1	04/13/18 13:18	04/13/18 13:18	JAH
Volatile Organic Compounds (GC) by Method RSK175	WG1099029	1	04/17/18 12:19	04/17/18 12:19	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 15:49	04/12/18 15:49	JAH



R-MW5-041118 L984988-07 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 13:47
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097649	1	04/13/18 13:40	04/13/18 13:40	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 16:09	04/12/18 16:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/16/18 12:08	04/16/18 12:08	ACG

¹ Cp

² Tc

³ Ss

MW138-041118 L984988-08 GW

Collected by Jeff Dobbins
 Collected date/time 04/11/18 13:55
 Received date/time 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097253	1	04/14/18 05:15	04/14/18 05:15	MCG
Wet Chemistry by Method 9056A	WG1097140	1	04/12/18 16:34	04/12/18 16:34	DR
Wet Chemistry by Method 9060A	WG1097605	10	04/13/18 13:51	04/13/18 13:51	EG
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/15/18 22:50	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097649	1	04/13/18 14:02	04/13/18 14:02	JAH
Volatile Organic Compounds (GC) by Method RSK175	WG1099029	1	04/17/18 12:23	04/17/18 12:23	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/12/18 16:29	04/12/18 16:29	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097123	1	04/16/18 12:28	04/16/18 12:28	ACG

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	258000		2710	20000	1	04/13/2018 21:51	WG1097253

Sample Narrative:

L984988-01 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7430		51.9	1000	1	04/12/2018 21:13	WG1097077
Nitrate	3410		22.7	100	1	04/12/2018 21:13	WG1097077
Sulfate	39800		77.4	5000	1	04/12/2018 21:13	WG1097077

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3240	<u>B</u>	102	1000	1	04/13/2018 11:52	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	145		15.0	100	1	04/15/2018 22:41	WG1097160
Manganese	94.0		0.250	5.00	1	04/15/2018 22:41	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

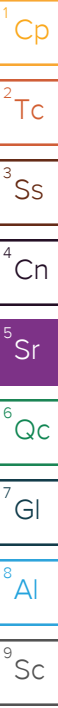
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	40.9	<u>B, J</u>	31.6	100	1	04/13/2018 12:34	WG1097649
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-122		04/13/2018 12:34	WG1097649

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	04/17/2018 12:14	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 12:14	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:14	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.16	<u>J</u>	1.05	25.0	1	04/12/2018 14:09	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 14:09	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 14:09	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 14:09	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 14:09	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 14:09	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 14:09	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 14:09	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 14:09	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 14:09	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 14:09	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 14:09	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 14:09	WG1097123





Collected date/time: 04/11/18 09:45

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/12/2018 14:09	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 14:09	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 14:09	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 14:09	WG1097123
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/12/2018 14:09	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 14:09	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 14:09	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 14:09	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 14:09	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 14:09	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 14:09	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 14:09	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 14:09	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 14:09	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 14:09	WG1097123
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	04/12/2018 14:09	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 14:09	WG1097123
cis-1,2-Dichloroethene	4.64		0.0933	0.500	1	04/12/2018 14:09	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 14:09	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 14:09	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 14:09	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 14:09	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 14:09	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 14:09	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 14:09	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 14:09	WG1097123
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/12/2018 14:09	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 14:09	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 14:09	WG1097123
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/12/2018 14:09	WG1097123
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/12/2018 14:09	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 14:09	WG1097123
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/12/2018 14:09	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 14:09	WG1097123
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/12/2018 14:09	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 14:09	WG1097123
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/12/2018 14:09	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 14:09	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 14:09	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 14:09	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 14:09	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 14:09	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 14:09	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 14:09	WG1097123
Tetrachloroethene	33.7		0.199	0.500	1	04/12/2018 14:09	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 14:09	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 14:09	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 14:09	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 14:09	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 14:09	WG1097123
Trichloroethene	6.13		0.153	0.500	1	04/12/2018 14:09	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 14:09	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 14:09	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 14:09	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 14:09	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 14:09	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 09:45

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 14:09	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 14:09	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 14:09	WG1097123
<i>(S) Toluene-d8</i>	94.8			80.0-120		04/12/2018 14:09	WG1097123
<i>(S) Dibromofluoromethane</i>	101			76.0-123		04/12/2018 14:09	WG1097123
<i>(S) 4-Bromofluorobenzene</i>	114			80.0-120		04/12/2018 14:09	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 12:21

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 14:29	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 14:29	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 14:29	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 14:29	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 14:29	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 14:29	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 14:29	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 14:29	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 14:29	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 14:29	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 14:29	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 14:29	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 14:29	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 14:29	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 14:29	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 14:29	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 14:29	WG1097123
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/12/2018 14:29	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 14:29	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 14:29	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 14:29	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 14:29	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 14:29	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 14:29	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 14:29	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	04/12/2018 14:29	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 14:29	WG1097123
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/12/2018 14:29	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 14:29	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 14:29	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 14:29	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 14:29	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 14:29	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 14:29	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 14:29	WG1097123
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/12/2018 14:29	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 14:29	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 14:29	WG1097123
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/12/2018 14:29	WG1097123
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/12/2018 14:29	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 14:29	WG1097123
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/12/2018 14:29	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 14:29	WG1097123
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/12/2018 14:29	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 14:29	WG1097123
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/12/2018 14:29	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 14:29	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 14:29	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 14:29	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 14:29	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 14:29	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 14:29	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 12:21

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 14:29	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 14:29	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 14:29	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 14:29	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 14:29	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 14:29	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 14:29	WG1097123
Trichloroethene	U		0.153	0.500	1	04/12/2018 14:29	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 14:29	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 14:29	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 14:29	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 14:29	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 14:29	WG1097123
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 14:29	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 14:29	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 14:29	WG1097123
(S) Toluene-d8	96.4			80.0-120		04/12/2018 14:29	WG1097123
(S) Dibromofluoromethane	99.6			76.0-123		04/12/2018 14:29	WG1097123
(S) 4-Bromofluorobenzene	111			80.0-120		04/12/2018 14:29	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 11:51

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 14:49	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 14:49	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 14:49	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 14:49	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 14:49	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 14:49	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 14:49	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 14:49	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 14:49	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 14:49	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 14:49	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 14:49	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 14:49	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 14:49	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 14:49	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 14:49	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 14:49	WG1097123
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/12/2018 14:49	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 14:49	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 14:49	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 14:49	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 14:49	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 14:49	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 14:49	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 14:49	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	04/12/2018 14:49	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 14:49	WG1097123
cis-1,2-Dichloroethene	0.272	<u>J</u>	0.0933	0.500	1	04/12/2018 14:49	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 14:49	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 14:49	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 14:49	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 14:49	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 14:49	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 14:49	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 14:49	WG1097123
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/12/2018 14:49	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 14:49	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 14:49	WG1097123
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/12/2018 14:49	WG1097123
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/12/2018 14:49	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 14:49	WG1097123
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/12/2018 14:49	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 14:49	WG1097123
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/12/2018 14:49	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 14:49	WG1097123
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/12/2018 14:49	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 14:49	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 14:49	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 14:49	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 14:49	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 14:49	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 14:49	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 11:51

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 14:49	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 14:49	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 14:49	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 14:49	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 14:49	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 14:49	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 14:49	WG1097123
Trichloroethene	U		0.153	0.500	1	04/12/2018 14:49	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 14:49	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 14:49	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 14:49	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 14:49	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 14:49	WG1097123
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 14:49	WG1097123
Vinyl chloride	5.81		0.118	0.500	1	04/12/2018 14:49	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 14:49	WG1097123
(S) Toluene-d8	95.5			80.0-120		04/12/2018 14:49	WG1097123
(S) Dibromofluoromethane	101			76.0-123		04/12/2018 14:49	WG1097123
(S) 4-Bromofluorobenzene	112			80.0-120		04/12/2018 14:49	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 12:18

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 15:09	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 15:09	WG1097123
Benzene	0.880		0.0896	0.500	1	04/12/2018 15:09	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 15:09	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 15:09	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 15:09	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 15:09	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 15:09	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 15:09	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 15:09	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 15:09	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 15:09	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 15:09	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 15:09	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 15:09	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 15:09	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 15:09	WG1097123
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/12/2018 15:09	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 15:09	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 15:09	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 15:09	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 15:09	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 15:09	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 15:09	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 15:09	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	04/12/2018 15:09	WG1097123
1,1-Dichloroethene	7.83		0.188	0.500	1	04/12/2018 15:09	WG1097123
cis-1,2-Dichloroethene	3720		18.7	100	200	04/16/2018 11:29	WG1097123
trans-1,2-Dichloroethene	21.3		0.152	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 15:09	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 15:09	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 15:09	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 15:09	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 15:09	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 15:09	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 15:09	WG1097123
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/12/2018 15:09	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 15:09	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 15:09	WG1097123
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/12/2018 15:09	WG1097123
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/12/2018 15:09	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 15:09	WG1097123
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/12/2018 15:09	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 15:09	WG1097123
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/12/2018 15:09	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 15:09	WG1097123
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/12/2018 15:09	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 15:09	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 15:09	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 15:09	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 15:09	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 15:09	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 15:09	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 12:18

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 15:09	WG1097123
Tetrachloroethene	191		0.199	0.500	1	04/12/2018 15:09	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 15:09	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 15:09	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 15:09	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 15:09	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 15:09	WG1097123
Trichloroethene	1100		30.6	100	200	04/16/2018 11:29	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 15:09	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 15:09	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 15:09	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 15:09	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 15:09	WG1097123
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 15:09	WG1097123
Vinyl chloride	34.9		0.118	0.500	1	04/12/2018 15:09	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 15:09	WG1097123
(S) Toluene-d8	105			80.0-120		04/16/2018 11:29	WG1097123
(S) Toluene-d8	97.8			80.0-120		04/12/2018 15:09	WG1097123
(S) Dibromofluoromethane	103			76.0-123		04/16/2018 11:29	WG1097123
(S) Dibromofluoromethane	99.1			76.0-123		04/12/2018 15:09	WG1097123
(S) 4-Bromofluorobenzene	103			80.0-120		04/16/2018 11:29	WG1097123
(S) 4-Bromofluorobenzene	112			80.0-120		04/12/2018 15:09	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	257000		2710	20000	1	04/13/2018 21:57	WG1097253

Sample Narrative:

L984988-05 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	35700		51.9	1000	1	04/12/2018 21:25	WG1097077
Nitrate	U		22.7	100	1	04/12/2018 21:25	WG1097077
Sulfate	9480		77.4	5000	1	04/12/2018 21:25	WG1097077

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3270	<u>B</u>	102	1000	1	04/13/2018 12:04	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5700		15.0	100	1	04/16/2018 00:19	WG1097160
Manganese	799		0.250	5.00	1	04/16/2018 00:19	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2018 13:44	WG1097649-1
(S) a,a,a-Trifluorotoluene(FID)	97.4			77.0-122		04/17/2018 13:44	WG1097649-1

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2700		0.287	0.678	1	04/17/2018 12:17	WG1099029
Ethane	4.41		0.296	1.29	1	04/17/2018 12:17	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:17	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	4.51	<u>J</u>	1.05	25.0	1	04/12/2018 15:29	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 15:29	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 15:29	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 15:29	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 15:29	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 15:29	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 15:29	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 15:29	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 15:29	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 15:29	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 15:29	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 15:29	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 15:29	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 10:35

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/12/2018 15:29	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 15:29	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 15:29	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 15:29	WG1097123
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/12/2018 15:29	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 15:29	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 15:29	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 15:29	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 15:29	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 15:29	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 15:29	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 15:29	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	04/12/2018 15:29	WG1097123
1,1-Dichloroethene	0.225	<u>J</u>	0.188	0.500	1	04/12/2018 15:29	WG1097123
cis-1,2-Dichloroethene	1.67		0.0933	0.500	1	04/16/2018 11:49	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 15:29	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 15:29	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 15:29	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 15:29	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 15:29	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 15:29	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 15:29	WG1097123
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/12/2018 15:29	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 15:29	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 15:29	WG1097123
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/12/2018 15:29	WG1097123
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/12/2018 15:29	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 15:29	WG1097123
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/12/2018 15:29	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 15:29	WG1097123
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/12/2018 15:29	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 15:29	WG1097123
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/12/2018 15:29	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 15:29	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 15:29	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 15:29	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 15:29	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 15:29	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 15:29	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 15:29	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 15:29	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 15:29	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 15:29	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 15:29	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 15:29	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 15:29	WG1097123
Trichloroethene	U		0.153	0.500	1	04/16/2018 11:49	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 15:29	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 15:29	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 15:29	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 15:29	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 15:29	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 10:35

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 15:29	WG1097123
Vinyl chloride	0.205	<u>J</u>	0.118	0.500	1	04/12/2018 15:29	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 15:29	WG1097123
(S) Toluene-d8	95.1			80.0-120		04/12/2018 15:29	WG1097123
(S) Toluene-d8	103			80.0-120		04/16/2018 11:49	WG1097123
(S) Dibromofluoromethane	101			76.0-123		04/16/2018 11:49	WG1097123
(S) Dibromofluoromethane	99.5			76.0-123		04/12/2018 15:29	WG1097123
(S) 4-Bromofluorobenzene	113			80.0-120		04/12/2018 15:29	WG1097123
(S) 4-Bromofluorobenzene	101			80.0-120		04/16/2018 11:49	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	262000		2710	20000	1	04/13/2018 22:03	WG1097253

Sample Narrative:

L984988-06 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7420		51.9	1000	1	04/12/2018 21:38	WG1097077
Nitrate	3170		22.7	100	1	04/12/2018 21:38	WG1097077
Sulfate	39800		77.4	5000	1	04/12/2018 21:38	WG1097077

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3140	<u>B</u>	102	1000	1	04/13/2018 13:10	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	96.2	<u>J</u>	15.0	100	1	04/15/2018 22:22	WG1097160
Manganese	54.4		0.250	5.00	1	04/15/2018 22:22	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	41.5	<u>B, J</u>	31.6	100	1	04/13/2018 13:18	WG1097649
(S) a,a,a-Trifluorotoluene(FID)	99.6			77.0-122		04/13/2018 13:18	WG1097649

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	04/17/2018 12:19	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 12:19	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:19	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.25	<u>J</u>	1.05	25.0	1	04/12/2018 15:49	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 15:49	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 15:49	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 15:49	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 15:49	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 15:49	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 15:49	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 15:49	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 15:49	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 15:49	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 15:49	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 15:49	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 15:49	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 10:51

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/12/2018 15:49	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 15:49	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 15:49	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 15:49	WG1097123
Chloromethane	U	JO	0.153	1.25	1	04/12/2018 15:49	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 15:49	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 15:49	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 15:49	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 15:49	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 15:49	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 15:49	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 15:49	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dichloroethane	U	JO	0.108	0.500	1	04/12/2018 15:49	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 15:49	WG1097123
cis-1,2-Dichloroethene	6.28		0.0933	0.500	1	04/12/2018 15:49	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 15:49	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 15:49	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 15:49	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 15:49	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 15:49	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 15:49	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 15:49	WG1097123
Di-isopropyl ether	U	JO	0.0924	0.500	1	04/12/2018 15:49	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 15:49	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 15:49	WG1097123
2-Hexanone	U	JO	0.757	5.00	1	04/12/2018 15:49	WG1097123
n-Hexane	U	JO	0.305	5.00	1	04/12/2018 15:49	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 15:49	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 15:49	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 15:49	WG1097123
2-Butanone (MEK)	U	JO	1.28	5.00	1	04/12/2018 15:49	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 15:49	WG1097123
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	04/12/2018 15:49	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 15:49	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 15:49	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 15:49	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 15:49	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 15:49	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 15:49	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 15:49	WG1097123
Tetrachloroethene	46.8		0.199	0.500	1	04/12/2018 15:49	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 15:49	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 15:49	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 15:49	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 15:49	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 15:49	WG1097123
Trichloroethene	8.41		0.153	0.500	1	04/12/2018 15:49	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 15:49	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 15:49	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 15:49	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 15:49	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 15:49	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 10:51

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 15:49	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 15:49	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 15:49	WG1097123
<i>(S) Toluene-d8</i>	95.1			80.0-120		04/12/2018 15:49	WG1097123
<i>(S) Dibromofluoromethane</i>	103			76.0-123		04/12/2018 15:49	WG1097123
<i>(S) 4-Bromofluorobenzene</i>	110			80.0-120		04/12/2018 15:49	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/13/2018 13:40	WG1097649
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-122		04/13/2018 13:40	WG1097649

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/12/2018 16:09	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 16:09	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 16:09	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 16:09	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 16:09	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 16:09	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 16:09	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 16:09	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 16:09	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 16:09	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 16:09	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 16:09	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 16:09	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 16:09	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 16:09	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 16:09	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 16:09	WG1097123
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/12/2018 16:09	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 16:09	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 16:09	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 16:09	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 16:09	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 16:09	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 16:09	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 16:09	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	04/12/2018 16:09	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 16:09	WG1097123
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/16/2018 12:08	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 16:09	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 16:09	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 16:09	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 16:09	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 16:09	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 16:09	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 16:09	WG1097123
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/12/2018 16:09	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 16:09	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 16:09	WG1097123
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/12/2018 16:09	WG1097123
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/12/2018 16:09	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 16:09	WG1097123
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/12/2018 16:09	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 16:09	WG1097123
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/12/2018 16:09	WG1097123



Collected date/time: 04/11/18 13:47

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/12/2018 16:09	WG1097123
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/12/2018 16:09	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 16:09	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 16:09	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 16:09	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 16:09	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 16:09	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 16:09	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 16:09	WG1097123
Tetrachloroethene	0.621		0.199	0.500	1	04/12/2018 16:09	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 16:09	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 16:09	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 16:09	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 16:09	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 16:09	WG1097123
Trichloroethene	U		0.153	0.500	1	04/16/2018 12:08	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 16:09	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 16:09	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 16:09	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 16:09	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 16:09	WG1097123
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 16:09	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 16:09	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 16:09	WG1097123
(S) Toluene-d8	94.0			80.0-120		04/12/2018 16:09	WG1097123
(S) Toluene-d8	102			80.0-120		04/16/2018 12:08	WG1097123
(S) Dibromofluoromethane	103			76.0-123		04/16/2018 12:08	WG1097123
(S) Dibromofluoromethane	104			76.0-123		04/12/2018 16:09	WG1097123
(S) 4-Bromofluorobenzene	110			80.0-120		04/12/2018 16:09	WG1097123
(S) 4-Bromofluorobenzene	104			80.0-120		04/16/2018 12:08	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	143000		2710	20000	1	04/14/2018 05:15	WG1097253

Sample Narrative:

L984988-08 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13800		51.9	1000	1	04/12/2018 16:34	WG1097140
Nitrate	U		22.7	100	1	04/12/2018 16:34	WG1097140
Sulfate	45900		77.4	5000	1	04/12/2018 16:34	WG1097140

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4890	<u>B</u> <u>J</u>	1020	10000	10	04/13/2018 13:51	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	21500		15.0	100	1	04/15/2018 22:50	WG1097160
Manganese	725		0.250	5.00	1	04/15/2018 22:50	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	91.1	<u>B</u> <u>J</u>	31.6	100	1	04/13/2018 14:02	WG1097649
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	99.5			77.0-122		04/13/2018 14:02	WG1097649

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	83.1		0.287	0.678	1	04/17/2018 12:23	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 12:23	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:23	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 16:29	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 16:29	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 16:29	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 16:29	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 16:29	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 16:29	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 16:29	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 16:29	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 16:29	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 16:29	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 16:29	WG1097123
Carbon disulfide	0.214	<u>J</u>	0.101	0.500	1	04/12/2018 16:29	WG1097123
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/12/2018 16:29	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 13:55

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/12/2018 16:29	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 16:29	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 16:29	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 16:29	WG1097123
Chloromethane	U	JO	0.153	1.25	1	04/12/2018 16:29	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 16:29	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 16:29	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 16:29	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 16:29	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 16:29	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 16:29	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 16:29	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dichloroethane	U	JO	0.108	0.500	1	04/12/2018 16:29	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 16:29	WG1097123
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/16/2018 12:28	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 16:29	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 16:29	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 16:29	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 16:29	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 16:29	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 16:29	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 16:29	WG1097123
Di-isopropyl ether	U	JO	0.0924	0.500	1	04/12/2018 16:29	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 16:29	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 16:29	WG1097123
2-Hexanone	U	JO	0.757	5.00	1	04/12/2018 16:29	WG1097123
n-Hexane	U	JO	0.305	5.00	1	04/12/2018 16:29	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 16:29	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 16:29	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 16:29	WG1097123
2-Butanone (MEK)	U	JO	1.28	5.00	1	04/12/2018 16:29	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 16:29	WG1097123
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	04/12/2018 16:29	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 16:29	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 16:29	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 16:29	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 16:29	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 16:29	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 16:29	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 16:29	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 16:29	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 16:29	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 16:29	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 16:29	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 16:29	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 16:29	WG1097123
Trichloroethene	U		0.153	0.500	1	04/16/2018 12:28	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 16:29	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 16:29	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 16:29	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 16:29	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 16:29	WG1097123

1
Cp

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Tc

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Ss

4
Cn

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Sr

6
Qc

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Gl

8
Al

9
Sc



Collected date/time: 04/11/18 13:55

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/12/2018 16:29	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 16:29	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 16:29	WG1097123
(S) Toluene-d8	94.2			80.0-120		04/12/2018 16:29	WG1097123
(S) Toluene-d8	102			80.0-120		04/16/2018 12:28	WG1097123
(S) Dibromofluoromethane	102			76.0-123		04/12/2018 16:29	WG1097123
(S) Dibromofluoromethane	102			76.0-123		04/16/2018 12:28	WG1097123
(S) 4-Bromofluorobenzene	99.6			80.0-120		04/16/2018 12:28	WG1097123
(S) 4-Bromofluorobenzene	108			80.0-120		04/12/2018 16:29	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L985243-01 Original Sample (OS) • Duplicate (DUP)

(OS) L985243-01 04/13/18 16:09 • (DUP) R3301795-1 04/13/18 16:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	61300	64800	1	5.54		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L984988-08 Original Sample (OS) • Duplicate (DUP)

(OS) L984988-08 04/14/18 05:15 • (DUP) R3301795-7 04/14/18 05:23

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	143000	143000	1	0.227		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301795-5 04/13/18 17:53 • (LCSD) R3301795-6 04/13/18 22:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Alkalinity	100000	106000	111000	106	111	85.0-115			4.66	20

Sample Narrative:

LCS: Endpoint pH 4.5
LCSD: Endpoint pH 4.5





Method Blank (MB)

(MB) R3301305-1 04/12/18 06:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L984949-01 Original Sample (OS) • Duplicate (DUP)

(OS) L984949-01 04/12/18 16:15 • (DUP) R3301305-4 04/12/18 16:28

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Chloride	93900	93600	1	0.340	15			15
Nitrate	ND	35.0	1	0.000	15			15
Sulfate	22000	21800	1	0.690	15			15

L984960-02 Original Sample (OS) • Duplicate (DUP)

(OS) L984960-02 04/12/18 18:56 • (DUP) R3301305-7 04/12/18 19:09

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Chloride	45200	45300	1	0.401	15			15
Nitrate	1560	1610	1	3.20	15			15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301305-2 04/12/18 07:03 • (LCSD) R3301305-3 04/12/18 07:15

Analyte	Spike Amount		LCS Result	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier		LCSD Qualifier	
	ug/l	ug/l						ug/l	ug/l	%	%
Chloride	40000	39600	39600	39600	99.1	98.9	80.0-120	0.180	0.180	15	15
Nitrate	8000	8110	8110	8110	101	101	80.0-120	0.0395	0.0395	15	15
Sulfate	40000	39400	39400	39400	98.6	98.4	80.0-120	0.122	0.122	15	15

L984949-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L984949-01 04/12/18 16:15 • (MS) R3301305-5 04/12/18 16:40 • (MSD) R3301305-6 04/12/18 16:52

Analyte	Spike Amount		Original Result	MS Result	MSD Result	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier		MSD Qualifier	
	ug/l	ug/l								ug/l	ug/l	%	%
Chloride	50000	93900	93900	141000	140000	94.0	93.0	1	80.0-120	E	E	0.333	15
Nitrate	5000	ND	ND	4820	4790	95.7	95.1	1	80.0-120	E	E	0.674	15

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT: PES Environmental, Inc.- WA

PROJECT: 1413.001.05.601

SDG: L984988

DATE/TIME: 04/19/18 21:13

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L984949-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L984949-01 04/12/18 16:15 • (MS) R3301305-5 04/12/18 16:40 • (MSD) R3301305-6 04/12/18 16:52

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	22000	63000	62700	82.0	81.5	1	80.0-120			0.444	15

L984960-02 Original Sample (OS) • Matrix Spike (MS)

(OS) L984960-02 04/12/18 18:56 • (MS) R3301305-8 04/12/18 19:21

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	45200	94900	99.4	1	80.0-120	
Nitrate	5000	1560	6630	102	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3301459-1 04/12/18 10:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	173	J	51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L984993-01 Original Sample (OS) • Duplicate (DUP)

(OS) L984993-01 04/12/18 16:49 • (DUP) R3301459-4 04/12/18 17:04

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Chloride	2940	2880	1	2.11				15
Nitrate	ND	0.000	1	0.000				15
Sulfate	26900	27300	1	1.33				15

L985143-01 Original Sample (OS) • Duplicate (DUP)

(OS) L985143-01 04/12/18 21:11 • (DUP) R3301459-7 04/12/18 21:27

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Chloride	9350	9360	1	0.102				15
Nitrate	U	0.000	1	0.000				15
Sulfate	49900	49900	1	0.0948				15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301459-2 04/12/18 10:32 • (LCSD) R3301459-3 04/12/18 10:48

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD Limits	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%
Chloride	40000	39000	38900	38900	97.6	97.3					80.0-120	0.259					15	
Nitrate	8000	8010	8030	8030	100	100					80.0-120	0.228					15	
Sulfate	40000	38700	38800	38800	96.8	96.9					80.0-120	0.114					15	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

L984993-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS) L984993-01 04/12/18 16:49 • (MS) R3301459-5 04/12/18 17:20 • (MSD) R3301459-6 04/12/18 17:35		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.						
Chloride	50000	2940	52900	53500	99.9	101	1	80.0-120			1.15	15
Nitrate	5000	ND	4740	4900	94.8	98.0	1	80.0-120			3.26	15
Sulfate	50000	26900	76400	76800	98.9	99.7	1	80.0-120			0.518	15

L985143-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS) L985143-01 04/12/18 21:11 • (MS) R3301459-8 04/12/18 22:13 • (MSD) R3301459-9 04/12/18 22:28		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.						
Chloride	50000	9350	59200	59300	99.8	99.8	1	80.0-120			0.0294	15
Nitrate	5000	U	4700	4740	94.0	94.8	1	80.0-120			0.909	15
Sulfate	50000	49900	97800	97700	95.8	95.6	1	80.0-120			0.0727	15

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3301810-1 04/13/18 07:54	ug/l		ug/l	ug/l
TOC (Total Organic Carbon)	523	J	102	1000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3301810-2 04/13/18 08:30 • (LCSD) R3301810-3 04/13/18 12:20	ug/l	ug/l	ug/l	%	%	%			%	%
TOC	75000	80300	79700	107	106	85.0-115			0.712	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3302051-1 04/15/18 22:08				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	LCS		LCSD		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
(LCS) R3302051-2 04/15/18 22:12 • (LCSD) R3302051-3 04/15/18 22:17	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	%	%	RPD	RPD	%	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%
Iron	5000	5040	5000	101	100	80.0-120	0.793	20	20	0.793	20	20
Manganese	50.0	50.4	49.4	101	98.8	80.0-120	2.02	20	20	2.02	20	20

L984988-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	OS		MS		MSD		MSD Duplicate		Dilution		Rec. Limits		MS Qualifier		MSD Qualifier		RPD	
(OS) L984988-06 04/15/18 22:22 • (MS) R3302051-5 04/15/18 22:31 • (MSD) R3302051-6 04/15/18 22:36	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	%	%	%	%	Dilution	%	%	%	%	%	%	RPD
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%		%	%	%	%	%	%	%
Iron	5000	96.2	4920	5040	96.6	98.9	75.0-125	1	75.0-125	1	75.0-125	2.31	20	2.31	20	2.31	20	20
Manganese	50.0	54.4	98.1	106	87.4	104	75.0-125	1	75.0-125	1	75.0-125	8.18	20	8.18	20	8.18	20	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L984988-01.06.07.08](#)

Method Blank (MB)

(MB) R3302191-3 04/13/18 11:04

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	38.8	J	316	100
^(S) a,a-o-Trifluorotoluene(FID)	99.7			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302191-1 04/13/18 09:15 • (LCSD) R3302191-2 04/13/18 10:20

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	5560	5860	101	107	72.0-134			5.21	20
^(S) a,a-o-Trifluorotoluene(FID)				109	107	77.0-122				

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1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L984988-05](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) a,a-o-Trifluorotoluene(FID)	97.4			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier		LCSD Qualifier		RPD	RPD Limits
							ug/l	ug/l	ug/l	ug/l		
Gasoline Range Organics-NWTPH	5500	5690	5660	103	103	72.0-134					0.439	20
^(S) a,a-o-Trifluorotoluene(FID)				102	102	77.0-122						

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L984988-01.05.06.08](#)

Method Blank (MB)

(MB) R3302413-1 04/17/18 10:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L984988-06 Original Sample (OS) • Duplicate (DUP)

(OS) L984988-06 04/17/18 12:19 • (DUP) R3302413-2 04/17/18 13:46

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Methane	U	0.000	1	0.000				20
Ethane	U	0.000	1	0.000				20
Ethene	U	0.000	1	0.000				20

L985009-05 Original Sample (OS) • Duplicate (DUP)

(OS) L985009-05 04/17/18 13:53 • (DUP) R3302413-3 04/17/18 14:21

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Methane	ND	0.000	1	0.000				20
Ethane	ND	0.000	1	0.000				20
Ethene	ND	0.000	1	0.000				20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302413-4 04/17/18 14:24 • (LCSD) R3302413-5 04/17/18 14:27

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%
Methane	67.8	75.9	75.8	75.8	112	112					85.0-115			0.156	0.156			20
Ethane	129	122	119	119	94.3	91.9					85.0-115			2.61	2.61			20
Ethene	127	125	122	122	98.6	96.3					85.0-115			2.38	2.38			20

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Method Blank (MB)

(MB) R3302018-2_04/12/18 12:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L984988-01.02.03.04.05.06.07.08](#)

Method Blank (MB)

(MB) R3302018-2_04/12/18 12:27

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.265	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	95.1			80.0-120
(S) Dibromofluoromethane	101			76.0-123
(S) 4-Bromofluorobenzene	115			80.0-120

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3302018-1 04/12/18 11:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	112	89.6	10.0-160	1 Cp
Acrylonitrile	125	80.2	64.2	60.0-142	3 Ss
Benzene	25.0	25.0	100	69.0-123	2 Tc
Bromobenzene	25.0	27.1	108	79.0-120	4 Cn
Bromodichloromethane	25.0	22.9	91.4	76.0-120	5 Sr
Bromochloromethane	25.0	24.7	99.0	76.0-122	6 Qc
Bromoform	25.0	30.1	121	67.0-132	7 Gl
Bromomethane	25.0	22.3	89.1	18.0-160	8 Al
n-Butylbenzene	25.0	25.3	101	72.0-126	9 Sc
sec-Butylbenzene	25.0	25.4	102	74.0-121	
tert-Butylbenzene	25.0	24.7	98.8	75.0-122	
Carbon disulfide	25.0	25.3	101	55.0-127	
Carbon tetrachloride	25.0	20.8	83.3	63.0-122	
Chlorobenzene	25.0	24.0	95.9	79.0-121	
Chlorodibromomethane	25.0	24.2	96.9	75.0-125	
Chloroethane	25.0	24.6	98.3	47.0-152	
Chloroform	25.0	24.7	98.7	72.0-121	
Chloromethane	25.0	16.5	65.8	48.0-139	
2-Chlorotoluene	25.0	27.2	109	74.0-122	
4-Chlorotoluene	25.0	26.8	107	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	21.0	84.1	64.0-127	
1,2-Dibromoethane	25.0	24.6	98.3	77.0-123	
Dibromomethane	25.0	25.0	100	78.0-120	
1,2-Dichlorobenzene	25.0	22.7	90.8	80.0-120	
1,3-Dichlorobenzene	25.0	24.2	96.6	72.0-123	
1,4-Dichlorobenzene	25.0	24.7	98.9	77.0-120	
Dichlorodifluoromethane	25.0	22.2	88.9	49.0-155	
1,1-Dichloroethane	25.0	20.7	82.9	70.0-126	
1,2-Dichloroethane	25.0	20.4	81.7	67.0-126	
1,1-Dichloroethene	25.0	25.4	102	64.0-129	
cis-1,2-Dichloroethene	25.0	24.1	96.2	73.0-120	
1,2-Dichloropropane	25.0	23.6	94.5	71.0-121	
1,1-Dichloropropene	25.0	21.3	85.2	75.0-125	
1,3-Dichloropropene	25.0	24.8	99.1	71.0-129	
cis-1,3-Dichloropropene	25.0	25.4	101	80.0-121	
trans-1,3-Dichloropropene	25.0	25.0	100	79.0-123	
trans-1,4-Dichloro-2-butene	25.0	24.8	99.0	74.0-127	
2,2-Dichloropropane	25.0	22.2	88.7	55.0-134	
Di-isopropyl ether	25.0	23.1	92.5	60.0-125	
	25.0	16.1	64.5	59.0-133	

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Laboratory Control Sample (LCS)

(LCS) R3302018-1 04/12/18 11:47

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	23.9	95.5	77.0-120	
Hexachloro-1,3-butadiene	25.0	22.1	88.3	64.0-131	
2-Hexanone	125	90.0	72.0	58.0-147	
n-Hexane	25.0	16.5	65.8	56.0-124	
Iodomethane	125	121	96.8	57.0-140	
Isopropylbenzene	25.0	30.4	122	75.0-120	J4
p-Isopropyltoluene	25.0	24.8	99.1	74.0-126	
2-Butanone (MEK)	125	86.2	69.0	37.0-158	
Methylene Chloride	25.0	24.1	96.4	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	82.5	66.0	59.0-143	
Methyl tert-butyl ether	25.0	23.8	95.3	64.0-123	
Naphthalene	25.0	21.1	84.3	62.0-128	
n-Propylbenzene	25.0	28.2	113	79.0-120	
Styrene	25.0	31.0	124	78.0-124	
1,1,1,2-Tetrachloroethane	25.0	21.7	86.7	75.0-122	
1,1,2,2-Tetrachloroethane	25.0	28.3	113	71.0-122	
1,1,2-Trichlorotrifluoroethane	25.0	25.9	103	61.0-136	
Tetrachloroethene	25.0	22.5	90.1	70.0-127	
Toluene	25.0	23.4	93.5	77.0-120	
1,2,3-Trichlorobenzene	25.0	21.2	84.9	61.0-133	
1,2,4-Trichlorobenzene	25.0	22.1	88.6	69.0-129	
1,1,1-Trichloroethane	25.0	22.5	89.9	68.0-122	
1,1,2-Trichloroethane	25.0	25.9	103	78.0-120	
Trichloroethene	25.0	22.9	91.8	78.0-120	
Trichlorofluoromethane	25.0	25.2	101	56.0-137	
1,2,3-Trichloropropane	25.0	25.2	101	72.0-124	
1,2,4-Trimethylbenzene	25.0	25.0	100	75.0-120	
1,2,3-Trimethylbenzene	25.0	24.9	99.4	75.0-120	
1,3,5-Trimethylbenzene	25.0	26.6	106	75.0-120	
Vinyl acetate	125	96.3	77.1	46.0-160	
Vinyl chloride	25.0	23.1	92.4	64.0-133	
Xylenes, Total	75.0	68.7	91.6	77.0-120	
(S) Toluene-d8			100	80.0-120	
(S) Dibromofluoromethane			98.3	76.0-123	
(S) 4-Bromofluorobenzene			118	80.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.05.601

SDG:

L984988

DATE/TIME:

04/19/18 21:13

PAGE:

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J4	The associated batch QC was outside the established quality control range for accuracy.

1 Cp

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ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

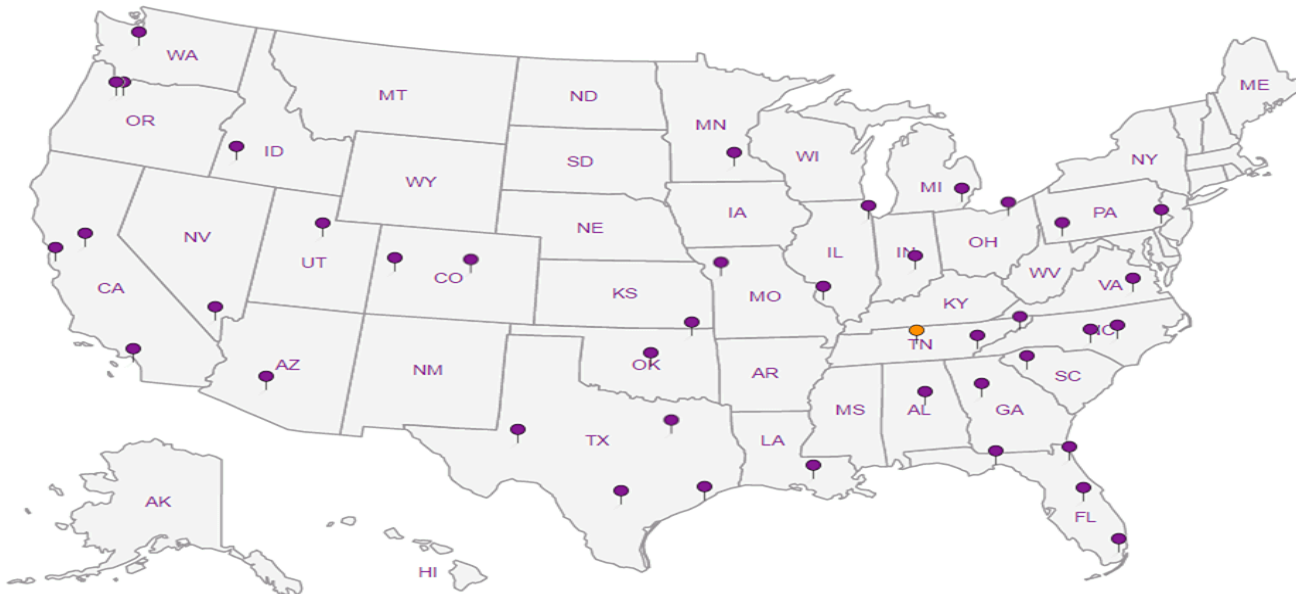
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹Drinking Water ²Underground Storage Tanks ³Aquatic Toxicity ⁴Chemical/Microbiological ⁵Mold ⁶Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

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6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Report to:
 Brian O'Neal/Bill Haldeaman

Email To: boneal@pesenv.com;
 bhaldeaman@pesenv.com

Project:
 American Linen

City/State/Zip:
 SEATTLE, WA

Phone: 206-529-3980
 Fax: 206-529-3985

Client Project #
 1413.001.05.601

Lab Project #
 PESENVSWA-ALP

Collected by (Print):
 Jeff Dobbins

Site/Facility ID #
 1413.001.05.601

P.O. #

Collected by (Signature):

Rush? (Lab MUST be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

Immediately
 Packed on ice N Y X

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Entrs

No. of

Pres Chk

NO3,SO4,Cl,Aik 250mlHDPE-NoPres

NWTPHGX 40mlAmb HCl

RSK175LL (EEM) 40mlAmb-HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

V8260LLC VOCs 40mlAmb-HCl

Analysis / Container / Preservative

Chain of Custody

Page 1 of 1

22065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5838
 Phone: 800-767-5839
 Fax: 615-758-5839

L# 194988
 C143

Accnum: PESENVSWA
 Template: T134175
 Prelogin: P645197
 TSR: 110 - Brian Ford
 PB: 3-22-18CS
 Shipped Via: FedEx Ground

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Entrs	*NO3,SO4,Cl,Aik* 250mlHDPE-NoPres	NWTPHGX 40mlAmb HCl	RSK175LL (EEM) 40mlAmb-HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	V8260LLC VOCs 40mlAmb-HCl
BB-S-041118	GRAB	GW		4/11/18	0945	10	X	X	X	X	X	X
MW-116-041118		GW		4/11/18	1221	3	X	X	X	X	X	X
MW-115-041118		GW		4/11/18	1151	3	X	X	X	X	X	X
MW-113-041118		GW		4/11/18	1218	3	X	X	X	X	X	X
MW-105-041118		GW		4/11/18	1035	11	X	X	X	X	X	X
MW-903-041118		GW		4/11/18	1051	11	X	X	X	X	X	X
R-MW-5-041118		GW		4/11/18	1347	6	X	X	X	X	X	X
MW-138-041118		GW		4/11/18	1355	11	X	X	X	X	X	X
REP BLANK		GW										

Remarks: *Nitrate has a 48 hour hold time*

* Matrix: AIR - Air F - Filter
 GW - Groundwater B - Biosassay
 WW - Wastewater
 DW - Drinking Water
 OT - Other

PH _____ Temp _____
 Flow _____ Other _____

Samples Returned Via:
 UPS FedEx Courier

Tracking # 4276 044 3736

Trip Blank Received: Yes No

HCL/Weigh

Relinquished by: (Signature)
 Date: _____ Time: _____

Received by: (Signature)
 Date: 4/12/18 Time: 0845

Temp: _____ °C Bottles Received: Yes No

HCL/Weigh

Relinquished by: (Signature)
 Date: _____ Time: _____

Received by: (Signature)
 Date: 4/12/18 Time: 0845

Temp: _____ °C Bottles Received: Yes No

HCL/Weigh

Condition: NCF OK



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	258000		2710	20000	1	04/13/2018 21:51	WG1097253

Sample Narrative:

L984988-01 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7430		51.9	1000	1	04/12/2018 21:13	WG1097077
Nitrate	3410		22.7	100	1	04/12/2018 21:13	WG1097077
Sulfate	39800		77.4	5000	1	04/12/2018 21:13	WG1097077

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3240	<u>B</u>	102	1000	1	04/13/2018 11:52	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	145		15.0	100	1	04/15/2018 22:41	WG1097160
Manganese	94.0		0.250	5.00	1	04/15/2018 22:41	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	40.9	<u>U</u>	<u>B</u> <u>J</u>	31.6	100	04/13/2018 12:34	WG1097649
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-122		04/13/2018 12:34	WG1097649

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	04/17/2018 12:14	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 12:14	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:14	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.16	<u>J</u>	<u>J</u>	1.05	25.0	04/12/2018 14:09	WG1097123
Acrylonitrile	U	<u>UJ</u>	<u>JO</u>	0.873	5.00	04/12/2018 14:09	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 14:09	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 14:09	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 14:09	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 14:09	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 14:09	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 14:09	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 14:09	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 14:09	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 14:09	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 14:09	WG1097123
Carbon tetrachloride	U	<u>UJ</u>	<u>JO</u>	0.159	0.500	04/12/2018 14:09	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/9/18



Collected date/time: 04/11/18 09:45

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/12/2018 14:09	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 14:09	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 14:09	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 14:09	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 14:09	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 14:09	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 14:09	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 14:09	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 14:09	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 14:09	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 14:09	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 14:09	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 14:09	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 14:09	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 14:09	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 14:09	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 14:09	WG1097123
cis-1,2-Dichloroethene	4.64	J	0.0933	0.500	1	04/12/2018 14:09	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 14:09	WG1097123 JC 5/10/18
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 14:09	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 14:09	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 14:09	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 14:09	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 14:09	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 14:09	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 14:09	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 14:09	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 14:09	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 14:09	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 14:09	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 14:09	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 14:09	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 14:09	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 14:09	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 14:09	WG1097123 JC 5/9/18
Methylene Chloride	U		1.07	2.50	1	04/12/2018 14:09	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 14:09	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 14:09	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 14:09	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 14:09	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 14:09	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 14:09	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 14:09	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 14:09	WG1097123
Tetrachloroethene	33.7	J	0.199	0.500	1	04/12/2018 14:09	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 14:09	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 14:09	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 14:09	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 14:09	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 14:09	WG1097123
Trichloroethene	6.13	J	0.153	0.500	1	04/12/2018 14:09	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 14:09	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 14:09	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 14:09	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 14:09	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 14:09	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 14:09	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 14:09	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 14:09	WG1097123
(S) Toluene-d8	94.8			80.0-120		04/12/2018 14:09	WG1097123
(S) Dibromofluoromethane	101			76.0-123		04/12/2018 14:09	WG1097123
(S) 4-Bromofluorobenzene	114			80.0-120		04/12/2018 14:09	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/10/18

JC 5/9/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 14:29	WG1097123
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/12/2018 14:29	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 14:29	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 14:29	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 14:29	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 14:29	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 14:29	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 14:29	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 14:29	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 14:29	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 14:29	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 14:29	WG1097123
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/12/2018 14:29	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 14:29	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 14:29	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 14:29	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 14:29	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 14:29	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 14:29	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 14:29	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 14:29	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 14:29	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 14:29	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 14:29	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 14:29	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 14:29	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 14:29	WG1097123
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/12/2018 14:29	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 14:29	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 14:29	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 14:29	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 14:29	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 14:29	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 14:29	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 14:29	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 14:29	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 14:29	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 14:29	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 14:29	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 14:29	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 14:29	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 14:29	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 14:29	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 14:29	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 14:29	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 14:29	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 14:29	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 14:29	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 14:29	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 14:29	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 14:29	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 14:29	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 14:29	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 12:21

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 14:29	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 14:29	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 14:29	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 14:29	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 14:29	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 14:29	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 14:29	WG1097123
Trichloroethene	U		0.153	0.500	1	04/12/2018 14:29	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 14:29	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 14:29	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 14:29	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 14:29	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 14:29	WG1097123
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 14:29	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 14:29	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 14:29	WG1097123
(S) Toluene-d8	96.4			80.0-120		04/12/2018 14:29	WG1097123
(S) Dibromofluoromethane	99.6			76.0-123		04/12/2018 14:29	WG1097123
(S) 4-Bromofluorobenzene	111			80.0-120		04/12/2018 14:29	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 11:51

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 14:49	WG1097123
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/12/2018 14:49	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 14:49	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 14:49	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 14:49	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 14:49	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 14:49	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 14:49	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 14:49	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 14:49	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 14:49	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 14:49	WG1097123
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/12/2018 14:49	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 14:49	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 14:49	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 14:49	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 14:49	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 14:49	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 14:49	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 14:49	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 14:49	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 14:49	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 14:49	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 14:49	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 14:49	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 14:49	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 14:49	WG1097123
cis-1,2-Dichloroethene	0.272	J J	0.0933	0.500	1	04/12/2018 14:49	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 14:49	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 14:49	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 14:49	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 14:49	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 14:49	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 14:49	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 14:49	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 14:49	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 14:49	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 14:49	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 14:49	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 14:49	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 14:49	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 14:49	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 14:49	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 14:49	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 14:49	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 14:49	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 14:49	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 14:49	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 14:49	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 14:49	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 14:49	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 14:49	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 14:49	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 11:51

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 14:49	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 14:49	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 14:49	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 14:49	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 14:49	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 14:49	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 14:49	WG1097123
Trichloroethene	U		0.153	0.500	1	04/12/2018 14:49	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 14:49	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 14:49	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 14:49	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 14:49	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 14:49	WG1097123
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 14:49	WG1097123
Vinyl chloride	5.81		0.118	0.500	1	04/12/2018 14:49	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 14:49	WG1097123
(S) Toluene-d8	95.5			80.0-120		04/12/2018 14:49	WG1097123
(S) Dibromofluoromethane	101			76.0-123		04/12/2018 14:49	WG1097123
(S) 4-Bromofluorobenzene	112			80.0-120		04/12/2018 14:49	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 15:09	WG1097123
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/12/2018 15:09	WG1097123
Benzene	0.880		0.0896	0.500	1	04/12/2018 15:09	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 15:09	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 15:09	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 15:09	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 15:09	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 15:09	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 15:09	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 15:09	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 15:09	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 15:09	WG1097123
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/12/2018 15:09	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 15:09	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 15:09	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 15:09	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 15:09	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 15:09	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 15:09	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 15:09	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 15:09	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 15:09	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 15:09	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 15:09	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 15:09	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 15:09	WG1097123
1,1-Dichloroethene	7.83		0.188	0.500	1	04/12/2018 15:09	WG1097123
cis-1,2-Dichloroethene	3720		18.7	100	200	04/16/2018 11:29	WG1097123
trans-1,2-Dichloroethene	21.3		0.152	0.500	1	04/12/2018 15:09	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 15:09	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 15:09	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 15:09	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 15:09	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 15:09	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 15:09	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 15:09	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 15:09	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 15:09	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 15:09	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 15:09	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 15:09	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 15:09	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 15:09	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 15:09	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 15:09	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 15:09	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 15:09	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 15:09	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 15:09	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 15:09	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 15:09	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 15:09	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 15:09	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
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- 8 Al
- 9 Sc

JC 5/9/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 15:09	WG1097123
Tetrachloroethene	191		0.199	0.500	1	04/12/2018 15:09	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 15:09	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 15:09	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 15:09	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 15:09	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 15:09	WG1097123
Trichloroethene	1100		30.6	100	200	04/16/2018 11:29	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 15:09	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 15:09	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 15:09	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 15:09	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 15:09	WG1097123
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 15:09	WG1097123
Vinyl chloride	34.9		0.118	0.500	1	04/12/2018 15:09	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 15:09	WG1097123
(S) Toluene-d8	105			80.0-120		04/16/2018 11:29	WG1097123
(S) Toluene-d8	97.8			80.0-120		04/12/2018 15:09	WG1097123
(S) Dibromofluoromethane	103			76.0-123		04/16/2018 11:29	WG1097123
(S) Dibromofluoromethane	99.1			76.0-123		04/12/2018 15:09	WG1097123
(S) 4-Bromofluorobenzene	103			80.0-120		04/16/2018 11:29	WG1097123
(S) 4-Bromofluorobenzene	112			80.0-120		04/12/2018 15:09	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	257000		2710	20000	1	04/13/2018 21:57	WG1097253

Sample Narrative:

L984988-05 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	35700		51.9	1000	1	04/12/2018 21:25	WG1097077
Nitrate	U		22.7	100	1	04/12/2018 21:25	WG1097077
Sulfate	9480		77.4	5000	1	04/12/2018 21:25	WG1097077

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3270	<u>B</u>	102	1000	1	04/13/2018 12:04	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5700		15.0	100	1	04/16/2018 00:19	WG1097160
Manganese	799		0.250	5.00	1	04/16/2018 00:19	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/17/2018 13:44	WG1097649-1
(S) a,a,a-Trifluorotoluene(FID)	97.4			77.0-122		04/17/2018 13:44	WG1097649-1

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	2700		0.287	0.678	1	04/17/2018 12:17	WG1099029
Ethane	4.41		0.296	1.29	1	04/17/2018 12:17	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:17	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.51	<u>J</u>	1.05	25.0	1	04/12/2018 15:29	WG1097123
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/12/2018 15:29	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 15:29	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 15:29	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 15:29	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 15:29	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 15:29	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 15:29	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 15:29	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 15:29	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 15:29	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 15:29	WG1097123
Carbon tetrachloride	U	<u>UJ</u>	0.159	0.500	1	04/12/2018 15:29	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 10:35

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/12/2018 15:29	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 15:29	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 15:29	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 15:29	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 15:29	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 15:29	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 15:29	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 15:29	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 15:29	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 15:29	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 15:29	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 15:29	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 15:29	WG1097123
1,1-Dichloroethene	0.225	J J	0.188	0.500	1	04/12/2018 15:29	WG1097123
cis-1,2-Dichloroethene	1.67		0.0933	0.500	1	04/16/2018 11:49	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 15:29	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 15:29	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 15:29	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 15:29	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 15:29	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 15:29	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 15:29	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 15:29	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 15:29	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 15:29	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 15:29	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 15:29	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 15:29	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 15:29	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 15:29	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 15:29	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 15:29	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 15:29	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 15:29	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 15:29	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 15:29	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 15:29	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 15:29	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 15:29	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 15:29	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 15:29	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 15:29	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 15:29	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 15:29	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 15:29	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 15:29	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 15:29	WG1097123
Trichloroethene	U		0.153	0.500	1	04/16/2018 11:49	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 15:29	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 15:29	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 15:29	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 15:29	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 15:29	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 10:35

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 15:29	WG1097123
Vinyl chloride	0.205	J J	0.118	0.500	1	04/12/2018 15:29	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 15:29	WG1097123
(S) Toluene-d8	95.1			80.0-120		04/12/2018 15:29	WG1097123
(S) Toluene-d8	103			80.0-120		04/16/2018 11:49	WG1097123
(S) Dibromofluoromethane	101			76.0-123		04/16/2018 11:49	WG1097123
(S) Dibromofluoromethane	99.5			76.0-123		04/12/2018 15:29	WG1097123
(S) 4-Bromofluorobenzene	113			80.0-120		04/12/2018 15:29	WG1097123
(S) 4-Bromofluorobenzene	101			80.0-120		04/16/2018 11:49	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	262000		2710	20000	1	04/13/2018 22:03	WG1097253

Sample Narrative:

L984988-06 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	7420		51.9	1000	1	04/12/2018 21:38	WG1097077
Nitrate	3170		22.7	100	1	04/12/2018 21:38	WG1097077
Sulfate	39800		77.4	5000	1	04/12/2018 21:38	WG1097077

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3140	<u>B</u>	102	1000	1	04/13/2018 13:10	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	96.2	<u>J</u>	15.0	100	1	04/15/2018 22:22	WG1097160
Manganese	54.4		0.250	5.00	1	04/15/2018 22:22	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.5	<u>U</u> <u>B</u> <u>J</u>	31.6	100	1	04/13/2018 13:18	WG1097649
(S) a,a,a-Trifluorotoluene(FID)	99.6			77.0-122		04/13/2018 13:18	WG1097649

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	04/17/2018 12:19	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 12:19	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:19	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.25	<u>J</u> <u>J</u>	1.05	25.0	1	04/12/2018 15:49	WG1097123
Acrylonitrile	U	<u>UJ</u> <u>JO</u>	0.873	5.00	1	04/12/2018 15:49	WG1097123 JC 5/9/18
Benzene	U		0.0896	0.500	1	04/12/2018 15:49	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 15:49	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 15:49	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 15:49	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 15:49	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 15:49	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 15:49	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 15:49	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 15:49	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 15:49	WG1097123
Carbon tetrachloride	U	<u>UJ</u> <u>JO</u>	0.159	0.500	1	04/12/2018 15:49	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 10:51

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/12/2018 15:49	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 15:49	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 15:49	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 15:49	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 15:49	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 15:49	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 15:49	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 15:49	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 15:49	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 15:49	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 15:49	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 15:49	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 15:49	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 15:49	WG1097123
cis-1,2-Dichloroethene	6.28	J	0.0933	0.500	1	04/12/2018 15:49	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 15:49	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 15:49	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 15:49	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 15:49	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 15:49	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 15:49	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 15:49	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 15:49	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 15:49	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 15:49	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 15:49	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 15:49	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 15:49	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 15:49	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 15:49	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 15:49	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 15:49	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 15:49	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 15:49	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 15:49	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 15:49	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 15:49	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 15:49	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 15:49	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 15:49	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 15:49	WG1097123
Tetrachloroethene	46.8	J	0.199	0.500	1	04/12/2018 15:49	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 15:49	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 15:49	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 15:49	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 15:49	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 15:49	WG1097123
Trichloroethene	8.41	J	0.153	0.500	1	04/12/2018 15:49	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 15:49	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 15:49	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 15:49	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 15:49	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 15:49	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/10/18

JC 5/9/18



Collected date/time: 04/11/18 10:51

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 15:49	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 15:49	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 15:49	WG1097123
(S) Toluene-d8	95.1			80.0-120		04/12/2018 15:49	WG1097123
(S) Dibromofluoromethane	103			76.0-123		04/12/2018 15:49	WG1097123
(S) 4-Bromofluorobenzene	110			80.0-120		04/12/2018 15:49	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/10/18

JC 5/9/18



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/13/2018 13:40	WG1097649
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-122		04/13/2018 13:40	WG1097649

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/12/2018 16:09	WG1097123
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/12/2018 16:09	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 16:09	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 16:09	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 16:09	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 16:09	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 16:09	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 16:09	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 16:09	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 16:09	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 16:09	WG1097123
Carbon disulfide	U		0.101	0.500	1	04/12/2018 16:09	WG1097123
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/12/2018 16:09	WG1097123
Chlorobenzene	U		0.140	0.500	1	04/12/2018 16:09	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 16:09	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 16:09	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 16:09	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 16:09	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 16:09	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 16:09	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 16:09	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 16:09	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 16:09	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 16:09	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 16:09	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 16:09	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 16:09	WG1097123
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/16/2018 12:08	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 16:09	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 16:09	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 16:09	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 16:09	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 16:09	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 16:09	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 16:09	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 16:09	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 16:09	WG1097123 JC 5/9/18
Ethylbenzene	U		0.158	0.500	1	04/12/2018 16:09	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 16:09	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 16:09	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 16:09	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 16:09	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 16:09	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 16:09	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 16:09	WG1097123



Collected date/time: 04/11/18 13:47

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/12/2018 16:09	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 16:09	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 16:09	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 16:09	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 16:09	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 16:09	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 16:09	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 16:09	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 16:09	WG1097123
Tetrachloroethene	0.621		0.199	0.500	1	04/12/2018 16:09	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 16:09	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 16:09	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 16:09	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 16:09	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 16:09	WG1097123
Trichloroethene	U		0.153	0.500	1	04/16/2018 12:08	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 16:09	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 16:09	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 16:09	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 16:09	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 16:09	WG1097123
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 16:09	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 16:09	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 16:09	WG1097123
(S) Toluene-d8	94.0			80.0-120		04/12/2018 16:09	WG1097123
(S) Toluene-d8	102			80.0-120		04/16/2018 12:08	WG1097123
(S) Dibromofluoromethane	103			76.0-123		04/16/2018 12:08	WG1097123
(S) Dibromofluoromethane	104			76.0-123		04/12/2018 16:09	WG1097123
(S) 4-Bromofluorobenzene	110			80.0-120		04/12/2018 16:09	WG1097123
(S) 4-Bromofluorobenzene	104			80.0-120		04/16/2018 12:08	WG1097123

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/9/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	143000		2710	20000	1	04/14/2018 05:15	WG1097253

Sample Narrative:

L984988-08 WG1097253: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	13800		51.9	1000	1	04/12/2018 16:34	WG1097140
Nitrate	U		22.7	100	1	04/12/2018 16:34	WG1097140
Sulfate	45900		77.4	5000	1	04/12/2018 16:34	WG1097140

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4890	<u>B</u> <u>J</u>	1020	10000	10	04/13/2018 13:51	WG1097605

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	21500		15.0	100	1	04/15/2018 22:50	WG1097160
Manganese	725		0.250	5.00	1	04/15/2018 22:50	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	91.1	<u>U</u> <u>B</u> <u>J</u>	31.6	100	1	04/13/2018 14:02	WG1097649
(S) a,a,a-Trifluorotoluene(FID)	99.5			77.0-122		04/13/2018 14:02	WG1097649

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	83.1		0.287	0.678	1	04/17/2018 12:23	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 12:23	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 12:23	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/12/2018 16:29	WG1097123
Acrylonitrile	U	<u>U</u> <u>J</u> <u>O</u>	0.873	5.00	1	04/12/2018 16:29	WG1097123
Benzene	U		0.0896	0.500	1	04/12/2018 16:29	WG1097123
Bromobenzene	U		0.133	0.500	1	04/12/2018 16:29	WG1097123
Bromodichloromethane	U		0.0800	0.500	1	04/12/2018 16:29	WG1097123
Bromochloromethane	U		0.145	0.500	1	04/12/2018 16:29	WG1097123
Bromoform	U		0.186	0.500	1	04/12/2018 16:29	WG1097123
Bromomethane	U		0.157	2.50	1	04/12/2018 16:29	WG1097123
n-Butylbenzene	U		0.143	0.500	1	04/12/2018 16:29	WG1097123
sec-Butylbenzene	U		0.134	0.500	1	04/12/2018 16:29	WG1097123
tert-Butylbenzene	U		0.183	0.500	1	04/12/2018 16:29	WG1097123
Carbon disulfide	0.214	<u>J</u>	0.101	0.500	1	04/12/2018 16:29	WG1097123
Carbon tetrachloride	U	<u>J</u> <u>O</u>	0.159	0.500	1	04/12/2018 16:29	WG1097123

JC 5/9/18

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 13:55

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/12/2018 16:29	WG1097123
Chlorodibromomethane	U		0.128	0.500	1	04/12/2018 16:29	WG1097123
Chloroethane	U		0.141	2.50	1	04/12/2018 16:29	WG1097123
Chloroform	U		0.0860	0.500	1	04/12/2018 16:29	WG1097123
Chloromethane	U	UJ JO	0.153	1.25	1	04/12/2018 16:29	WG1097123
2-Chlorotoluene	U		0.111	0.500	1	04/12/2018 16:29	WG1097123
4-Chlorotoluene	U		0.0972	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/12/2018 16:29	WG1097123
1,2-Dibromoethane	U		0.193	0.500	1	04/12/2018 16:29	WG1097123
Dibromomethane	U		0.117	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dichlorobenzene	U		0.101	0.500	1	04/12/2018 16:29	WG1097123
1,3-Dichlorobenzene	U		0.130	0.500	1	04/12/2018 16:29	WG1097123
1,4-Dichlorobenzene	U		0.121	0.500	1	04/12/2018 16:29	WG1097123
Dichlorodifluoromethane	U		0.127	2.50	1	04/12/2018 16:29	WG1097123
1,1-Dichloroethane	U		0.114	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dichloroethane	U	UJ JO	0.108	0.500	1	04/12/2018 16:29	WG1097123
1,1-Dichloroethene	U		0.188	0.500	1	04/12/2018 16:29	WG1097123
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/16/2018 12:28	WG1097123
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/12/2018 16:29	WG1097123
1,2-Dichloropropane	U		0.190	0.500	1	04/12/2018 16:29	WG1097123
1,1-Dichloropropene	U		0.128	0.500	1	04/12/2018 16:29	WG1097123
1,3-Dichloropropane	U		0.147	1.00	1	04/12/2018 16:29	WG1097123
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/12/2018 16:29	WG1097123
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/12/2018 16:29	WG1097123
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/12/2018 16:29	WG1097123
2,2-Dichloropropane	U		0.0929	0.500	1	04/12/2018 16:29	WG1097123
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/12/2018 16:29	WG1097123
Ethylbenzene	U		0.158	0.500	1	04/12/2018 16:29	WG1097123
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/12/2018 16:29	WG1097123
2-Hexanone	U	UJ JO	0.757	5.00	1	04/12/2018 16:29	WG1097123
n-Hexane	U	UJ JO	0.305	5.00	1	04/12/2018 16:29	WG1097123
Iodomethane	U		0.377	10.0	1	04/12/2018 16:29	WG1097123
Isopropylbenzene	U	J4	0.126	0.500	1	04/12/2018 16:29	WG1097123
p-Isopropyltoluene	U		0.138	0.500	1	04/12/2018 16:29	WG1097123
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/12/2018 16:29	WG1097123
Methylene Chloride	U		1.07	2.50	1	04/12/2018 16:29	WG1097123
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/12/2018 16:29	WG1097123
Methyl tert-butyl ether	U		0.102	0.500	1	04/12/2018 16:29	WG1097123
Naphthalene	U		0.174	2.50	1	04/12/2018 16:29	WG1097123
n-Propylbenzene	U		0.162	0.500	1	04/12/2018 16:29	WG1097123
Styrene	U		0.117	0.500	1	04/12/2018 16:29	WG1097123
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/12/2018 16:29	WG1097123
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/12/2018 16:29	WG1097123
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/12/2018 16:29	WG1097123
Tetrachloroethene	U		0.199	0.500	1	04/12/2018 16:29	WG1097123
Toluene	U		0.412	0.500	1	04/12/2018 16:29	WG1097123
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/12/2018 16:29	WG1097123
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/12/2018 16:29	WG1097123
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/12/2018 16:29	WG1097123
1,1,2-Trichloroethane	U		0.186	0.500	1	04/12/2018 16:29	WG1097123
Trichloroethene	U		0.153	0.500	1	04/16/2018 12:28	WG1097123
Trichlorofluoromethane	U		0.130	2.50	1	04/12/2018 16:29	WG1097123
1,2,3-Trichloropropane	U		0.247	2.50	1	04/12/2018 16:29	WG1097123
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/12/2018 16:29	WG1097123
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/12/2018 16:29	WG1097123
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/12/2018 16:29	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 13:55

L984988

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/12/2018 16:29	WG1097123
Vinyl chloride	U		0.118	0.500	1	04/12/2018 16:29	WG1097123
Xylenes, Total	U		0.316	1.50	1	04/12/2018 16:29	WG1097123
(S) Toluene-d8	94.2			80.0-120		04/12/2018 16:29	WG1097123
(S) Toluene-d8	102			80.0-120		04/16/2018 12:28	WG1097123
(S) Dibromofluoromethane	102			76.0-123		04/12/2018 16:29	WG1097123
(S) Dibromofluoromethane	102			76.0-123		04/16/2018 12:28	WG1097123
(S) 4-Bromofluorobenzene	99.6			80.0-120		04/16/2018 12:28	WG1097123
(S) 4-Bromofluorobenzene	108			80.0-120		04/12/2018 16:29	WG1097123

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18

JC 5/9/18

April 19, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L985279
Samples Received: 04/12/2018
Project Number: 1413.001.05.601
Description:

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-148-11 L985279-01 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097916	1	04/13/18 15:11	04/13/18 15:36	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 09:55	04/14/18 18:31	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 09:55	04/12/18 08:45

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW-148-20 L985279-02 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 10:05	04/14/18 18:52	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 10:05	04/12/18 08:45

MW-148-30 L985279-03 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 10:20	04/14/18 19:14	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 10:20	04/12/18 08:45

MW-148-40 L985279-04 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 10:45	04/14/18 19:35	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 10:45	04/12/18 08:45

MW-148-50 L985279-05 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 11:00	04/14/18 19:56	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 11:00	04/12/18 08:45

MW-148-60 L985279-06 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 11:20	04/14/18 20:18	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 11:20	04/12/18 08:45

MW-148-70 L985279-07 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 11:30	04/14/18 20:40	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 11:30	04/12/18 08:45



MW-148-80 L985279-08 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/09/18 12:10	04/14/18 21:21	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 12:10	04/12/18 08:45

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

TRIP BLANK L985279-09 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097806	1	04/13/18 14:46	04/13/18 14:46	JAH

Collected by	Collected date/time	Received date/time
KS/RM	04/09/18 00:00	04/12/18 08:45

MW-143-10 L985279-10 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/11/18 09:38	04/14/18 21:42	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/11/18 09:38	04/12/18 08:45

MW-143-20 L985279-11 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/11/18 10:00	04/15/18 14:21	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/11/18 10:00	04/12/18 08:45

MW-143-30 L985279-12 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097927	1	04/13/18 14:40	04/13/18 14:58	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/11/18 10:20	04/15/18 14:42	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/11/18 10:20	04/12/18 08:45

MW-143-40 L985279-13 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097930	1	04/14/18 07:11	04/14/18 07:24	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/11/18 10:40	04/15/18 15:04	DWR

Collected by	Collected date/time	Received date/time
KS/RM	04/11/18 10:40	04/12/18 08:45

MW-143-50 L985279-14 Solid

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097930	1	04/14/18 07:11	04/14/18 07:24	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	1	04/11/18 10:55	04/15/18 15:47	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098127	25	04/11/18 10:55	04/17/18 14:55	LRL

Collected by	Collected date/time	Received date/time
KS/RM	04/11/18 10:55	04/12/18 08:45



MW-143-60 L985279-15 Solid

Collected by: KS/RM
 Collected date/time: 04/11/18 11:20
 Received date/time: 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097930	1	04/14/18 07:11	04/14/18 07:24	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098553	1	04/11/18 11:20	04/15/18 16:08	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098553	25	04/11/18 11:20	04/17/18 13:28	LRL

1 Cp

2 Tc

3 Ss

MW-143-70 L985279-16 Solid

Collected by: KS/RM
 Collected date/time: 04/11/18 12:00
 Received date/time: 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097930	1	04/14/18 07:11	04/14/18 07:24	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098553	1	04/11/18 12:00	04/15/18 16:29	DWR

4 Cn

5 Sr

6 Qc

MW-143-80 L985279-17 Solid

Collected by: KS/RM
 Collected date/time: 04/11/18 13:00
 Received date/time: 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097930	1	04/14/18 07:11	04/14/18 07:24	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098553	1	04/11/18 13:00	04/15/18 16:50	DWR

7 Gl

8 Al

9 Sc

MW-902-20 L985279-18 Solid

Collected by: KS/RM
 Collected date/time: 04/11/18 14:22
 Received date/time: 04/12/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Total Solids by Method 2540 G-2011	WG1097930	1	04/14/18 07:11	04/14/18 07:24	JD
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1098553	1	04/11/18 14:22	04/15/18 17:12	DWR



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.7		1	04/13/2018 15:36	WG1097916

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0266	J	0.0115	0.0577	1	04/14/2018 18:31	WG1098127
Acrylonitrile	U		0.00207	0.0115	1	04/14/2018 18:31	WG1098127
Benzene	0.000728	J	0.000311	0.00115	1	04/14/2018 18:31	WG1098127
Bromobenzene	U		0.000328	0.00115	1	04/14/2018 18:31	WG1098127
Bromodichloromethane	U		0.000293	0.00115	1	04/14/2018 18:31	WG1098127
Bromochloromethane	U		0.000450	0.00577	1	04/14/2018 18:31	WG1098127
Bromoform	U		0.000489	0.00115	1	04/14/2018 18:31	WG1098127
Bromomethane	U		0.00155	0.00577	1	04/14/2018 18:31	WG1098127
n-Butylbenzene	U		0.000298	0.00115	1	04/14/2018 18:31	WG1098127
sec-Butylbenzene	U		0.000232	0.00115	1	04/14/2018 18:31	WG1098127
tert-Butylbenzene	U		0.000238	0.00115	1	04/14/2018 18:31	WG1098127
Carbon disulfide	0.00130		0.000255	0.00115	1	04/14/2018 18:31	WG1098127
Carbon tetrachloride	U		0.000378	0.00115	1	04/14/2018 18:31	WG1098127
Chlorobenzene	U		0.000245	0.00115	1	04/14/2018 18:31	WG1098127
Chlorodibromomethane	U		0.000430	0.00115	1	04/14/2018 18:31	WG1098127
Chloroethane	U		0.00109	0.00577	1	04/14/2018 18:31	WG1098127
Chloroform	U		0.000264	0.00577	1	04/14/2018 18:31	WG1098127
Chloromethane	U		0.000433	0.00288	1	04/14/2018 18:31	WG1098127
2-Chlorotoluene	U		0.000347	0.00115	1	04/14/2018 18:31	WG1098127
4-Chlorotoluene	U		0.000277	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00577	1	04/14/2018 18:31	WG1098127
1,2-Dibromoethane	U		0.000396	0.00115	1	04/14/2018 18:31	WG1098127
Dibromomethane	U		0.000441	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dichlorobenzene	U		0.000352	0.00115	1	04/14/2018 18:31	WG1098127
1,3-Dichlorobenzene	U		0.000276	0.00115	1	04/14/2018 18:31	WG1098127
1,4-Dichlorobenzene	U		0.000261	0.00115	1	04/14/2018 18:31	WG1098127
Dichlorodifluoromethane	U		0.000823	0.00577	1	04/14/2018 18:31	WG1098127
1,1-Dichloroethane	U		0.000230	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dichloroethane	U		0.000306	0.00115	1	04/14/2018 18:31	WG1098127
1,1-Dichloroethene	U		0.000350	0.00115	1	04/14/2018 18:31	WG1098127
cis-1,2-Dichloroethene	U		0.000271	0.00115	1	04/14/2018 18:31	WG1098127
trans-1,2-Dichloroethene	U		0.000305	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dichloropropane	U		0.000413	0.00115	1	04/14/2018 18:31	WG1098127
1,1-Dichloropropene	U		0.000366	0.00115	1	04/14/2018 18:31	WG1098127
1,3-Dichloropropane	U		0.000239	0.00115	1	04/14/2018 18:31	WG1098127
cis-1,3-Dichloropropene	U		0.000302	0.00115	1	04/14/2018 18:31	WG1098127
trans-1,3-Dichloropropene	U		0.000308	0.00115	1	04/14/2018 18:31	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000898	0.00288	1	04/14/2018 18:31	WG1098127
2,2-Dichloropropane	U		0.000322	0.00115	1	04/14/2018 18:31	WG1098127
Di-isopropyl ether	U		0.000286	0.00115	1	04/14/2018 18:31	WG1098127
Ethylbenzene	U		0.000343	0.00115	1	04/14/2018 18:31	WG1098127
Hexachloro-1,3-butadiene	U		0.000395	0.00115	1	04/14/2018 18:31	WG1098127
2-Hexanone	U		0.00158	0.0115	1	04/14/2018 18:31	WG1098127
n-Hexane	0.00937	J	0.000335	0.0115	1	04/14/2018 18:31	WG1098127
Iodomethane	U		0.00292	0.0115	1	04/14/2018 18:31	WG1098127
Isopropylbenzene	U		0.000280	0.00115	1	04/14/2018 18:31	WG1098127
p-Isopropyltoluene	U		0.000235	0.00115	1	04/14/2018 18:31	WG1098127
2-Butanone (MEK)	0.00585	J	0.00540	0.0115	1	04/14/2018 18:31	WG1098127
Methylene Chloride	U		0.00115	0.00577	1	04/14/2018 18:31	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00217	0.0115	1	04/14/2018 18:31	WG1098127

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/09/18 09:55

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00115	1	04/14/2018 18:31	WG1098127
Naphthalene	U		0.00115	0.00577	1	04/14/2018 18:31	WG1098127
n-Propylbenzene	U		0.000238	0.00115	1	04/14/2018 18:31	WG1098127
Styrene	U		0.000270	0.00115	1	04/14/2018 18:31	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000305	0.00115	1	04/14/2018 18:31	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000421	0.00115	1	04/14/2018 18:31	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000421	0.00115	1	04/14/2018 18:31	WG1098127
Tetrachloroethene	U		0.000318	0.00115	1	04/14/2018 18:31	WG1098127
Toluene	U		0.000501	0.00577	1	04/14/2018 18:31	WG1098127
1,2,3-Trichlorobenzene	U		0.000353	0.00115	1	04/14/2018 18:31	WG1098127
1,2,4-Trichlorobenzene	U		0.000448	0.00115	1	04/14/2018 18:31	WG1098127
1,1,1-Trichloroethane	U		0.000330	0.00115	1	04/14/2018 18:31	WG1098127
1,1,2-Trichloroethane	U		0.000320	0.00115	1	04/14/2018 18:31	WG1098127
Trichloroethene	U		0.000322	0.00115	1	04/14/2018 18:31	WG1098127
Trichlorofluoromethane	U		0.000441	0.00577	1	04/14/2018 18:31	WG1098127
1,2,3-Trichloropropane	U		0.000855	0.00288	1	04/14/2018 18:31	WG1098127
1,2,4-Trimethylbenzene	U		0.000243	0.00115	1	04/14/2018 18:31	WG1098127
1,2,3-Trimethylbenzene	U		0.000331	0.00115	1	04/14/2018 18:31	WG1098127
1,3,5-Trimethylbenzene	U		0.000307	0.00115	1	04/14/2018 18:31	WG1098127
Vinyl acetate	U		0.00276	0.0115	1	04/14/2018 18:31	WG1098127
Vinyl chloride	U		0.000336	0.00115	1	04/14/2018 18:31	WG1098127
Xylenes, Total	U		0.000805	0.00346	1	04/14/2018 18:31	WG1098127
(S) Toluene-d8	99.7			80.0-120		04/14/2018 18:31	WG1098127
(S) Dibromofluoromethane	97.8			74.0-131		04/14/2018 18:31	WG1098127
(S) 4-Bromofluorobenzene	94.3			64.0-132		04/14/2018 18:31	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 10:05

L985279

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.2		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0108	0.0542	1	04/14/2018 18:52	WG1098127
Acrylonitrile	U		0.00194	0.0108	1	04/14/2018 18:52	WG1098127
Benzene	U		0.000293	0.00108	1	04/14/2018 18:52	WG1098127
Bromobenzene	U		0.000308	0.00108	1	04/14/2018 18:52	WG1098127
Bromodichloromethane	U		0.000276	0.00108	1	04/14/2018 18:52	WG1098127
Bromochloromethane	U		0.000423	0.00542	1	04/14/2018 18:52	WG1098127
Bromoform	U		0.000460	0.00108	1	04/14/2018 18:52	WG1098127
Bromomethane	U		0.00145	0.00542	1	04/14/2018 18:52	WG1098127
n-Butylbenzene	U		0.000280	0.00108	1	04/14/2018 18:52	WG1098127
sec-Butylbenzene	U		0.000218	0.00108	1	04/14/2018 18:52	WG1098127
tert-Butylbenzene	U		0.000223	0.00108	1	04/14/2018 18:52	WG1098127
Carbon disulfide	0.000247	J	0.000240	0.00108	1	04/14/2018 18:52	WG1098127
Carbon tetrachloride	U		0.000356	0.00108	1	04/14/2018 18:52	WG1098127
Chlorobenzene	U		0.000230	0.00108	1	04/14/2018 18:52	WG1098127
Chlorodibromomethane	U		0.000405	0.00108	1	04/14/2018 18:52	WG1098127
Chloroethane	U		0.00103	0.00542	1	04/14/2018 18:52	WG1098127
Chloroform	U		0.000248	0.00542	1	04/14/2018 18:52	WG1098127
Chloromethane	U		0.000407	0.00271	1	04/14/2018 18:52	WG1098127
2-Chlorotoluene	U		0.000327	0.00108	1	04/14/2018 18:52	WG1098127
4-Chlorotoluene	U		0.000260	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00542	1	04/14/2018 18:52	WG1098127
1,2-Dibromoethane	U		0.000372	0.00108	1	04/14/2018 18:52	WG1098127
Dibromomethane	U		0.000414	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dichlorobenzene	U		0.000331	0.00108	1	04/14/2018 18:52	WG1098127
1,3-Dichlorobenzene	U		0.000259	0.00108	1	04/14/2018 18:52	WG1098127
1,4-Dichlorobenzene	U		0.000245	0.00108	1	04/14/2018 18:52	WG1098127
Dichlorodifluoromethane	U		0.000773	0.00542	1	04/14/2018 18:52	WG1098127
1,1-Dichloroethane	U		0.000216	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dichloroethane	U		0.000287	0.00108	1	04/14/2018 18:52	WG1098127
1,1-Dichloroethene	U		0.000329	0.00108	1	04/14/2018 18:52	WG1098127
cis-1,2-Dichloroethene	U		0.000255	0.00108	1	04/14/2018 18:52	WG1098127
trans-1,2-Dichloroethene	U		0.000286	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dichloropropane	U		0.000388	0.00108	1	04/14/2018 18:52	WG1098127
1,1-Dichloropropene	U		0.000344	0.00108	1	04/14/2018 18:52	WG1098127
1,3-Dichloropropane	U		0.000225	0.00108	1	04/14/2018 18:52	WG1098127
cis-1,3-Dichloropropene	U		0.000284	0.00108	1	04/14/2018 18:52	WG1098127
trans-1,3-Dichloropropene	U		0.000290	0.00108	1	04/14/2018 18:52	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000844	0.00271	1	04/14/2018 18:52	WG1098127
2,2-Dichloropropane	U		0.000303	0.00108	1	04/14/2018 18:52	WG1098127
Di-isopropyl ether	U		0.000269	0.00108	1	04/14/2018 18:52	WG1098127
Ethylbenzene	U		0.000322	0.00108	1	04/14/2018 18:52	WG1098127
Hexachloro-1,3-butadiene	U		0.000371	0.00108	1	04/14/2018 18:52	WG1098127
2-Hexanone	U		0.00149	0.0108	1	04/14/2018 18:52	WG1098127
n-Hexane	U		0.000315	0.0108	1	04/14/2018 18:52	WG1098127
Iodomethane	U		0.00274	0.0108	1	04/14/2018 18:52	WG1098127
Isopropylbenzene	U		0.000264	0.00108	1	04/14/2018 18:52	WG1098127
p-Isopropyltoluene	U		0.000221	0.00108	1	04/14/2018 18:52	WG1098127
2-Butanone (MEK)	U		0.00508	0.0108	1	04/14/2018 18:52	WG1098127
Methylene Chloride	U		0.00108	0.00542	1	04/14/2018 18:52	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0108	1	04/14/2018 18:52	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 10:05

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00108	1	04/14/2018 18:52	WG1098127
Naphthalene	U		0.00108	0.00542	1	04/14/2018 18:52	WG1098127
n-Propylbenzene	U		0.000223	0.00108	1	04/14/2018 18:52	WG1098127
Styrene	U		0.000254	0.00108	1	04/14/2018 18:52	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000286	0.00108	1	04/14/2018 18:52	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000396	0.00108	1	04/14/2018 18:52	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00108	1	04/14/2018 18:52	WG1098127
Tetrachloroethene	0.00188		0.000299	0.00108	1	04/14/2018 18:52	WG1098127
Toluene	U		0.000471	0.00542	1	04/14/2018 18:52	WG1098127
1,2,3-Trichlorobenzene	U		0.000332	0.00108	1	04/14/2018 18:52	WG1098127
1,2,4-Trichlorobenzene	U		0.000421	0.00108	1	04/14/2018 18:52	WG1098127
1,1,1-Trichloroethane	U		0.000310	0.00108	1	04/14/2018 18:52	WG1098127
1,1,2-Trichloroethane	U		0.000300	0.00108	1	04/14/2018 18:52	WG1098127
Trichloroethene	U		0.000303	0.00108	1	04/14/2018 18:52	WG1098127
Trichlorofluoromethane	U		0.000414	0.00542	1	04/14/2018 18:52	WG1098127
1,2,3-Trichloropropane	U		0.000804	0.00271	1	04/14/2018 18:52	WG1098127
1,2,4-Trimethylbenzene	U		0.000229	0.00108	1	04/14/2018 18:52	WG1098127
1,2,3-Trimethylbenzene	U		0.000311	0.00108	1	04/14/2018 18:52	WG1098127
1,3,5-Trimethylbenzene	U		0.000289	0.00108	1	04/14/2018 18:52	WG1098127
Vinyl acetate	U		0.00259	0.0108	1	04/14/2018 18:52	WG1098127
Vinyl chloride	U		0.000316	0.00108	1	04/14/2018 18:52	WG1098127
Xylenes, Total	U		0.000757	0.00325	1	04/14/2018 18:52	WG1098127
(S) Toluene-d8	101			80.0-120		04/14/2018 18:52	WG1098127
(S) Dibromofluoromethane	103			74.0-131		04/14/2018 18:52	WG1098127
(S) 4-Bromofluorobenzene	94.2			64.0-132		04/14/2018 18:52	WG1098127

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0561	1	04/14/2018 19:14	WG1098127
Acrylonitrile	U		0.00201	0.0112	1	04/14/2018 19:14	WG1098127
Benzene	U		0.000303	0.00112	1	04/14/2018 19:14	WG1098127
Bromobenzene	U		0.000319	0.00112	1	04/14/2018 19:14	WG1098127
Bromodichloromethane	U		0.000285	0.00112	1	04/14/2018 19:14	WG1098127
Bromochloromethane	U		0.000438	0.00561	1	04/14/2018 19:14	WG1098127
Bromoform	U		0.000476	0.00112	1	04/14/2018 19:14	WG1098127
Bromomethane	U		0.00150	0.00561	1	04/14/2018 19:14	WG1098127
n-Butylbenzene	U		0.000290	0.00112	1	04/14/2018 19:14	WG1098127
sec-Butylbenzene	U		0.000226	0.00112	1	04/14/2018 19:14	WG1098127
tert-Butylbenzene	U		0.000231	0.00112	1	04/14/2018 19:14	WG1098127
Carbon disulfide	U		0.000248	0.00112	1	04/14/2018 19:14	WG1098127
Carbon tetrachloride	U		0.000368	0.00112	1	04/14/2018 19:14	WG1098127
Chlorobenzene	U		0.000238	0.00112	1	04/14/2018 19:14	WG1098127
Chlorodibromomethane	U		0.000419	0.00112	1	04/14/2018 19:14	WG1098127
Chloroethane	U		0.00106	0.00561	1	04/14/2018 19:14	WG1098127
Chloroform	U		0.000257	0.00561	1	04/14/2018 19:14	WG1098127
Chloromethane	U		0.000421	0.00281	1	04/14/2018 19:14	WG1098127
2-Chlorotoluene	U		0.000338	0.00112	1	04/14/2018 19:14	WG1098127
4-Chlorotoluene	U		0.000269	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00561	1	04/14/2018 19:14	WG1098127
1,2-Dibromoethane	U		0.000385	0.00112	1	04/14/2018 19:14	WG1098127
Dibromomethane	U		0.000429	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dichlorobenzene	U		0.000342	0.00112	1	04/14/2018 19:14	WG1098127
1,3-Dichlorobenzene	U		0.000268	0.00112	1	04/14/2018 19:14	WG1098127
1,4-Dichlorobenzene	U		0.000254	0.00112	1	04/14/2018 19:14	WG1098127
Dichlorodifluoromethane	U		0.000801	0.00561	1	04/14/2018 19:14	WG1098127
1,1-Dichloroethane	U		0.000223	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dichloroethane	U		0.000298	0.00112	1	04/14/2018 19:14	WG1098127
1,1-Dichloroethene	U		0.000340	0.00112	1	04/14/2018 19:14	WG1098127
cis-1,2-Dichloroethene	0.00364		0.000264	0.00112	1	04/14/2018 19:14	WG1098127
trans-1,2-Dichloroethene	U		0.000296	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dichloropropane	U		0.000402	0.00112	1	04/14/2018 19:14	WG1098127
1,1-Dichloropropene	U		0.000356	0.00112	1	04/14/2018 19:14	WG1098127
1,3-Dichloropropane	U		0.000232	0.00112	1	04/14/2018 19:14	WG1098127
cis-1,3-Dichloropropene	U		0.000294	0.00112	1	04/14/2018 19:14	WG1098127
trans-1,3-Dichloropropene	U		0.000300	0.00112	1	04/14/2018 19:14	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000874	0.00281	1	04/14/2018 19:14	WG1098127
2,2-Dichloropropane	U		0.000313	0.00112	1	04/14/2018 19:14	WG1098127
Di-isopropyl ether	U		0.000278	0.00112	1	04/14/2018 19:14	WG1098127
Ethylbenzene	U		0.000334	0.00112	1	04/14/2018 19:14	WG1098127
Hexachloro-1,3-butadiene	U		0.000384	0.00112	1	04/14/2018 19:14	WG1098127
2-Hexanone	U		0.00154	0.0112	1	04/14/2018 19:14	WG1098127
n-Hexane	0.000376	J	0.000326	0.0112	1	04/14/2018 19:14	WG1098127
Iodomethane	U		0.00284	0.0112	1	04/14/2018 19:14	WG1098127
Isopropylbenzene	U		0.000273	0.00112	1	04/14/2018 19:14	WG1098127
p-Isopropyltoluene	U		0.000229	0.00112	1	04/14/2018 19:14	WG1098127
2-Butanone (MEK)	U		0.00526	0.0112	1	04/14/2018 19:14	WG1098127
Methylene Chloride	U		0.00112	0.00561	1	04/14/2018 19:14	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00211	0.0112	1	04/14/2018 19:14	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 10:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000238	0.00112	1	04/14/2018 19:14	WG1098127
Naphthalene	U		0.00112	0.00561	1	04/14/2018 19:14	WG1098127
n-Propylbenzene	U		0.000231	0.00112	1	04/14/2018 19:14	WG1098127
Styrene	U		0.000263	0.00112	1	04/14/2018 19:14	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000296	0.00112	1	04/14/2018 19:14	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000410	0.00112	1	04/14/2018 19:14	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000410	0.00112	1	04/14/2018 19:14	WG1098127
Tetrachloroethene	U		0.000310	0.00112	1	04/14/2018 19:14	WG1098127
Toluene	U		0.000487	0.00561	1	04/14/2018 19:14	WG1098127
1,2,3-Trichlorobenzene	U		0.000344	0.00112	1	04/14/2018 19:14	WG1098127
1,2,4-Trichlorobenzene	U		0.000436	0.00112	1	04/14/2018 19:14	WG1098127
1,1,1-Trichloroethane	U		0.000321	0.00112	1	04/14/2018 19:14	WG1098127
1,1,2-Trichloroethane	U		0.000311	0.00112	1	04/14/2018 19:14	WG1098127
Trichloroethene	U		0.000313	0.00112	1	04/14/2018 19:14	WG1098127
Trichlorofluoromethane	U		0.000429	0.00561	1	04/14/2018 19:14	WG1098127
1,2,3-Trichloropropane	U		0.000832	0.00281	1	04/14/2018 19:14	WG1098127
1,2,4-Trimethylbenzene	U		0.000237	0.00112	1	04/14/2018 19:14	WG1098127
1,2,3-Trimethylbenzene	U		0.000322	0.00112	1	04/14/2018 19:14	WG1098127
1,3,5-Trimethylbenzene	U		0.000299	0.00112	1	04/14/2018 19:14	WG1098127
Vinyl acetate	U		0.00268	0.0112	1	04/14/2018 19:14	WG1098127
Vinyl chloride	0.0144		0.000327	0.00112	1	04/14/2018 19:14	WG1098127
Xylenes, Total	U		0.000784	0.00337	1	04/14/2018 19:14	WG1098127
<i>(S) Toluene-d8</i>	101			80.0-120		04/14/2018 19:14	WG1098127
<i>(S) Dibromofluoromethane</i>	104			74.0-131		04/14/2018 19:14	WG1098127
<i>(S) 4-Bromofluorobenzene</i>	93.6			64.0-132		04/14/2018 19:14	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0109	0.0543	1	04/14/2018 19:35	WG1098127
Acrylonitrile	U		0.00194	0.0109	1	04/14/2018 19:35	WG1098127
Benzene	U		0.000293	0.00109	1	04/14/2018 19:35	WG1098127
Bromobenzene	U		0.000309	0.00109	1	04/14/2018 19:35	WG1098127
Bromodichloromethane	U		0.000276	0.00109	1	04/14/2018 19:35	WG1098127
Bromochloromethane	U		0.000424	0.00543	1	04/14/2018 19:35	WG1098127
Bromoform	U		0.000461	0.00109	1	04/14/2018 19:35	WG1098127
Bromomethane	U		0.00146	0.00543	1	04/14/2018 19:35	WG1098127
n-Butylbenzene	U		0.000280	0.00109	1	04/14/2018 19:35	WG1098127
sec-Butylbenzene	U		0.000218	0.00109	1	04/14/2018 19:35	WG1098127
tert-Butylbenzene	U		0.000224	0.00109	1	04/14/2018 19:35	WG1098127
Carbon disulfide	0.000261	J	0.000240	0.00109	1	04/14/2018 19:35	WG1098127
Carbon tetrachloride	U		0.000356	0.00109	1	04/14/2018 19:35	WG1098127
Chlorobenzene	U		0.000230	0.00109	1	04/14/2018 19:35	WG1098127
Chlorodibromomethane	U		0.000405	0.00109	1	04/14/2018 19:35	WG1098127
Chloroethane	U		0.00103	0.00543	1	04/14/2018 19:35	WG1098127
Chloroform	U		0.000249	0.00543	1	04/14/2018 19:35	WG1098127
Chloromethane	U		0.000407	0.00272	1	04/14/2018 19:35	WG1098127
2-Chlorotoluene	U		0.000327	0.00109	1	04/14/2018 19:35	WG1098127
4-Chlorotoluene	U		0.000261	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00543	1	04/14/2018 19:35	WG1098127
1,2-Dibromoethane	U		0.000373	0.00109	1	04/14/2018 19:35	WG1098127
Dibromomethane	U		0.000415	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dichlorobenzene	U		0.000331	0.00109	1	04/14/2018 19:35	WG1098127
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/14/2018 19:35	WG1098127
1,4-Dichlorobenzene	U		0.000246	0.00109	1	04/14/2018 19:35	WG1098127
Dichlorodifluoromethane	U		0.000775	0.00543	1	04/14/2018 19:35	WG1098127
1,1-Dichloroethane	U		0.000216	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dichloroethane	U		0.000288	0.00109	1	04/14/2018 19:35	WG1098127
1,1-Dichloroethene	U		0.000329	0.00109	1	04/14/2018 19:35	WG1098127
cis-1,2-Dichloroethene	0.00113		0.000255	0.00109	1	04/14/2018 19:35	WG1098127
trans-1,2-Dichloroethene	U		0.000287	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dichloropropane	U		0.000389	0.00109	1	04/14/2018 19:35	WG1098127
1,1-Dichloropropene	U		0.000344	0.00109	1	04/14/2018 19:35	WG1098127
1,3-Dichloropropane	U		0.000225	0.00109	1	04/14/2018 19:35	WG1098127
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/14/2018 19:35	WG1098127
trans-1,3-Dichloropropene	U		0.000290	0.00109	1	04/14/2018 19:35	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000845	0.00272	1	04/14/2018 19:35	WG1098127
2,2-Dichloropropane	U		0.000303	0.00109	1	04/14/2018 19:35	WG1098127
Di-isopropyl ether	U		0.000269	0.00109	1	04/14/2018 19:35	WG1098127
Ethylbenzene	U		0.000323	0.00109	1	04/14/2018 19:35	WG1098127
Hexachloro-1,3-butadiene	U		0.000372	0.00109	1	04/14/2018 19:35	WG1098127
2-Hexanone	U		0.00149	0.0109	1	04/14/2018 19:35	WG1098127
n-Hexane	U		0.000315	0.0109	1	04/14/2018 19:35	WG1098127
Iodomethane	U		0.00275	0.0109	1	04/14/2018 19:35	WG1098127
Isopropylbenzene	U		0.000264	0.00109	1	04/14/2018 19:35	WG1098127
p-Isopropyltoluene	U		0.000222	0.00109	1	04/14/2018 19:35	WG1098127
2-Butanone (MEK)	U		0.00508	0.0109	1	04/14/2018 19:35	WG1098127
Methylene Chloride	U		0.00109	0.00543	1	04/14/2018 19:35	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0109	1	04/14/2018 19:35	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 10:45

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00109	1	04/14/2018 19:35	WG1098127
Naphthalene	U		0.00109	0.00543	1	04/14/2018 19:35	WG1098127
n-Propylbenzene	U		0.000224	0.00109	1	04/14/2018 19:35	WG1098127
Styrene	U		0.000254	0.00109	1	04/14/2018 19:35	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/14/2018 19:35	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000397	0.00109	1	04/14/2018 19:35	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000397	0.00109	1	04/14/2018 19:35	WG1098127
Tetrachloroethene	0.000801	J	0.000300	0.00109	1	04/14/2018 19:35	WG1098127
Toluene	U		0.000471	0.00543	1	04/14/2018 19:35	WG1098127
1,2,3-Trichlorobenzene	U		0.000332	0.00109	1	04/14/2018 19:35	WG1098127
1,2,4-Trichlorobenzene	U		0.000421	0.00109	1	04/14/2018 19:35	WG1098127
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/14/2018 19:35	WG1098127
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/14/2018 19:35	WG1098127
Trichloroethene	0.000551	J	0.000303	0.00109	1	04/14/2018 19:35	WG1098127
Trichlorofluoromethane	U		0.000415	0.00543	1	04/14/2018 19:35	WG1098127
1,2,3-Trichloropropane	U		0.000805	0.00272	1	04/14/2018 19:35	WG1098127
1,2,4-Trimethylbenzene	U		0.000229	0.00109	1	04/14/2018 19:35	WG1098127
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/14/2018 19:35	WG1098127
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/14/2018 19:35	WG1098127
Vinyl acetate	U		0.00260	0.0109	1	04/14/2018 19:35	WG1098127
Vinyl chloride	U		0.000316	0.00109	1	04/14/2018 19:35	WG1098127
Xylenes, Total	U		0.000758	0.00326	1	04/14/2018 19:35	WG1098127
(S) Toluene-d8	98.5			80.0-120		04/14/2018 19:35	WG1098127
(S) Dibromofluoromethane	102			74.0-131		04/14/2018 19:35	WG1098127
(S) 4-Bromofluorobenzene	96.8			64.0-132		04/14/2018 19:35	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 11:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	04/13/2018 14:58	WG1097927

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0110	0.0551	1	04/14/2018 19:56	WG1098127
Acrylonitrile	U		0.00197	0.0110	1	04/14/2018 19:56	WG1098127
Benzene	U		0.000298	0.00110	1	04/14/2018 19:56	WG1098127
Bromobenzene	U		0.000313	0.00110	1	04/14/2018 19:56	WG1098127
Bromodichloromethane	U		0.000280	0.00110	1	04/14/2018 19:56	WG1098127
Bromochloromethane	U		0.000430	0.00551	1	04/14/2018 19:56	WG1098127
Bromoform	U		0.000468	0.00110	1	04/14/2018 19:56	WG1098127
Bromomethane	U		0.00148	0.00551	1	04/14/2018 19:56	WG1098127
n-Butylbenzene	U		0.000285	0.00110	1	04/14/2018 19:56	WG1098127
sec-Butylbenzene	U		0.000222	0.00110	1	04/14/2018 19:56	WG1098127
tert-Butylbenzene	U		0.000227	0.00110	1	04/14/2018 19:56	WG1098127
Carbon disulfide	0.000256	J	0.000244	0.00110	1	04/14/2018 19:56	WG1098127
Carbon tetrachloride	U		0.000362	0.00110	1	04/14/2018 19:56	WG1098127
Chlorobenzene	U		0.000234	0.00110	1	04/14/2018 19:56	WG1098127
Chlorodibromomethane	U		0.000411	0.00110	1	04/14/2018 19:56	WG1098127
Chloroethane	U		0.00104	0.00551	1	04/14/2018 19:56	WG1098127
Chloroform	U		0.000253	0.00551	1	04/14/2018 19:56	WG1098127
Chloromethane	U		0.000414	0.00276	1	04/14/2018 19:56	WG1098127
2-Chlorotoluene	U		0.000332	0.00110	1	04/14/2018 19:56	WG1098127
4-Chlorotoluene	U		0.000265	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	04/14/2018 19:56	WG1098127
1,2-Dibromoethane	U		0.000378	0.00110	1	04/14/2018 19:56	WG1098127
Dibromomethane	U		0.000421	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dichlorobenzene	U		0.000336	0.00110	1	04/14/2018 19:56	WG1098127
1,3-Dichlorobenzene	U		0.000264	0.00110	1	04/14/2018 19:56	WG1098127
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/14/2018 19:56	WG1098127
Dichlorodifluoromethane	U		0.000786	0.00551	1	04/14/2018 19:56	WG1098127
1,1-Dichloroethane	U		0.000219	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dichloroethane	U		0.000292	0.00110	1	04/14/2018 19:56	WG1098127
1,1-Dichloroethene	U		0.000334	0.00110	1	04/14/2018 19:56	WG1098127
cis-1,2-Dichloroethene	U		0.000259	0.00110	1	04/14/2018 19:56	WG1098127
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dichloropropane	U		0.000395	0.00110	1	04/14/2018 19:56	WG1098127
1,1-Dichloropropene	U		0.000350	0.00110	1	04/14/2018 19:56	WG1098127
1,3-Dichloropropane	U		0.000228	0.00110	1	04/14/2018 19:56	WG1098127
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	04/14/2018 19:56	WG1098127
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	04/14/2018 19:56	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000858	0.00276	1	04/14/2018 19:56	WG1098127
2,2-Dichloropropane	U		0.000308	0.00110	1	04/14/2018 19:56	WG1098127
Di-isopropyl ether	U		0.000274	0.00110	1	04/14/2018 19:56	WG1098127
Ethylbenzene	U		0.000328	0.00110	1	04/14/2018 19:56	WG1098127
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	04/14/2018 19:56	WG1098127
2-Hexanone	U		0.00151	0.0110	1	04/14/2018 19:56	WG1098127
n-Hexane	U		0.000320	0.0110	1	04/14/2018 19:56	WG1098127
Iodomethane	U		0.00279	0.0110	1	04/14/2018 19:56	WG1098127
Isopropylbenzene	U		0.000268	0.00110	1	04/14/2018 19:56	WG1098127
p-Isopropyltoluene	U		0.000225	0.00110	1	04/14/2018 19:56	WG1098127
2-Butanone (MEK)	U		0.00516	0.0110	1	04/14/2018 19:56	WG1098127
Methylene Chloride	U		0.00110	0.00551	1	04/14/2018 19:56	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/14/2018 19:56	WG1098127



Collected date/time: 04/09/18 11:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	04/14/2018 19:56	WG1098127
Naphthalene	U		0.00110	0.00551	1	04/14/2018 19:56	WG1098127
n-Propylbenzene	U		0.000227	0.00110	1	04/14/2018 19:56	WG1098127
Styrene	U		0.000258	0.00110	1	04/14/2018 19:56	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	04/14/2018 19:56	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	04/14/2018 19:56	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	04/14/2018 19:56	WG1098127
Tetrachloroethene	U		0.000304	0.00110	1	04/14/2018 19:56	WG1098127
Toluene	U		0.000479	0.00551	1	04/14/2018 19:56	WG1098127
1,2,3-Trichlorobenzene	U		0.000338	0.00110	1	04/14/2018 19:56	WG1098127
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	04/14/2018 19:56	WG1098127
1,1,1-Trichloroethane	U		0.000315	0.00110	1	04/14/2018 19:56	WG1098127
1,1,2-Trichloroethane	U		0.000306	0.00110	1	04/14/2018 19:56	WG1098127
Trichloroethene	U		0.000308	0.00110	1	04/14/2018 19:56	WG1098127
Trichlorofluoromethane	U		0.000421	0.00551	1	04/14/2018 19:56	WG1098127
1,2,3-Trichloropropane	U		0.000817	0.00276	1	04/14/2018 19:56	WG1098127
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	04/14/2018 19:56	WG1098127
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	04/14/2018 19:56	WG1098127
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/14/2018 19:56	WG1098127
Vinyl acetate	U		0.00264	0.0110	1	04/14/2018 19:56	WG1098127
Vinyl chloride	U		0.000321	0.00110	1	04/14/2018 19:56	WG1098127
Xylenes, Total	U		0.000770	0.00331	1	04/14/2018 19:56	WG1098127
(S) Toluene-d8	102			80.0-120		04/14/2018 19:56	WG1098127
(S) Dibromofluoromethane	96.8			74.0-131		04/14/2018 19:56	WG1098127
(S) 4-Bromofluorobenzene	98.8			64.0-132		04/14/2018 19:56	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 11:20

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.2		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0126	0.0631	1	04/14/2018 20:18	WG1098127
Acrylonitrile	U		0.00226	0.0126	1	04/14/2018 20:18	WG1098127
Benzene	U		0.000341	0.00126	1	04/14/2018 20:18	WG1098127
Bromobenzene	U		0.000358	0.00126	1	04/14/2018 20:18	WG1098127
Bromodichloromethane	U		0.000321	0.00126	1	04/14/2018 20:18	WG1098127
Bromochloromethane	U		0.000492	0.00631	1	04/14/2018 20:18	WG1098127
Bromoform	U		0.000535	0.00126	1	04/14/2018 20:18	WG1098127
Bromomethane	U		0.00169	0.00631	1	04/14/2018 20:18	WG1098127
n-Butylbenzene	U		0.000326	0.00126	1	04/14/2018 20:18	WG1098127
sec-Butylbenzene	U		0.000254	0.00126	1	04/14/2018 20:18	WG1098127
tert-Butylbenzene	U		0.000260	0.00126	1	04/14/2018 20:18	WG1098127
Carbon disulfide	U		0.000279	0.00126	1	04/14/2018 20:18	WG1098127
Carbon tetrachloride	U		0.000414	0.00126	1	04/14/2018 20:18	WG1098127
Chlorobenzene	U		0.000268	0.00126	1	04/14/2018 20:18	WG1098127
Chlorodibromomethane	U		0.000471	0.00126	1	04/14/2018 20:18	WG1098127
Chloroethane	U		0.00119	0.00631	1	04/14/2018 20:18	WG1098127
Chloroform	U		0.000289	0.00631	1	04/14/2018 20:18	WG1098127
Chloromethane	U		0.000473	0.00315	1	04/14/2018 20:18	WG1098127
2-Chlorotoluene	U		0.000380	0.00126	1	04/14/2018 20:18	WG1098127
4-Chlorotoluene	U		0.000303	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00132	0.00631	1	04/14/2018 20:18	WG1098127
1,2-Dibromoethane	U		0.000433	0.00126	1	04/14/2018 20:18	WG1098127
Dibromomethane	U		0.000482	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dichlorobenzene	U		0.000385	0.00126	1	04/14/2018 20:18	WG1098127
1,3-Dichlorobenzene	U		0.000302	0.00126	1	04/14/2018 20:18	WG1098127
1,4-Dichlorobenzene	U		0.000285	0.00126	1	04/14/2018 20:18	WG1098127
Dichlorodifluoromethane	U		0.000900	0.00631	1	04/14/2018 20:18	WG1098127
1,1-Dichloroethane	U		0.000251	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dichloroethane	U		0.000334	0.00126	1	04/14/2018 20:18	WG1098127
1,1-Dichloroethene	U		0.000382	0.00126	1	04/14/2018 20:18	WG1098127
cis-1,2-Dichloroethene	U		0.000297	0.00126	1	04/14/2018 20:18	WG1098127
trans-1,2-Dichloroethene	U		0.000333	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dichloropropane	U		0.000452	0.00126	1	04/14/2018 20:18	WG1098127
1,1-Dichloropropene	U		0.000400	0.00126	1	04/14/2018 20:18	WG1098127
1,3-Dichloropropane	U		0.000261	0.00126	1	04/14/2018 20:18	WG1098127
cis-1,3-Dichloropropene	U		0.000331	0.00126	1	04/14/2018 20:18	WG1098127
trans-1,3-Dichloropropene	U		0.000337	0.00126	1	04/14/2018 20:18	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000982	0.00315	1	04/14/2018 20:18	WG1098127
2,2-Dichloropropane	U		0.000352	0.00126	1	04/14/2018 20:18	WG1098127
Di-isopropyl ether	U		0.000313	0.00126	1	04/14/2018 20:18	WG1098127
Ethylbenzene	U		0.000375	0.00126	1	04/14/2018 20:18	WG1098127
Hexachloro-1,3-butadiene	U		0.000432	0.00126	1	04/14/2018 20:18	WG1098127
2-Hexanone	U		0.00173	0.0126	1	04/14/2018 20:18	WG1098127
n-Hexane	U		0.000366	0.0126	1	04/14/2018 20:18	WG1098127
Iodomethane	U		0.00319	0.0126	1	04/14/2018 20:18	WG1098127
Isopropylbenzene	U		0.000307	0.00126	1	04/14/2018 20:18	WG1098127
p-Isopropyltoluene	U		0.000257	0.00126	1	04/14/2018 20:18	WG1098127
2-Butanone (MEK)	U		0.00591	0.0126	1	04/14/2018 20:18	WG1098127
Methylene Chloride	U		0.00126	0.00631	1	04/14/2018 20:18	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00237	0.0126	1	04/14/2018 20:18	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 11:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000268	0.00126	1	04/14/2018 20:18	WG1098127
Naphthalene	U		0.00126	0.00631	1	04/14/2018 20:18	WG1098127
n-Propylbenzene	U		0.000260	0.00126	1	04/14/2018 20:18	WG1098127
Styrene	U		0.000295	0.00126	1	04/14/2018 20:18	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000333	0.00126	1	04/14/2018 20:18	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000461	0.00126	1	04/14/2018 20:18	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000461	0.00126	1	04/14/2018 20:18	WG1098127
Tetrachloroethene	U		0.000348	0.00126	1	04/14/2018 20:18	WG1098127
Toluene	U		0.000548	0.00631	1	04/14/2018 20:18	WG1098127
1,2,3-Trichlorobenzene	U		0.000386	0.00126	1	04/14/2018 20:18	WG1098127
1,2,4-Trichlorobenzene	U		0.000490	0.00126	1	04/14/2018 20:18	WG1098127
1,1,1-Trichloroethane	U		0.000361	0.00126	1	04/14/2018 20:18	WG1098127
1,1,2-Trichloroethane	U		0.000350	0.00126	1	04/14/2018 20:18	WG1098127
Trichloroethene	U		0.000352	0.00126	1	04/14/2018 20:18	WG1098127
Trichlorofluoromethane	U		0.000482	0.00631	1	04/14/2018 20:18	WG1098127
1,2,3-Trichloropropane	U		0.000935	0.00315	1	04/14/2018 20:18	WG1098127
1,2,4-Trimethylbenzene	U		0.000266	0.00126	1	04/14/2018 20:18	WG1098127
1,2,3-Trimethylbenzene	U		0.000362	0.00126	1	04/14/2018 20:18	WG1098127
1,3,5-Trimethylbenzene	U		0.000336	0.00126	1	04/14/2018 20:18	WG1098127
Vinyl acetate	U		0.00302	0.0126	1	04/14/2018 20:18	WG1098127
Vinyl chloride	U		0.000367	0.00126	1	04/14/2018 20:18	WG1098127
Xylenes, Total	U		0.000881	0.00379	1	04/14/2018 20:18	WG1098127
(S) Toluene-d8	101			80.0-120		04/14/2018 20:18	WG1098127
(S) Dibromofluoromethane	101			74.0-131		04/14/2018 20:18	WG1098127
(S) 4-Bromofluorobenzene	94.8			64.0-132		04/14/2018 20:18	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 11:30

L985279

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.4		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0198	J	0.0126	0.0630	1	04/14/2018 20:40	WG1098127
Acrylonitrile	U		0.00226	0.0126	1	04/14/2018 20:40	WG1098127
Benzene	U		0.000340	0.00126	1	04/14/2018 20:40	WG1098127
Bromobenzene	U		0.000358	0.00126	1	04/14/2018 20:40	WG1098127
Bromodichloromethane	U		0.000320	0.00126	1	04/14/2018 20:40	WG1098127
Bromochloromethane	U		0.000491	0.00630	1	04/14/2018 20:40	WG1098127
Bromoform	U		0.000534	0.00126	1	04/14/2018 20:40	WG1098127
Bromomethane	U		0.00169	0.00630	1	04/14/2018 20:40	WG1098127
n-Butylbenzene	U		0.000325	0.00126	1	04/14/2018 20:40	WG1098127
sec-Butylbenzene	U		0.000253	0.00126	1	04/14/2018 20:40	WG1098127
tert-Butylbenzene	U		0.000260	0.00126	1	04/14/2018 20:40	WG1098127
Carbon disulfide	0.000395	J	0.000278	0.00126	1	04/14/2018 20:40	WG1098127
Carbon tetrachloride	U		0.000413	0.00126	1	04/14/2018 20:40	WG1098127
Chlorobenzene	U		0.000267	0.00126	1	04/14/2018 20:40	WG1098127
Chlorodibromomethane	U		0.000470	0.00126	1	04/14/2018 20:40	WG1098127
Chloroethane	U		0.00119	0.00630	1	04/14/2018 20:40	WG1098127
Chloroform	U		0.000289	0.00630	1	04/14/2018 20:40	WG1098127
Chloromethane	U		0.000473	0.00315	1	04/14/2018 20:40	WG1098127
2-Chlorotoluene	U		0.000379	0.00126	1	04/14/2018 20:40	WG1098127
4-Chlorotoluene	U		0.000302	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00132	0.00630	1	04/14/2018 20:40	WG1098127
1,2-Dibromoethane	U		0.000432	0.00126	1	04/14/2018 20:40	WG1098127
Dibromomethane	U		0.000481	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dichlorobenzene	U		0.000384	0.00126	1	04/14/2018 20:40	WG1098127
1,3-Dichlorobenzene	U		0.000301	0.00126	1	04/14/2018 20:40	WG1098127
1,4-Dichlorobenzene	U		0.000285	0.00126	1	04/14/2018 20:40	WG1098127
Dichlorodifluoromethane	U		0.000898	0.00630	1	04/14/2018 20:40	WG1098127
1,1-Dichloroethane	U		0.000251	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dichloroethane	U		0.000334	0.00126	1	04/14/2018 20:40	WG1098127
1,1-Dichloroethene	U		0.000382	0.00126	1	04/14/2018 20:40	WG1098127
cis-1,2-Dichloroethene	0.000380	J	0.000296	0.00126	1	04/14/2018 20:40	WG1098127
trans-1,2-Dichloroethene	U		0.000333	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dichloropropane	U		0.000451	0.00126	1	04/14/2018 20:40	WG1098127
1,1-Dichloropropene	U		0.000399	0.00126	1	04/14/2018 20:40	WG1098127
1,3-Dichloropropane	U		0.000261	0.00126	1	04/14/2018 20:40	WG1098127
cis-1,3-Dichloropropene	U		0.000330	0.00126	1	04/14/2018 20:40	WG1098127
trans-1,3-Dichloropropene	U		0.000336	0.00126	1	04/14/2018 20:40	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000980	0.00315	1	04/14/2018 20:40	WG1098127
2,2-Dichloropropane	U		0.000352	0.00126	1	04/14/2018 20:40	WG1098127
Di-isopropyl ether	U		0.000313	0.00126	1	04/14/2018 20:40	WG1098127
Ethylbenzene	U		0.000374	0.00126	1	04/14/2018 20:40	WG1098127
Hexachloro-1,3-butadiene	U		0.000431	0.00126	1	04/14/2018 20:40	WG1098127
2-Hexanone	U		0.00173	0.0126	1	04/14/2018 20:40	WG1098127
n-Hexane	0.00557	J	0.000365	0.0126	1	04/14/2018 20:40	WG1098127
Iodomethane	U		0.00319	0.0126	1	04/14/2018 20:40	WG1098127
Isopropylbenzene	U		0.000306	0.00126	1	04/14/2018 20:40	WG1098127
p-Isopropyltoluene	U		0.000257	0.00126	1	04/14/2018 20:40	WG1098127
2-Butanone (MEK)	U		0.00590	0.0126	1	04/14/2018 20:40	WG1098127
Methylene Chloride	U		0.00126	0.00630	1	04/14/2018 20:40	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00237	0.0126	1	04/14/2018 20:40	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 11:30

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000267	0.00126	1	04/14/2018 20:40	WG1098127
Naphthalene	U		0.00126	0.00630	1	04/14/2018 20:40	WG1098127
n-Propylbenzene	U		0.000260	0.00126	1	04/14/2018 20:40	WG1098127
Styrene	U		0.000295	0.00126	1	04/14/2018 20:40	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000333	0.00126	1	04/14/2018 20:40	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000460	0.00126	1	04/14/2018 20:40	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000460	0.00126	1	04/14/2018 20:40	WG1098127
Tetrachloroethene	0.000618	U	0.000348	0.00126	1	04/14/2018 20:40	WG1098127
Toluene	U		0.000547	0.00630	1	04/14/2018 20:40	WG1098127
1,2,3-Trichlorobenzene	U		0.000386	0.00126	1	04/14/2018 20:40	WG1098127
1,2,4-Trichlorobenzene	U		0.000489	0.00126	1	04/14/2018 20:40	WG1098127
1,1,1-Trichloroethane	U		0.000360	0.00126	1	04/14/2018 20:40	WG1098127
1,1,2-Trichloroethane	U		0.000349	0.00126	1	04/14/2018 20:40	WG1098127
Trichloroethene	U		0.000352	0.00126	1	04/14/2018 20:40	WG1098127
Trichlorofluoromethane	U		0.000481	0.00630	1	04/14/2018 20:40	WG1098127
1,2,3-Trichloropropane	U		0.000934	0.00315	1	04/14/2018 20:40	WG1098127
1,2,4-Trimethylbenzene	U		0.000266	0.00126	1	04/14/2018 20:40	WG1098127
1,2,3-Trimethylbenzene	U		0.000362	0.00126	1	04/14/2018 20:40	WG1098127
1,3,5-Trimethylbenzene	U		0.000335	0.00126	1	04/14/2018 20:40	WG1098127
Vinyl acetate	U		0.00301	0.0126	1	04/14/2018 20:40	WG1098127
Vinyl chloride	U		0.000367	0.00126	1	04/14/2018 20:40	WG1098127
Xylenes, Total	U		0.000880	0.00378	1	04/14/2018 20:40	WG1098127
(S) Toluene-d8	102			80.0-120		04/14/2018 20:40	WG1098127
(S) Dibromofluoromethane	103			74.0-131		04/14/2018 20:40	WG1098127
(S) 4-Bromofluorobenzene	96.6			64.0-132		04/14/2018 20:40	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0118	J	0.0118	0.0588	1	04/14/2018 21:21	WG1098127
Acrylonitrile	U		0.00210	0.0118	1	04/14/2018 21:21	WG1098127
Benzene	U		0.000317	0.00118	1	04/14/2018 21:21	WG1098127
Bromobenzene	U		0.000334	0.00118	1	04/14/2018 21:21	WG1098127
Bromodichloromethane	U		0.000298	0.00118	1	04/14/2018 21:21	WG1098127
Bromochloromethane	U		0.000458	0.00588	1	04/14/2018 21:21	WG1098127
Bromoform	U		0.000498	0.00118	1	04/14/2018 21:21	WG1098127
Bromomethane	U		0.00157	0.00588	1	04/14/2018 21:21	WG1098127
n-Butylbenzene	U		0.000303	0.00118	1	04/14/2018 21:21	WG1098127
sec-Butylbenzene	U		0.000236	0.00118	1	04/14/2018 21:21	WG1098127
tert-Butylbenzene	U		0.000242	0.00118	1	04/14/2018 21:21	WG1098127
Carbon disulfide	U		0.000260	0.00118	1	04/14/2018 21:21	WG1098127
Carbon tetrachloride	U		0.000385	0.00118	1	04/14/2018 21:21	WG1098127
Chlorobenzene	U		0.000249	0.00118	1	04/14/2018 21:21	WG1098127
Chlorodibromomethane	U		0.000438	0.00118	1	04/14/2018 21:21	WG1098127
Chloroethane	U		0.00111	0.00588	1	04/14/2018 21:21	WG1098127
Chloroform	U		0.000269	0.00588	1	04/14/2018 21:21	WG1098127
Chloromethane	U		0.000441	0.00294	1	04/14/2018 21:21	WG1098127
2-Chlorotoluene	U		0.000354	0.00118	1	04/14/2018 21:21	WG1098127
4-Chlorotoluene	U		0.000282	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00123	0.00588	1	04/14/2018 21:21	WG1098127
1,2-Dibromoethane	U		0.000403	0.00118	1	04/14/2018 21:21	WG1098127
Dibromomethane	U		0.000449	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dichlorobenzene	U		0.000358	0.00118	1	04/14/2018 21:21	WG1098127
1,3-Dichlorobenzene	U		0.000281	0.00118	1	04/14/2018 21:21	WG1098127
1,4-Dichlorobenzene	U		0.000266	0.00118	1	04/14/2018 21:21	WG1098127
Dichlorodifluoromethane	U		0.000838	0.00588	1	04/14/2018 21:21	WG1098127
1,1-Dichloroethane	U		0.000234	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dichloroethane	U		0.000311	0.00118	1	04/14/2018 21:21	WG1098127
1,1-Dichloroethene	U		0.000356	0.00118	1	04/14/2018 21:21	WG1098127
cis-1,2-Dichloroethene	0.000314	J	0.000276	0.00118	1	04/14/2018 21:21	WG1098127
trans-1,2-Dichloroethene	U		0.000310	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dichloropropane	U		0.000421	0.00118	1	04/14/2018 21:21	WG1098127
1,1-Dichloropropene	U		0.000373	0.00118	1	04/14/2018 21:21	WG1098127
1,3-Dichloropropane	U		0.000243	0.00118	1	04/14/2018 21:21	WG1098127
cis-1,3-Dichloropropene	U		0.000308	0.00118	1	04/14/2018 21:21	WG1098127
trans-1,3-Dichloropropene	U		0.000314	0.00118	1	04/14/2018 21:21	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000914	0.00294	1	04/14/2018 21:21	WG1098127
2,2-Dichloropropane	U		0.000328	0.00118	1	04/14/2018 21:21	WG1098127
Di-isopropyl ether	U		0.000291	0.00118	1	04/14/2018 21:21	WG1098127
Ethylbenzene	U		0.000349	0.00118	1	04/14/2018 21:21	WG1098127
Hexachloro-1,3-butadiene	U		0.000402	0.00118	1	04/14/2018 21:21	WG1098127
2-Hexanone	U		0.00161	0.0118	1	04/14/2018 21:21	WG1098127
n-Hexane	0.00183	J	0.000341	0.0118	1	04/14/2018 21:21	WG1098127
Iodomethane	U		0.00297	0.0118	1	04/14/2018 21:21	WG1098127
Isopropylbenzene	U		0.000286	0.00118	1	04/14/2018 21:21	WG1098127
p-Isopropyltoluene	U		0.000240	0.00118	1	04/14/2018 21:21	WG1098127
2-Butanone (MEK)	U		0.00550	0.0118	1	04/14/2018 21:21	WG1098127
Methylene Chloride	U		0.00118	0.00588	1	04/14/2018 21:21	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0118	1	04/14/2018 21:21	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 12:10

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000249	0.00118	1	04/14/2018 21:21	WG1098127
Naphthalene	U		0.00118	0.00588	1	04/14/2018 21:21	WG1098127
n-Propylbenzene	U		0.000242	0.00118	1	04/14/2018 21:21	WG1098127
Styrene	U		0.000275	0.00118	1	04/14/2018 21:21	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000310	0.00118	1	04/14/2018 21:21	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000429	0.00118	1	04/14/2018 21:21	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000429	0.00118	1	04/14/2018 21:21	WG1098127
Tetrachloroethene	0.000585	J	0.000324	0.00118	1	04/14/2018 21:21	WG1098127
Toluene	U		0.000510	0.00588	1	04/14/2018 21:21	WG1098127
1,2,3-Trichlorobenzene	U		0.000360	0.00118	1	04/14/2018 21:21	WG1098127
1,2,4-Trichlorobenzene	U		0.000456	0.00118	1	04/14/2018 21:21	WG1098127
1,1,1-Trichloroethane	U		0.000336	0.00118	1	04/14/2018 21:21	WG1098127
1,1,2-Trichloroethane	U		0.000326	0.00118	1	04/14/2018 21:21	WG1098127
Trichloroethene	U		0.000328	0.00118	1	04/14/2018 21:21	WG1098127
Trichlorofluoromethane	U		0.000449	0.00588	1	04/14/2018 21:21	WG1098127
1,2,3-Trichloropropane	U		0.000871	0.00294	1	04/14/2018 21:21	WG1098127
1,2,4-Trimethylbenzene	U		0.000248	0.00118	1	04/14/2018 21:21	WG1098127
1,2,3-Trimethylbenzene	U		0.000337	0.00118	1	04/14/2018 21:21	WG1098127
1,3,5-Trimethylbenzene	U		0.000313	0.00118	1	04/14/2018 21:21	WG1098127
Vinyl acetate	U		0.00281	0.0118	1	04/14/2018 21:21	WG1098127
Vinyl chloride	U		0.000342	0.00118	1	04/14/2018 21:21	WG1098127
Xylenes, Total	U		0.000820	0.00353	1	04/14/2018 21:21	WG1098127
(S) Toluene-d8	100			80.0-120		04/14/2018 21:21	WG1098127
(S) Dibromofluoromethane	97.6			74.0-131		04/14/2018 21:21	WG1098127
(S) 4-Bromofluorobenzene	96.1			64.0-132		04/14/2018 21:21	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 00:00

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	<u>JO</u>	1.05	25.0	1	04/13/2018 14:46	WG1097806
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	04/13/2018 14:46	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 14:46	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 14:46	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 14:46	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 14:46	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 14:46	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 14:46	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 14:46	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 14:46	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 14:46	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 14:46	WG1097806
Carbon tetrachloride	U	<u>JO</u>	0.159	0.500	1	04/13/2018 14:46	WG1097806
Chlorobenzene	U		0.140	0.500	1	04/13/2018 14:46	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 14:46	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 14:46	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 14:46	WG1097806
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/13/2018 14:46	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 14:46	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 14:46	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 14:46	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 14:46	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 14:46	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 14:46	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 14:46	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 14:46	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 14:46	WG1097806
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/13/2018 14:46	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 14:46	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 14:46	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 14:46	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 14:46	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 14:46	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 14:46	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 14:46	WG1097806
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/13/2018 14:46	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 14:46	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 14:46	WG1097806
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/13/2018 14:46	WG1097806
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/13/2018 14:46	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 14:46	WG1097806
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/13/2018 14:46	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 14:46	WG1097806
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/13/2018 14:46	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 14:46	WG1097806
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/13/2018 14:46	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 14:46	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 14:46	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 14:46	WG1097806
Styrene	U	<u>J4</u>	0.117	0.500	1	04/13/2018 14:46	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 14:46	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 14:46	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 00:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 14:46	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 14:46	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 14:46	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 14:46	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 14:46	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 14:46	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 14:46	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 14:46	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 14:46	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 14:46	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 14:46	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 14:46	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 14:46	WG1097806
Vinyl acetate	U		0.645	5.00	1	04/13/2018 14:46	WG1097806
Vinyl chloride	U		0.118	0.500	1	04/13/2018 14:46	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 14:46	WG1097806
(S) Toluene-d8	93.9			80.0-120		04/13/2018 14:46	WG1097806
(S) Dibromofluoromethane	102			76.0-123		04/13/2018 14:46	WG1097806
(S) 4-Bromofluorobenzene	118			80.0-120		04/13/2018 14:46	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0437	J	0.0139	0.0693	1	04/14/2018 21:42	WG1098127
Acrylonitrile	U		0.00248	0.0139	1	04/14/2018 21:42	WG1098127
Benzene	0.00459		0.000374	0.00139	1	04/14/2018 21:42	WG1098127
Bromobenzene	U		0.000394	0.00139	1	04/14/2018 21:42	WG1098127
Bromodichloromethane	U		0.000352	0.00139	1	04/14/2018 21:42	WG1098127
Bromochloromethane	U		0.000541	0.00693	1	04/14/2018 21:42	WG1098127
Bromoform	U		0.000588	0.00139	1	04/14/2018 21:42	WG1098127
Bromomethane	U		0.00186	0.00693	1	04/14/2018 21:42	WG1098127
n-Butylbenzene	U		0.000358	0.00139	1	04/14/2018 21:42	WG1098127
sec-Butylbenzene	U		0.000279	0.00139	1	04/14/2018 21:42	WG1098127
tert-Butylbenzene	U		0.000286	0.00139	1	04/14/2018 21:42	WG1098127
Carbon disulfide	0.000789	J	0.000306	0.00139	1	04/14/2018 21:42	WG1098127
Carbon tetrachloride	U		0.000455	0.00139	1	04/14/2018 21:42	WG1098127
Chlorobenzene	U		0.000294	0.00139	1	04/14/2018 21:42	WG1098127
Chlorodibromomethane	U		0.000517	0.00139	1	04/14/2018 21:42	WG1098127
Chloroethane	U		0.00131	0.00693	1	04/14/2018 21:42	WG1098127
Chloroform	U		0.000317	0.00693	1	04/14/2018 21:42	WG1098127
Chloromethane	U		0.000520	0.00347	1	04/14/2018 21:42	WG1098127
2-Chlorotoluene	U		0.000417	0.00139	1	04/14/2018 21:42	WG1098127
4-Chlorotoluene	U		0.000333	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00146	0.00693	1	04/14/2018 21:42	WG1098127
1,2-Dibromoethane	U		0.000475	0.00139	1	04/14/2018 21:42	WG1098127
Dibromomethane	U		0.000530	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dichlorobenzene	U		0.000423	0.00139	1	04/14/2018 21:42	WG1098127
1,3-Dichlorobenzene	U		0.000331	0.00139	1	04/14/2018 21:42	WG1098127
1,4-Dichlorobenzene	U		0.000313	0.00139	1	04/14/2018 21:42	WG1098127
Dichlorodifluoromethane	U		0.000988	0.00693	1	04/14/2018 21:42	WG1098127
1,1-Dichloroethane	0.000609	J	0.000276	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dichloroethane	U		0.000367	0.00139	1	04/14/2018 21:42	WG1098127
1,1-Dichloroethene	U		0.000420	0.00139	1	04/14/2018 21:42	WG1098127
cis-1,2-Dichloroethene	U		0.000326	0.00139	1	04/14/2018 21:42	WG1098127
trans-1,2-Dichloroethene	U		0.000366	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dichloropropane	U		0.000496	0.00139	1	04/14/2018 21:42	WG1098127
1,1-Dichloropropene	U		0.000439	0.00139	1	04/14/2018 21:42	WG1098127
1,3-Dichloropropane	U		0.000287	0.00139	1	04/14/2018 21:42	WG1098127
cis-1,3-Dichloropropene	U		0.000363	0.00139	1	04/14/2018 21:42	WG1098127
trans-1,3-Dichloropropene	U		0.000370	0.00139	1	04/14/2018 21:42	WG1098127
trans-1,4-Dichloro-2-butene	U		0.00108	0.00347	1	04/14/2018 21:42	WG1098127
2,2-Dichloropropane	U		0.000387	0.00139	1	04/14/2018 21:42	WG1098127
Di-isopropyl ether	U		0.000344	0.00139	1	04/14/2018 21:42	WG1098127
Ethylbenzene	U		0.000412	0.00139	1	04/14/2018 21:42	WG1098127
Hexachloro-1,3-butadiene	U		0.000474	0.00139	1	04/14/2018 21:42	WG1098127
2-Hexanone	U		0.00190	0.0139	1	04/14/2018 21:42	WG1098127
n-Hexane	0.00289	J	0.000402	0.0139	1	04/14/2018 21:42	WG1098127
Iodomethane	U		0.00351	0.0139	1	04/14/2018 21:42	WG1098127
Isopropylbenzene	U		0.000337	0.00139	1	04/14/2018 21:42	WG1098127
p-Isopropyltoluene	U		0.000283	0.00139	1	04/14/2018 21:42	WG1098127
2-Butanone (MEK)	U		0.00649	0.0139	1	04/14/2018 21:42	WG1098127
Methylene Chloride	U		0.00139	0.00693	1	04/14/2018 21:42	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00261	0.0139	1	04/14/2018 21:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 09:38

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000294	0.00139	1	04/14/2018 21:42	WG1098127
Naphthalene	U		0.00139	0.00693	1	04/14/2018 21:42	WG1098127
n-Propylbenzene	U		0.000286	0.00139	1	04/14/2018 21:42	WG1098127
Styrene	U		0.000324	0.00139	1	04/14/2018 21:42	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000366	0.00139	1	04/14/2018 21:42	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000506	0.00139	1	04/14/2018 21:42	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000506	0.00139	1	04/14/2018 21:42	WG1098127
Tetrachloroethene	0.000499	J	0.000383	0.00139	1	04/14/2018 21:42	WG1098127
Toluene	U		0.000602	0.00693	1	04/14/2018 21:42	WG1098127
1,2,3-Trichlorobenzene	U		0.000424	0.00139	1	04/14/2018 21:42	WG1098127
1,2,4-Trichlorobenzene	U		0.000538	0.00139	1	04/14/2018 21:42	WG1098127
1,1,1-Trichloroethane	0.000715	J	0.000396	0.00139	1	04/14/2018 21:42	WG1098127
1,1,2-Trichloroethane	U		0.000384	0.00139	1	04/14/2018 21:42	WG1098127
Trichloroethene	U		0.000387	0.00139	1	04/14/2018 21:42	WG1098127
Trichlorofluoromethane	U		0.000530	0.00693	1	04/14/2018 21:42	WG1098127
1,2,3-Trichloropropane	U		0.00103	0.00347	1	04/14/2018 21:42	WG1098127
1,2,4-Trimethylbenzene	U		0.000292	0.00139	1	04/14/2018 21:42	WG1098127
1,2,3-Trimethylbenzene	U		0.000398	0.00139	1	04/14/2018 21:42	WG1098127
1,3,5-Trimethylbenzene	U		0.000369	0.00139	1	04/14/2018 21:42	WG1098127
Vinyl acetate	U		0.00331	0.0139	1	04/14/2018 21:42	WG1098127
Vinyl chloride	U		0.000403	0.00139	1	04/14/2018 21:42	WG1098127
Xylenes, Total	U		0.000968	0.00416	1	04/14/2018 21:42	WG1098127
(S) Toluene-d8	99.3			80.0-120		04/14/2018 21:42	WG1098127
(S) Dibromofluoromethane	95.1			74.0-131		04/14/2018 21:42	WG1098127
(S) 4-Bromofluorobenzene	102			64.0-132		04/14/2018 21:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0142	J	0.0116	0.0581	1	04/15/2018 14:21	WG1098127
Acrylonitrile	U		0.00208	0.0116	1	04/15/2018 14:21	WG1098127
Benzene	U		0.000314	0.00116	1	04/15/2018 14:21	WG1098127
Bromobenzene	U		0.000330	0.00116	1	04/15/2018 14:21	WG1098127
Bromodichloromethane	U		0.000295	0.00116	1	04/15/2018 14:21	WG1098127
Bromochloromethane	U		0.000453	0.00581	1	04/15/2018 14:21	WG1098127
Bromoform	U		0.000493	0.00116	1	04/15/2018 14:21	WG1098127
Bromomethane	U		0.00156	0.00581	1	04/15/2018 14:21	WG1098127
n-Butylbenzene	U		0.000300	0.00116	1	04/15/2018 14:21	WG1098127
sec-Butylbenzene	U		0.000233	0.00116	1	04/15/2018 14:21	WG1098127
tert-Butylbenzene	U		0.000239	0.00116	1	04/15/2018 14:21	WG1098127
Carbon disulfide	0.000833	J	0.000257	0.00116	1	04/15/2018 14:21	WG1098127
Carbon tetrachloride	U		0.000381	0.00116	1	04/15/2018 14:21	WG1098127
Chlorobenzene	U		0.000246	0.00116	1	04/15/2018 14:21	WG1098127
Chlorodibromomethane	U		0.000433	0.00116	1	04/15/2018 14:21	WG1098127
Chloroethane	U		0.00110	0.00581	1	04/15/2018 14:21	WG1098127
Chloroform	U		0.000266	0.00581	1	04/15/2018 14:21	WG1098127
Chloromethane	U		0.000436	0.00290	1	04/15/2018 14:21	WG1098127
2-Chlorotoluene	U		0.000350	0.00116	1	04/15/2018 14:21	WG1098127
4-Chlorotoluene	U		0.000279	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00581	1	04/15/2018 14:21	WG1098127
1,2-Dibromoethane	U		0.000398	0.00116	1	04/15/2018 14:21	WG1098127
Dibromomethane	U		0.000444	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dichlorobenzene	U		0.000354	0.00116	1	04/15/2018 14:21	WG1098127
1,3-Dichlorobenzene	U		0.000278	0.00116	1	04/15/2018 14:21	WG1098127
1,4-Dichlorobenzene	U		0.000263	0.00116	1	04/15/2018 14:21	WG1098127
Dichlorodifluoromethane	U		0.000828	0.00581	1	04/15/2018 14:21	WG1098127
1,1-Dichloroethane	U		0.000231	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dichloroethane	U		0.000308	0.00116	1	04/15/2018 14:21	WG1098127
1,1-Dichloroethene	U		0.000352	0.00116	1	04/15/2018 14:21	WG1098127
cis-1,2-Dichloroethene	U		0.000273	0.00116	1	04/15/2018 14:21	WG1098127
trans-1,2-Dichloroethene	U		0.000307	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dichloropropane	U		0.000416	0.00116	1	04/15/2018 14:21	WG1098127
1,1-Dichloropropene	U		0.000368	0.00116	1	04/15/2018 14:21	WG1098127
1,3-Dichloropropane	U		0.000240	0.00116	1	04/15/2018 14:21	WG1098127
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	04/15/2018 14:21	WG1098127
trans-1,3-Dichloropropene	U		0.000310	0.00116	1	04/15/2018 14:21	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000904	0.00290	1	04/15/2018 14:21	WG1098127
2,2-Dichloropropane	U		0.000324	0.00116	1	04/15/2018 14:21	WG1098127
Di-isopropyl ether	U		0.000288	0.00116	1	04/15/2018 14:21	WG1098127
Ethylbenzene	U		0.000345	0.00116	1	04/15/2018 14:21	WG1098127
Hexachloro-1,3-butadiene	U		0.000397	0.00116	1	04/15/2018 14:21	WG1098127
2-Hexanone	U		0.00159	0.0116	1	04/15/2018 14:21	WG1098127
n-Hexane	U		0.000337	0.0116	1	04/15/2018 14:21	WG1098127
Iodomethane	U		0.00294	0.0116	1	04/15/2018 14:21	WG1098127
Isopropylbenzene	U		0.000282	0.00116	1	04/15/2018 14:21	WG1098127
p-Isopropyltoluene	0.000329	J	0.000237	0.00116	1	04/15/2018 14:21	WG1098127
2-Butanone (MEK)	U		0.00544	0.0116	1	04/15/2018 14:21	WG1098127
Methylene Chloride	U		0.00116	0.00581	1	04/15/2018 14:21	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	04/15/2018 14:21	WG1098127

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/11/18 10:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/15/2018 14:21	WG1098127
Naphthalene	U		0.00116	0.00581	1	04/15/2018 14:21	WG1098127
n-Propylbenzene	U		0.000239	0.00116	1	04/15/2018 14:21	WG1098127
Styrene	U		0.000272	0.00116	1	04/15/2018 14:21	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000307	0.00116	1	04/15/2018 14:21	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000424	0.00116	1	04/15/2018 14:21	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000424	0.00116	1	04/15/2018 14:21	WG1098127
Tetrachloroethene	U		0.000321	0.00116	1	04/15/2018 14:21	WG1098127
Toluene	U		0.000504	0.00581	1	04/15/2018 14:21	WG1098127
1,2,3-Trichlorobenzene	U		0.000355	0.00116	1	04/15/2018 14:21	WG1098127
1,2,4-Trichlorobenzene	U		0.000451	0.00116	1	04/15/2018 14:21	WG1098127
1,1,1-Trichloroethane	U		0.000332	0.00116	1	04/15/2018 14:21	WG1098127
1,1,2-Trichloroethane	U		0.000322	0.00116	1	04/15/2018 14:21	WG1098127
Trichloroethene	U		0.000324	0.00116	1	04/15/2018 14:21	WG1098127
Trichlorofluoromethane	U		0.000444	0.00581	1	04/15/2018 14:21	WG1098127
1,2,3-Trichloropropane	U		0.000861	0.00290	1	04/15/2018 14:21	WG1098127
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	04/15/2018 14:21	WG1098127
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	04/15/2018 14:21	WG1098127
1,3,5-Trimethylbenzene	U		0.000309	0.00116	1	04/15/2018 14:21	WG1098127
Vinyl acetate	U		0.00278	0.0116	1	04/15/2018 14:21	WG1098127
Vinyl chloride	U		0.000338	0.00116	1	04/15/2018 14:21	WG1098127
Xylenes, Total	U		0.000811	0.00348	1	04/15/2018 14:21	WG1098127
(S) Toluene-d8	104			80.0-120		04/15/2018 14:21	WG1098127
(S) Dibromofluoromethane	96.2			74.0-131		04/15/2018 14:21	WG1098127
(S) 4-Bromofluorobenzene	94.9			64.0-132		04/15/2018 14:21	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.8		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0114	0.0569	1	04/15/2018 14:42	WG1098127
Acrylonitrile	U		0.00204	0.0114	1	04/15/2018 14:42	WG1098127
Benzene	U		0.000307	0.00114	1	04/15/2018 14:42	WG1098127
Bromobenzene	U		0.000323	0.00114	1	04/15/2018 14:42	WG1098127
Bromodichloromethane	U		0.000289	0.00114	1	04/15/2018 14:42	WG1098127
Bromochloromethane	U		0.000444	0.00569	1	04/15/2018 14:42	WG1098127
Bromoform	U		0.000483	0.00114	1	04/15/2018 14:42	WG1098127
Bromomethane	U		0.00153	0.00569	1	04/15/2018 14:42	WG1098127
n-Butylbenzene	U		0.000294	0.00114	1	04/15/2018 14:42	WG1098127
sec-Butylbenzene	U		0.000229	0.00114	1	04/15/2018 14:42	WG1098127
tert-Butylbenzene	U		0.000235	0.00114	1	04/15/2018 14:42	WG1098127
Carbon disulfide	U		0.000252	0.00114	1	04/15/2018 14:42	WG1098127
Carbon tetrachloride	U		0.000373	0.00114	1	04/15/2018 14:42	WG1098127
Chlorobenzene	U		0.000241	0.00114	1	04/15/2018 14:42	WG1098127
Chlorodibromomethane	U		0.000425	0.00114	1	04/15/2018 14:42	WG1098127
Chloroethane	U		0.00108	0.00569	1	04/15/2018 14:42	WG1098127
Chloroform	U		0.000261	0.00569	1	04/15/2018 14:42	WG1098127
Chloromethane	U		0.000427	0.00285	1	04/15/2018 14:42	WG1098127
2-Chlorotoluene	U		0.000343	0.00114	1	04/15/2018 14:42	WG1098127
4-Chlorotoluene	U		0.000273	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00569	1	04/15/2018 14:42	WG1098127
1,2-Dibromoethane	U		0.000391	0.00114	1	04/15/2018 14:42	WG1098127
Dibromomethane	U		0.000435	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dichlorobenzene	U		0.000347	0.00114	1	04/15/2018 14:42	WG1098127
1,3-Dichlorobenzene	U		0.000272	0.00114	1	04/15/2018 14:42	WG1098127
1,4-Dichlorobenzene	U		0.000257	0.00114	1	04/15/2018 14:42	WG1098127
Dichlorodifluoromethane	U		0.000812	0.00569	1	04/15/2018 14:42	WG1098127
1,1-Dichloroethane	U		0.000227	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dichloroethane	U		0.000302	0.00114	1	04/15/2018 14:42	WG1098127
1,1-Dichloroethene	U		0.000345	0.00114	1	04/15/2018 14:42	WG1098127
cis-1,2-Dichloroethene	0.000547	J	0.000268	0.00114	1	04/15/2018 14:42	WG1098127
trans-1,2-Dichloroethene	U		0.000301	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dichloropropane	U		0.000408	0.00114	1	04/15/2018 14:42	WG1098127
1,1-Dichloropropene	U		0.000361	0.00114	1	04/15/2018 14:42	WG1098127
1,3-Dichloropropane	U		0.000236	0.00114	1	04/15/2018 14:42	WG1098127
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	04/15/2018 14:42	WG1098127
trans-1,3-Dichloropropene	U		0.000304	0.00114	1	04/15/2018 14:42	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000886	0.00285	1	04/15/2018 14:42	WG1098127
2,2-Dichloropropane	U		0.000318	0.00114	1	04/15/2018 14:42	WG1098127
Di-isopropyl ether	U		0.000282	0.00114	1	04/15/2018 14:42	WG1098127
Ethylbenzene	U		0.000338	0.00114	1	04/15/2018 14:42	WG1098127
Hexachloro-1,3-butadiene	U		0.000389	0.00114	1	04/15/2018 14:42	WG1098127
2-Hexanone	U		0.00156	0.0114	1	04/15/2018 14:42	WG1098127
n-Hexane	U		0.000330	0.0114	1	04/15/2018 14:42	WG1098127
Iodomethane	U		0.00288	0.0114	1	04/15/2018 14:42	WG1098127
Isopropylbenzene	U		0.000277	0.00114	1	04/15/2018 14:42	WG1098127
p-Isopropyltoluene	U		0.000232	0.00114	1	04/15/2018 14:42	WG1098127
2-Butanone (MEK)	U		0.00533	0.0114	1	04/15/2018 14:42	WG1098127
Methylene Chloride	U		0.00114	0.00569	1	04/15/2018 14:42	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	04/15/2018 14:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 10:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	04/15/2018 14:42	WG1098127
Naphthalene	U		0.00114	0.00569	1	04/15/2018 14:42	WG1098127
n-Propylbenzene	U		0.000235	0.00114	1	04/15/2018 14:42	WG1098127
Styrene	U		0.000266	0.00114	1	04/15/2018 14:42	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000301	0.00114	1	04/15/2018 14:42	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000416	0.00114	1	04/15/2018 14:42	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000416	0.00114	1	04/15/2018 14:42	WG1098127
Tetrachloroethene	U		0.000314	0.00114	1	04/15/2018 14:42	WG1098127
Toluene	U		0.000494	0.00569	1	04/15/2018 14:42	WG1098127
1,2,3-Trichlorobenzene	U		0.000348	0.00114	1	04/15/2018 14:42	WG1098127
1,2,4-Trichlorobenzene	U		0.000442	0.00114	1	04/15/2018 14:42	WG1098127
1,1,1-Trichloroethane	U		0.000326	0.00114	1	04/15/2018 14:42	WG1098127
1,1,2-Trichloroethane	U		0.000315	0.00114	1	04/15/2018 14:42	WG1098127
Trichloroethene	U		0.000318	0.00114	1	04/15/2018 14:42	WG1098127
Trichlorofluoromethane	U		0.000435	0.00569	1	04/15/2018 14:42	WG1098127
1,2,3-Trichloropropane	U		0.000844	0.00285	1	04/15/2018 14:42	WG1098127
1,2,4-Trimethylbenzene	U		0.000240	0.00114	1	04/15/2018 14:42	WG1098127
1,2,3-Trimethylbenzene	U		0.000327	0.00114	1	04/15/2018 14:42	WG1098127
1,3,5-Trimethylbenzene	U		0.000303	0.00114	1	04/15/2018 14:42	WG1098127
Vinyl acetate	U		0.00272	0.0114	1	04/15/2018 14:42	WG1098127
Vinyl chloride	0.000928	J	0.000331	0.00114	1	04/15/2018 14:42	WG1098127
Xylenes, Total	U		0.000795	0.00342	1	04/15/2018 14:42	WG1098127
(S) Toluene-d8	101			80.0-120		04/15/2018 14:42	WG1098127
(S) Dibromofluoromethane	95.0			74.0-131		04/15/2018 14:42	WG1098127
(S) 4-Bromofluorobenzene	96.4			64.0-132		04/15/2018 14:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.8		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0119	0.0596	1	04/15/2018 15:04	WG1098127
Acrylonitrile	U		0.00214	0.0119	1	04/15/2018 15:04	WG1098127
Benzene	U		0.000322	0.00119	1	04/15/2018 15:04	WG1098127
Bromobenzene	U		0.000339	0.00119	1	04/15/2018 15:04	WG1098127
Bromodichloromethane	U		0.000303	0.00119	1	04/15/2018 15:04	WG1098127
Bromochloromethane	U		0.000465	0.00596	1	04/15/2018 15:04	WG1098127
Bromoform	U		0.000506	0.00119	1	04/15/2018 15:04	WG1098127
Bromomethane	U		0.00160	0.00596	1	04/15/2018 15:04	WG1098127
n-Butylbenzene	U		0.000308	0.00119	1	04/15/2018 15:04	WG1098127
sec-Butylbenzene	U		0.000240	0.00119	1	04/15/2018 15:04	WG1098127
tert-Butylbenzene	U		0.000246	0.00119	1	04/15/2018 15:04	WG1098127
Carbon disulfide	U		0.000264	0.00119	1	04/15/2018 15:04	WG1098127
Carbon tetrachloride	U		0.000391	0.00119	1	04/15/2018 15:04	WG1098127
Chlorobenzene	U		0.000253	0.00119	1	04/15/2018 15:04	WG1098127
Chlorodibromomethane	U		0.000445	0.00119	1	04/15/2018 15:04	WG1098127
Chloroethane	U		0.00113	0.00596	1	04/15/2018 15:04	WG1098127
Chloroform	U		0.000273	0.00596	1	04/15/2018 15:04	WG1098127
Chloromethane	U		0.000447	0.00298	1	04/15/2018 15:04	WG1098127
2-Chlorotoluene	U		0.000359	0.00119	1	04/15/2018 15:04	WG1098127
4-Chlorotoluene	U		0.000286	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00125	0.00596	1	04/15/2018 15:04	WG1098127
1,2-Dibromoethane	U		0.000409	0.00119	1	04/15/2018 15:04	WG1098127
Dibromomethane	U		0.000456	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dichlorobenzene	U		0.000364	0.00119	1	04/15/2018 15:04	WG1098127
1,3-Dichlorobenzene	U		0.000285	0.00119	1	04/15/2018 15:04	WG1098127
1,4-Dichlorobenzene	U		0.000270	0.00119	1	04/15/2018 15:04	WG1098127
Dichlorodifluoromethane	U		0.000850	0.00596	1	04/15/2018 15:04	WG1098127
1,1-Dichloroethane	U		0.000237	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dichloroethane	U		0.000316	0.00119	1	04/15/2018 15:04	WG1098127
1,1-Dichloroethene	U		0.000361	0.00119	1	04/15/2018 15:04	WG1098127
cis-1,2-Dichloroethene	0.00203		0.000280	0.00119	1	04/15/2018 15:04	WG1098127
trans-1,2-Dichloroethene	U		0.000315	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dichloropropane	U		0.000427	0.00119	1	04/15/2018 15:04	WG1098127
1,1-Dichloropropene	U		0.000378	0.00119	1	04/15/2018 15:04	WG1098127
1,3-Dichloropropane	U		0.000247	0.00119	1	04/15/2018 15:04	WG1098127
cis-1,3-Dichloropropene	U		0.000313	0.00119	1	04/15/2018 15:04	WG1098127
trans-1,3-Dichloropropene	U		0.000318	0.00119	1	04/15/2018 15:04	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000928	0.00298	1	04/15/2018 15:04	WG1098127
2,2-Dichloropropane	U		0.000333	0.00119	1	04/15/2018 15:04	WG1098127
Di-isopropyl ether	U		0.000296	0.00119	1	04/15/2018 15:04	WG1098127
Ethylbenzene	U		0.000354	0.00119	1	04/15/2018 15:04	WG1098127
Hexachloro-1,3-butadiene	U		0.000408	0.00119	1	04/15/2018 15:04	WG1098127
2-Hexanone	U		0.00163	0.0119	1	04/15/2018 15:04	WG1098127
n-Hexane	0.00257	J	0.000346	0.0119	1	04/15/2018 15:04	WG1098127
Iodomethane	U		0.00302	0.0119	1	04/15/2018 15:04	WG1098127
Isopropylbenzene	U		0.000290	0.00119	1	04/15/2018 15:04	WG1098127
p-Isopropyltoluene	U		0.000243	0.00119	1	04/15/2018 15:04	WG1098127
2-Butanone (MEK)	U		0.00558	0.0119	1	04/15/2018 15:04	WG1098127
Methylene Chloride	U		0.00119	0.00596	1	04/15/2018 15:04	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00224	0.0119	1	04/15/2018 15:04	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 10:40

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000253	0.00119	1	04/15/2018 15:04	WG1098127
Naphthalene	U		0.00119	0.00596	1	04/15/2018 15:04	WG1098127
n-Propylbenzene	U		0.000246	0.00119	1	04/15/2018 15:04	WG1098127
Styrene	U		0.000279	0.00119	1	04/15/2018 15:04	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000315	0.00119	1	04/15/2018 15:04	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000435	0.00119	1	04/15/2018 15:04	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000435	0.00119	1	04/15/2018 15:04	WG1098127
Tetrachloroethene	U		0.000329	0.00119	1	04/15/2018 15:04	WG1098127
Toluene	U		0.000518	0.00596	1	04/15/2018 15:04	WG1098127
1,2,3-Trichlorobenzene	U		0.000365	0.00119	1	04/15/2018 15:04	WG1098127
1,2,4-Trichlorobenzene	U		0.000463	0.00119	1	04/15/2018 15:04	WG1098127
1,1,1-Trichloroethane	U		0.000341	0.00119	1	04/15/2018 15:04	WG1098127
1,1,2-Trichloroethane	U		0.000330	0.00119	1	04/15/2018 15:04	WG1098127
Trichloroethene	U		0.000333	0.00119	1	04/15/2018 15:04	WG1098127
Trichlorofluoromethane	U		0.000456	0.00596	1	04/15/2018 15:04	WG1098127
1,2,3-Trichloropropane	U		0.000884	0.00298	1	04/15/2018 15:04	WG1098127
1,2,4-Trimethylbenzene	U		0.000252	0.00119	1	04/15/2018 15:04	WG1098127
1,2,3-Trimethylbenzene	U		0.000342	0.00119	1	04/15/2018 15:04	WG1098127
1,3,5-Trimethylbenzene	U		0.000317	0.00119	1	04/15/2018 15:04	WG1098127
Vinyl acetate	U		0.00285	0.0119	1	04/15/2018 15:04	WG1098127
Vinyl chloride	0.000521	J	0.000347	0.00119	1	04/15/2018 15:04	WG1098127
Xylenes, Total	U		0.000833	0.00358	1	04/15/2018 15:04	WG1098127
(S) Toluene-d8	103			80.0-120		04/15/2018 15:04	WG1098127
(S) Dibromofluoromethane	97.1			74.0-131		04/15/2018 15:04	WG1098127
(S) 4-Bromofluorobenzene	95.7			64.0-132		04/15/2018 15:04	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.3		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0115	0.0573	1	04/15/2018 15:47	WG1098127
Acrylonitrile	U		0.00205	0.0115	1	04/15/2018 15:47	WG1098127
Benzene	U		0.000309	0.00115	1	04/15/2018 15:47	WG1098127
Bromobenzene	U		0.000325	0.00115	1	04/15/2018 15:47	WG1098127
Bromodichloromethane	U		0.000291	0.00115	1	04/15/2018 15:47	WG1098127
Bromochloromethane	U		0.000447	0.00573	1	04/15/2018 15:47	WG1098127
Bromoform	U		0.000486	0.00115	1	04/15/2018 15:47	WG1098127
Bromomethane	U		0.00153	0.00573	1	04/15/2018 15:47	WG1098127
n-Butylbenzene	U		0.000295	0.00115	1	04/15/2018 15:47	WG1098127
sec-Butylbenzene	U		0.000230	0.00115	1	04/15/2018 15:47	WG1098127
tert-Butylbenzene	U		0.000236	0.00115	1	04/15/2018 15:47	WG1098127
Carbon disulfide	U		0.000253	0.00115	1	04/15/2018 15:47	WG1098127
Carbon tetrachloride	U		0.000376	0.00115	1	04/15/2018 15:47	WG1098127
Chlorobenzene	U		0.000243	0.00115	1	04/15/2018 15:47	WG1098127
Chlorodibromomethane	U		0.000427	0.00115	1	04/15/2018 15:47	WG1098127
Chloroethane	U		0.00108	0.00573	1	04/15/2018 15:47	WG1098127
Chloroform	U		0.000262	0.00573	1	04/15/2018 15:47	WG1098127
Chloromethane	U		0.000429	0.00286	1	04/15/2018 15:47	WG1098127
2-Chlorotoluene	U		0.000345	0.00115	1	04/15/2018 15:47	WG1098127
4-Chlorotoluene	U		0.000275	0.00115	1	04/15/2018 15:47	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00573	1	04/15/2018 15:47	WG1098127
1,2-Dibromoethane	U		0.000393	0.00115	1	04/15/2018 15:47	WG1098127
Dibromomethane	U		0.000438	0.00115	1	04/15/2018 15:47	WG1098127
1,2-Dichlorobenzene	U		0.000349	0.00115	1	04/15/2018 15:47	WG1098127
1,3-Dichlorobenzene	U		0.000274	0.00115	1	04/15/2018 15:47	WG1098127
1,4-Dichlorobenzene	U		0.000259	0.00115	1	04/15/2018 15:47	WG1098127
Dichlorodifluoromethane	U		0.000817	0.00573	1	04/15/2018 15:47	WG1098127
1,1-Dichloroethane	U		0.000228	0.00115	1	04/15/2018 15:47	WG1098127
1,2-Dichloroethane	U		0.000304	0.00115	1	04/15/2018 15:47	WG1098127
1,1-Dichloroethene	0.000867	J	0.000347	0.00115	1	04/15/2018 15:47	WG1098127
cis-1,2-Dichloroethene	0.207		0.00673	0.0286	25	04/17/2018 14:55	WG1098127
trans-1,2-Dichloroethene	0.00117		0.000302	0.00115	1	04/15/2018 15:47	WG1098127
1,2-Dichloropropane	U		0.000410	0.00115	1	04/15/2018 15:47	WG1098127
1,1-Dichloropropene	U		0.000363	0.00115	1	04/15/2018 15:47	WG1098127
1,3-Dichloropropane	U		0.000237	0.00115	1	04/15/2018 15:47	WG1098127
cis-1,3-Dichloropropene	U		0.000300	0.00115	1	04/15/2018 15:47	WG1098127
trans-1,3-Dichloropropene	U		0.000306	0.00115	1	04/15/2018 15:47	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000891	0.00286	1	04/15/2018 15:47	WG1098127
2,2-Dichloropropane	U		0.000320	0.00115	1	04/15/2018 15:47	WG1098127
Di-isopropyl ether	U		0.000284	0.00115	1	04/15/2018 15:47	WG1098127
Ethylbenzene	U		0.000340	0.00115	1	04/15/2018 15:47	WG1098127
Hexachloro-1,3-butadiene	U		0.000392	0.00115	1	04/15/2018 15:47	WG1098127
2-Hexanone	U		0.00157	0.0115	1	04/15/2018 15:47	WG1098127
n-Hexane	0.000594	J	0.000332	0.0115	1	04/15/2018 15:47	WG1098127
Iodomethane	U		0.00290	0.0115	1	04/15/2018 15:47	WG1098127
Isopropylbenzene	U		0.000278	0.00115	1	04/15/2018 15:47	WG1098127
p-Isopropyltoluene	U		0.000234	0.00115	1	04/15/2018 15:47	WG1098127
2-Butanone (MEK)	U		0.00536	0.0115	1	04/15/2018 15:47	WG1098127
Methylene Chloride	U		0.00115	0.00573	1	04/15/2018 15:47	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00215	0.0115	1	04/15/2018 15:47	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 10:55

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	04/15/2018 15:47	WG1098127
Naphthalene	U		0.00115	0.00573	1	04/15/2018 15:47	WG1098127
n-Propylbenzene	U		0.000236	0.00115	1	04/15/2018 15:47	WG1098127
Styrene	U		0.000268	0.00115	1	04/15/2018 15:47	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000302	0.00115	1	04/15/2018 15:47	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000418	0.00115	1	04/15/2018 15:47	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000418	0.00115	1	04/15/2018 15:47	WG1098127
Tetrachloroethene	0.00589		0.000316	0.00115	1	04/15/2018 15:47	WG1098127
Toluene	U		0.000497	0.00573	1	04/15/2018 15:47	WG1098127
1,2,3-Trichlorobenzene	U		0.000350	0.00115	1	04/15/2018 15:47	WG1098127
1,2,4-Trichlorobenzene	U		0.000444	0.00115	1	04/15/2018 15:47	WG1098127
1,1,1-Trichloroethane	U		0.000328	0.00115	1	04/15/2018 15:47	WG1098127
1,1,2-Trichloroethane	U		0.000317	0.00115	1	04/15/2018 15:47	WG1098127
Trichloroethene	0.00729		0.000320	0.00115	1	04/15/2018 15:47	WG1098127
Trichlorofluoromethane	U		0.000438	0.00573	1	04/15/2018 15:47	WG1098127
1,2,3-Trichloropropane	U		0.000849	0.00286	1	04/15/2018 15:47	WG1098127
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/15/2018 15:47	WG1098127
1,2,3-Trimethylbenzene	U		0.000329	0.00115	1	04/15/2018 15:47	WG1098127
1,3,5-Trimethylbenzene	U		0.000305	0.00115	1	04/15/2018 15:47	WG1098127
Vinyl acetate	U		0.00274	0.0115	1	04/15/2018 15:47	WG1098127
Vinyl chloride	0.0227		0.000333	0.00115	1	04/15/2018 15:47	WG1098127
Xylenes, Total	U		0.000799	0.00344	1	04/15/2018 15:47	WG1098127
(S) Toluene-d8	112			80.0-120		04/17/2018 14:55	WG1098127
(S) Toluene-d8	102			80.0-120		04/15/2018 15:47	WG1098127
(S) Dibromofluoromethane	101			74.0-131		04/17/2018 14:55	WG1098127
(S) Dibromofluoromethane	98.3			74.0-131		04/15/2018 15:47	WG1098127
(S) 4-Bromofluorobenzene	96.2			64.0-132		04/15/2018 15:47	WG1098127
(S) 4-Bromofluorobenzene	99.3			64.0-132		04/17/2018 14:55	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0111	0.0556	1	04/15/2018 16:08	WG1098553
Acrylonitrile	U		0.00199	0.0111	1	04/15/2018 16:08	WG1098553
Benzene	U		0.000300	0.00111	1	04/15/2018 16:08	WG1098553
Bromobenzene	U		0.000316	0.00111	1	04/15/2018 16:08	WG1098553
Bromodichloromethane	U		0.000282	0.00111	1	04/15/2018 16:08	WG1098553
Bromochloromethane	U		0.000433	0.00556	1	04/15/2018 16:08	WG1098553
Bromoform	U		0.000471	0.00111	1	04/15/2018 16:08	WG1098553
Bromomethane	U		0.00149	0.00556	1	04/15/2018 16:08	WG1098553
n-Butylbenzene	U		0.000287	0.00111	1	04/15/2018 16:08	WG1098553
sec-Butylbenzene	U		0.000223	0.00111	1	04/15/2018 16:08	WG1098553
tert-Butylbenzene	U		0.000229	0.00111	1	04/15/2018 16:08	WG1098553
Carbon disulfide	0.000323	J	0.000246	0.00111	1	04/15/2018 16:08	WG1098553
Carbon tetrachloride	U		0.000365	0.00111	1	04/15/2018 16:08	WG1098553
Chlorobenzene	U		0.000236	0.00111	1	04/15/2018 16:08	WG1098553
Chlorodibromomethane	U		0.000415	0.00111	1	04/15/2018 16:08	WG1098553
Chloroethane	U		0.00105	0.00556	1	04/15/2018 16:08	WG1098553
Chloroform	U		0.000255	0.00556	1	04/15/2018 16:08	WG1098553
Chloromethane	U		0.000417	0.00278	1	04/15/2018 16:08	WG1098553
2-Chlorotoluene	U		0.000335	0.00111	1	04/15/2018 16:08	WG1098553
4-Chlorotoluene	U		0.000267	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00556	1	04/15/2018 16:08	WG1098553
1,2-Dibromoethane	U		0.000381	0.00111	1	04/15/2018 16:08	WG1098553
Dibromomethane	U		0.000425	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dichlorobenzene	U		0.000339	0.00111	1	04/15/2018 16:08	WG1098553
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/15/2018 16:08	WG1098553
1,4-Dichlorobenzene	U		0.000251	0.00111	1	04/15/2018 16:08	WG1098553
Dichlorodifluoromethane	U		0.000792	0.00556	1	04/15/2018 16:08	WG1098553
1,1-Dichloroethane	U		0.000221	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dichloroethane	U		0.000295	0.00111	1	04/15/2018 16:08	WG1098553
1,1-Dichloroethene	U		0.000337	0.00111	1	04/15/2018 16:08	WG1098553
cis-1,2-Dichloroethene	0.00285		0.000261	0.00111	1	04/15/2018 16:08	WG1098553
trans-1,2-Dichloroethene	0.00136		0.000293	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dichloropropane	U		0.000398	0.00111	1	04/15/2018 16:08	WG1098553
1,1-Dichloropropene	U		0.000352	0.00111	1	04/15/2018 16:08	WG1098553
1,3-Dichloropropane	U		0.000230	0.00111	1	04/15/2018 16:08	WG1098553
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	04/15/2018 16:08	WG1098553
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/15/2018 16:08	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000865	0.00278	1	04/15/2018 16:08	WG1098553
2,2-Dichloropropane	U		0.000310	0.00111	1	04/15/2018 16:08	WG1098553
Di-isopropyl ether	U		0.000276	0.00111	1	04/15/2018 16:08	WG1098553
Ethylbenzene	U		0.000330	0.00111	1	04/15/2018 16:08	WG1098553
Hexachloro-1,3-butadiene	U		0.000380	0.00111	1	04/15/2018 16:08	WG1098553
2-Hexanone	U		0.00152	0.0111	1	04/15/2018 16:08	WG1098553
n-Hexane	U		0.000322	0.0111	1	04/15/2018 16:08	WG1098553
Iodomethane	U		0.00281	0.0111	1	04/15/2018 16:08	WG1098553
Isopropylbenzene	U		0.000270	0.00111	1	04/15/2018 16:08	WG1098553
p-Isopropyltoluene	U		0.000227	0.00111	1	04/15/2018 16:08	WG1098553
2-Butanone (MEK)	U		0.00520	0.0111	1	04/15/2018 16:08	WG1098553
Methylene Chloride	U		0.00111	0.00556	1	04/15/2018 16:08	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/15/2018 16:08	WG1098553

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 04/11/18 11:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/15/2018 16:08	WG1098553
Naphthalene	U		0.0011	0.00556	1	04/15/2018 16:08	WG1098553
n-Propylbenzene	U		0.000229	0.0011	1	04/15/2018 16:08	WG1098553
Styrene	U		0.000260	0.0011	1	04/15/2018 16:08	WG1098553
1,1,1-Tetrachloroethane	U		0.000293	0.0011	1	04/15/2018 16:08	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/15/2018 16:08	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/15/2018 16:08	WG1098553
Tetrachloroethene	0.00270		0.000307	0.0011	1	04/15/2018 16:08	WG1098553
Toluene	U		0.000482	0.00556	1	04/15/2018 16:08	WG1098553
1,2,3-Trichlorobenzene	U		0.000340	0.0011	1	04/15/2018 16:08	WG1098553
1,2,4-Trichlorobenzene	U		0.000431	0.0011	1	04/15/2018 16:08	WG1098553
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/15/2018 16:08	WG1098553
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/15/2018 16:08	WG1098553
Trichloroethene	0.000443	J	0.000310	0.0011	1	04/15/2018 16:08	WG1098553
Trichlorofluoromethane	U		0.000425	0.00556	1	04/15/2018 16:08	WG1098553
1,2,3-Trichloropropane	U		0.000824	0.00278	1	04/15/2018 16:08	WG1098553
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/15/2018 16:08	WG1098553
1,2,3-Trimethylbenzene	U		0.000319	0.0011	1	04/15/2018 16:08	WG1098553
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/15/2018 16:08	WG1098553
Vinyl acetate	U		0.00266	0.011	1	04/15/2018 16:08	WG1098553
Vinyl chloride	0.656		0.00809	0.0278	25	04/17/2018 13:28	WG1098553
Xylenes, Total	U		0.000776	0.00333	1	04/15/2018 16:08	WG1098553
(S) Toluene-d8	113			80.0-120		04/17/2018 13:28	WG1098553
(S) Toluene-d8	102			80.0-120		04/15/2018 16:08	WG1098553
(S) Dibromofluoromethane	99.3			74.0-131		04/15/2018 16:08	WG1098553
(S) Dibromofluoromethane	99.0			74.0-131		04/17/2018 13:28	WG1098553
(S) 4-Bromofluorobenzene	99.2			64.0-132		04/15/2018 16:08	WG1098553
(S) 4-Bromofluorobenzene	99.4			64.0-132		04/17/2018 13:28	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.9		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0110	0.0550	1	04/15/2018 16:29	WG1098553
Acrylonitrile	U		0.00197	0.0110	1	04/15/2018 16:29	WG1098553
Benzene	U		0.000297	0.00110	1	04/15/2018 16:29	WG1098553
Bromobenzene	U		0.000312	0.00110	1	04/15/2018 16:29	WG1098553
Bromodichloromethane	U		0.000279	0.00110	1	04/15/2018 16:29	WG1098553
Bromochloromethane	U		0.000429	0.00550	1	04/15/2018 16:29	WG1098553
Bromoform	U		0.000466	0.00110	1	04/15/2018 16:29	WG1098553
Bromomethane	U		0.00147	0.00550	1	04/15/2018 16:29	WG1098553
n-Butylbenzene	U		0.000284	0.00110	1	04/15/2018 16:29	WG1098553
sec-Butylbenzene	U		0.000221	0.00110	1	04/15/2018 16:29	WG1098553
tert-Butylbenzene	U		0.000227	0.00110	1	04/15/2018 16:29	WG1098553
Carbon disulfide	0.000487	J	0.000243	0.00110	1	04/15/2018 16:29	WG1098553
Carbon tetrachloride	U		0.000361	0.00110	1	04/15/2018 16:29	WG1098553
Chlorobenzene	U		0.000233	0.00110	1	04/15/2018 16:29	WG1098553
Chlorodibromomethane	U		0.000410	0.00110	1	04/15/2018 16:29	WG1098553
Chloroethane	U		0.00104	0.00550	1	04/15/2018 16:29	WG1098553
Chloroform	U		0.000252	0.00550	1	04/15/2018 16:29	WG1098553
Chloromethane	U		0.000413	0.00275	1	04/15/2018 16:29	WG1098553
2-Chlorotoluene	U		0.000331	0.00110	1	04/15/2018 16:29	WG1098553
4-Chlorotoluene	U		0.000264	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00550	1	04/15/2018 16:29	WG1098553
1,2-Dibromoethane	U		0.000377	0.00110	1	04/15/2018 16:29	WG1098553
Dibromomethane	U		0.000420	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dichlorobenzene	U		0.000336	0.00110	1	04/15/2018 16:29	WG1098553
1,3-Dichlorobenzene	U		0.000263	0.00110	1	04/15/2018 16:29	WG1098553
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/15/2018 16:29	WG1098553
Dichlorodifluoromethane	U		0.000784	0.00550	1	04/15/2018 16:29	WG1098553
1,1-Dichloroethane	U		0.000219	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dichloroethane	U		0.000292	0.00110	1	04/15/2018 16:29	WG1098553
1,1-Dichloroethene	U		0.000333	0.00110	1	04/15/2018 16:29	WG1098553
cis-1,2-Dichloroethene	0.0182		0.000259	0.00110	1	04/15/2018 16:29	WG1098553
trans-1,2-Dichloroethene	U		0.000290	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dichloropropane	U		0.000394	0.00110	1	04/15/2018 16:29	WG1098553
1,1-Dichloropropene	U		0.000349	0.00110	1	04/15/2018 16:29	WG1098553
1,3-Dichloropropane	U		0.000228	0.00110	1	04/15/2018 16:29	WG1098553
cis-1,3-Dichloropropene	U		0.000288	0.00110	1	04/15/2018 16:29	WG1098553
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	04/15/2018 16:29	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000856	0.00275	1	04/15/2018 16:29	WG1098553
2,2-Dichloropropane	U		0.000307	0.00110	1	04/15/2018 16:29	WG1098553
Di-isopropyl ether	U		0.000273	0.00110	1	04/15/2018 16:29	WG1098553
Ethylbenzene	U		0.000327	0.00110	1	04/15/2018 16:29	WG1098553
Hexachloro-1,3-butadiene	U		0.000376	0.00110	1	04/15/2018 16:29	WG1098553
2-Hexanone	U		0.00151	0.0110	1	04/15/2018 16:29	WG1098553
n-Hexane	U		0.000319	0.0110	1	04/15/2018 16:29	WG1098553
Iodomethane	U		0.00278	0.0110	1	04/15/2018 16:29	WG1098553
Isopropylbenzene	U		0.000267	0.00110	1	04/15/2018 16:29	WG1098553
p-Isopropyltoluene	U		0.000224	0.00110	1	04/15/2018 16:29	WG1098553
2-Butanone (MEK)	U		0.00515	0.0110	1	04/15/2018 16:29	WG1098553
Methylene Chloride	U		0.00110	0.00550	1	04/15/2018 16:29	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/15/2018 16:29	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 12:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	04/15/2018 16:29	WG1098553
Naphthalene	U		0.00110	0.00550	1	04/15/2018 16:29	WG1098553
n-Propylbenzene	U		0.000227	0.00110	1	04/15/2018 16:29	WG1098553
Styrene	U		0.000257	0.00110	1	04/15/2018 16:29	WG1098553
1,1,1,2-Tetrachloroethane	U		0.000290	0.00110	1	04/15/2018 16:29	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000402	0.00110	1	04/15/2018 16:29	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000402	0.00110	1	04/15/2018 16:29	WG1098553
Tetrachloroethene	0.00164		0.000304	0.00110	1	04/15/2018 16:29	WG1098553
Toluene	U		0.000477	0.00550	1	04/15/2018 16:29	WG1098553
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	04/15/2018 16:29	WG1098553
1,2,4-Trichlorobenzene	U		0.000427	0.00110	1	04/15/2018 16:29	WG1098553
1,1,1-Trichloroethane	U		0.000315	0.00110	1	04/15/2018 16:29	WG1098553
1,1,2-Trichloroethane	U		0.000305	0.00110	1	04/15/2018 16:29	WG1098553
Trichloroethene	0.00106	J	0.000307	0.00110	1	04/15/2018 16:29	WG1098553
Trichlorofluoromethane	U		0.000420	0.00550	1	04/15/2018 16:29	WG1098553
1,2,3-Trichloropropane	U		0.000815	0.00275	1	04/15/2018 16:29	WG1098553
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	04/15/2018 16:29	WG1098553
1,2,3-Trimethylbenzene	U		0.000316	0.00110	1	04/15/2018 16:29	WG1098553
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/15/2018 16:29	WG1098553
Vinyl acetate	U		0.00263	0.0110	1	04/15/2018 16:29	WG1098553
Vinyl chloride	0.0137		0.000320	0.00110	1	04/15/2018 16:29	WG1098553
Xylenes, Total	U		0.000768	0.00330	1	04/15/2018 16:29	WG1098553
(S) Toluene-d8	104			80.0-120		04/15/2018 16:29	WG1098553
(S) Dibromofluoromethane	99.0			74.0-131		04/15/2018 16:29	WG1098553
(S) 4-Bromofluorobenzene	98.2			64.0-132		04/15/2018 16:29	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0114	0.0568	1	04/15/2018 16:50	WG1098553
Acrylonitrile	U		0.00203	0.0114	1	04/15/2018 16:50	WG1098553
Benzene	U		0.000307	0.00114	1	04/15/2018 16:50	WG1098553
Bromobenzene	U		0.000323	0.00114	1	04/15/2018 16:50	WG1098553
Bromodichloromethane	U		0.000289	0.00114	1	04/15/2018 16:50	WG1098553
Bromochloromethane	U		0.000443	0.00568	1	04/15/2018 16:50	WG1098553
Bromoform	U		0.000482	0.00114	1	04/15/2018 16:50	WG1098553
Bromomethane	U		0.00152	0.00568	1	04/15/2018 16:50	WG1098553
n-Butylbenzene	U		0.000293	0.00114	1	04/15/2018 16:50	WG1098553
sec-Butylbenzene	U		0.000228	0.00114	1	04/15/2018 16:50	WG1098553
tert-Butylbenzene	U		0.000234	0.00114	1	04/15/2018 16:50	WG1098553
Carbon disulfide	0.000283	J	0.000251	0.00114	1	04/15/2018 16:50	WG1098553
Carbon tetrachloride	U		0.000373	0.00114	1	04/15/2018 16:50	WG1098553
Chlorobenzene	U		0.000241	0.00114	1	04/15/2018 16:50	WG1098553
Chlorodibromomethane	U		0.000424	0.00114	1	04/15/2018 16:50	WG1098553
Chloroethane	U		0.00107	0.00568	1	04/15/2018 16:50	WG1098553
Chloroform	U		0.000260	0.00568	1	04/15/2018 16:50	WG1098553
Chloromethane	U		0.000426	0.00284	1	04/15/2018 16:50	WG1098553
2-Chlorotoluene	U		0.000342	0.00114	1	04/15/2018 16:50	WG1098553
4-Chlorotoluene	U		0.000273	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00568	1	04/15/2018 16:50	WG1098553
1,2-Dibromoethane	U		0.000390	0.00114	1	04/15/2018 16:50	WG1098553
Dibromomethane	U		0.000434	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dichlorobenzene	U		0.000347	0.00114	1	04/15/2018 16:50	WG1098553
1,3-Dichlorobenzene	U		0.000272	0.00114	1	04/15/2018 16:50	WG1098553
1,4-Dichlorobenzene	U		0.000257	0.00114	1	04/15/2018 16:50	WG1098553
Dichlorodifluoromethane	U		0.000810	0.00568	1	04/15/2018 16:50	WG1098553
1,1-Dichloroethane	U		0.000226	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dichloroethane	U		0.000301	0.00114	1	04/15/2018 16:50	WG1098553
1,1-Dichloroethene	U		0.000344	0.00114	1	04/15/2018 16:50	WG1098553
cis-1,2-Dichloroethene	0.00361		0.000267	0.00114	1	04/15/2018 16:50	WG1098553
trans-1,2-Dichloroethene	U		0.000300	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dichloropropane	U		0.000407	0.00114	1	04/15/2018 16:50	WG1098553
1,1-Dichloropropene	U		0.000360	0.00114	1	04/15/2018 16:50	WG1098553
1,3-Dichloropropane	U		0.000235	0.00114	1	04/15/2018 16:50	WG1098553
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	04/15/2018 16:50	WG1098553
trans-1,3-Dichloropropene	U		0.000303	0.00114	1	04/15/2018 16:50	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000884	0.00284	1	04/15/2018 16:50	WG1098553
2,2-Dichloropropane	U		0.000317	0.00114	1	04/15/2018 16:50	WG1098553
Di-isopropyl ether	U		0.000282	0.00114	1	04/15/2018 16:50	WG1098553
Ethylbenzene	U		0.000337	0.00114	1	04/15/2018 16:50	WG1098553
Hexachloro-1,3-butadiene	U		0.000389	0.00114	1	04/15/2018 16:50	WG1098553
2-Hexanone	U		0.00156	0.0114	1	04/15/2018 16:50	WG1098553
n-Hexane	U		0.000330	0.0114	1	04/15/2018 16:50	WG1098553
Iodomethane	U		0.00287	0.0114	1	04/15/2018 16:50	WG1098553
Isopropylbenzene	U		0.000276	0.00114	1	04/15/2018 16:50	WG1098553
p-Isopropyltoluene	U		0.000232	0.00114	1	04/15/2018 16:50	WG1098553
2-Butanone (MEK)	U		0.00532	0.0114	1	04/15/2018 16:50	WG1098553
Methylene Chloride	U		0.00114	0.00568	1	04/15/2018 16:50	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	04/15/2018 16:50	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 13:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	04/15/2018 16:50	WG1098553
Naphthalene	U		0.00114	0.00568	1	04/15/2018 16:50	WG1098553
n-Propylbenzene	U		0.000234	0.00114	1	04/15/2018 16:50	WG1098553
Styrene	U		0.000266	0.00114	1	04/15/2018 16:50	WG1098553
1,1,1,2-Tetrachloroethane	U		0.000300	0.00114	1	04/15/2018 16:50	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000415	0.00114	1	04/15/2018 16:50	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000415	0.00114	1	04/15/2018 16:50	WG1098553
Tetrachloroethene	U		0.000314	0.00114	1	04/15/2018 16:50	WG1098553
Toluene	U		0.000493	0.00568	1	04/15/2018 16:50	WG1098553
1,2,3-Trichlorobenzene	U		0.000348	0.00114	1	04/15/2018 16:50	WG1098553
1,2,4-Trichlorobenzene	U		0.000441	0.00114	1	04/15/2018 16:50	WG1098553
1,1,1-Trichloroethane	U		0.000325	0.00114	1	04/15/2018 16:50	WG1098553
1,1,2-Trichloroethane	U		0.000315	0.00114	1	04/15/2018 16:50	WG1098553
Trichloroethene	U		0.000317	0.00114	1	04/15/2018 16:50	WG1098553
Trichlorofluoromethane	U		0.000434	0.00568	1	04/15/2018 16:50	WG1098553
1,2,3-Trichloropropane	U		0.000842	0.00284	1	04/15/2018 16:50	WG1098553
1,2,4-Trimethylbenzene	U		0.000240	0.00114	1	04/15/2018 16:50	WG1098553
1,2,3-Trimethylbenzene	U		0.000326	0.00114	1	04/15/2018 16:50	WG1098553
1,3,5-Trimethylbenzene	U		0.000302	0.00114	1	04/15/2018 16:50	WG1098553
Vinyl acetate	U		0.00272	0.0114	1	04/15/2018 16:50	WG1098553
Vinyl chloride	0.00320		0.000331	0.00114	1	04/15/2018 16:50	WG1098553
Xylenes, Total	U		0.000793	0.00341	1	04/15/2018 16:50	WG1098553
<i>(S) Toluene-d8</i>	104			80.0-120		04/15/2018 16:50	WG1098553
<i>(S) Dibromofluoromethane</i>	94.2			74.0-131		04/15/2018 16:50	WG1098553
<i>(S) 4-Bromofluorobenzene</i>	97.2			64.0-132		04/15/2018 16:50	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0560	1	04/15/2018 17:12	WG1098553
Acrylonitrile	U		0.00200	0.0112	1	04/15/2018 17:12	WG1098553
Benzene	U		0.000302	0.00112	1	04/15/2018 17:12	WG1098553
Bromobenzene	U		0.000318	0.00112	1	04/15/2018 17:12	WG1098553
Bromodichloromethane	U		0.000284	0.00112	1	04/15/2018 17:12	WG1098553
Bromochloromethane	U		0.000436	0.00560	1	04/15/2018 17:12	WG1098553
Bromoform	U		0.000474	0.00112	1	04/15/2018 17:12	WG1098553
Bromomethane	U		0.00150	0.00560	1	04/15/2018 17:12	WG1098553
n-Butylbenzene	U		0.000289	0.00112	1	04/15/2018 17:12	WG1098553
sec-Butylbenzene	U		0.000225	0.00112	1	04/15/2018 17:12	WG1098553
tert-Butylbenzene	U		0.000231	0.00112	1	04/15/2018 17:12	WG1098553
Carbon disulfide	U		0.000247	0.00112	1	04/15/2018 17:12	WG1098553
Carbon tetrachloride	U		0.000367	0.00112	1	04/15/2018 17:12	WG1098553
Chlorobenzene	U		0.000237	0.00112	1	04/15/2018 17:12	WG1098553
Chlorodibromomethane	U		0.000417	0.00112	1	04/15/2018 17:12	WG1098553
Chloroethane	U		0.00106	0.00560	1	04/15/2018 17:12	WG1098553
Chloroform	U		0.000256	0.00560	1	04/15/2018 17:12	WG1098553
Chloromethane	U		0.000420	0.00280	1	04/15/2018 17:12	WG1098553
2-Chlorotoluene	U		0.000337	0.00112	1	04/15/2018 17:12	WG1098553
4-Chlorotoluene	U		0.000269	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00560	1	04/15/2018 17:12	WG1098553
1,2-Dibromoethane	U		0.000384	0.00112	1	04/15/2018 17:12	WG1098553
Dibromomethane	U		0.000427	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dichlorobenzene	U		0.000341	0.00112	1	04/15/2018 17:12	WG1098553
1,3-Dichlorobenzene	U		0.000267	0.00112	1	04/15/2018 17:12	WG1098553
1,4-Dichlorobenzene	U		0.000253	0.00112	1	04/15/2018 17:12	WG1098553
Dichlorodifluoromethane	U		0.000798	0.00560	1	04/15/2018 17:12	WG1098553
1,1-Dichloroethane	U		0.000223	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dichloroethane	U		0.000297	0.00112	1	04/15/2018 17:12	WG1098553
1,1-Dichloroethene	U		0.000339	0.00112	1	04/15/2018 17:12	WG1098553
cis-1,2-Dichloroethene	0.00256		0.000263	0.00112	1	04/15/2018 17:12	WG1098553
trans-1,2-Dichloroethene	U		0.000295	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dichloropropane	U		0.000401	0.00112	1	04/15/2018 17:12	WG1098553
1,1-Dichloropropene	U		0.000355	0.00112	1	04/15/2018 17:12	WG1098553
1,3-Dichloropropane	U		0.000232	0.00112	1	04/15/2018 17:12	WG1098553
cis-1,3-Dichloropropene	U		0.000293	0.00112	1	04/15/2018 17:12	WG1098553
trans-1,3-Dichloropropene	U		0.000299	0.00112	1	04/15/2018 17:12	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000871	0.00280	1	04/15/2018 17:12	WG1098553
2,2-Dichloropropane	U		0.000312	0.00112	1	04/15/2018 17:12	WG1098553
Di-isopropyl ether	U		0.000278	0.00112	1	04/15/2018 17:12	WG1098553
Ethylbenzene	U		0.000332	0.00112	1	04/15/2018 17:12	WG1098553
Hexachloro-1,3-butadiene	U		0.000383	0.00112	1	04/15/2018 17:12	WG1098553
2-Hexanone	U		0.00153	0.0112	1	04/15/2018 17:12	WG1098553
n-Hexane	0.000474	J	0.000325	0.0112	1	04/15/2018 17:12	WG1098553
Iodomethane	U		0.00283	0.0112	1	04/15/2018 17:12	WG1098553
Isopropylbenzene	U		0.000272	0.00112	1	04/15/2018 17:12	WG1098553
p-Isopropyltoluene	U		0.000228	0.00112	1	04/15/2018 17:12	WG1098553
2-Butanone (MEK)	U		0.00524	0.0112	1	04/15/2018 17:12	WG1098553
Methylene Chloride	U		0.00112	0.00560	1	04/15/2018 17:12	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	04/15/2018 17:12	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 14:22

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/15/2018 17:12	WG1098553
Naphthalene	U		0.00112	0.00560	1	04/15/2018 17:12	WG1098553
n-Propylbenzene	U		0.000231	0.00112	1	04/15/2018 17:12	WG1098553
Styrene	U		0.000262	0.00112	1	04/15/2018 17:12	WG1098553
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/15/2018 17:12	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000408	0.00112	1	04/15/2018 17:12	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000408	0.00112	1	04/15/2018 17:12	WG1098553
Tetrachloroethene	U		0.000309	0.00112	1	04/15/2018 17:12	WG1098553
Toluene	U		0.000486	0.00560	1	04/15/2018 17:12	WG1098553
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/15/2018 17:12	WG1098553
1,2,4-Trichlorobenzene	U		0.000434	0.00112	1	04/15/2018 17:12	WG1098553
1,1,1-Trichloroethane	U		0.000320	0.00112	1	04/15/2018 17:12	WG1098553
1,1,2-Trichloroethane	U		0.000310	0.00112	1	04/15/2018 17:12	WG1098553
Trichloroethene	U		0.000312	0.00112	1	04/15/2018 17:12	WG1098553
Trichlorofluoromethane	U		0.000427	0.00560	1	04/15/2018 17:12	WG1098553
1,2,3-Trichloropropane	U		0.000829	0.00280	1	04/15/2018 17:12	WG1098553
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/15/2018 17:12	WG1098553
1,2,3-Trimethylbenzene	U		0.000321	0.00112	1	04/15/2018 17:12	WG1098553
1,3,5-Trimethylbenzene	U		0.000298	0.00112	1	04/15/2018 17:12	WG1098553
Vinyl acetate	U		0.00267	0.0112	1	04/15/2018 17:12	WG1098553
Vinyl chloride	0.00587		0.000326	0.00112	1	04/15/2018 17:12	WG1098553
Xylenes, Total	U		0.000781	0.00336	1	04/15/2018 17:12	WG1098553
<i>(S) Toluene-d8</i>	102			80.0-120		04/15/2018 17:12	WG1098553
<i>(S) Dibromofluoromethane</i>	97.9			74.0-131		04/15/2018 17:12	WG1098553
<i>(S) 4-Bromofluorobenzene</i>	96.4			64.0-132		04/15/2018 17:12	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Total Solids by Method 2540 G-2011

[L985279-01](#)

Method Blank (MB)

(MB) R3301863-1 04/13/18 15:36

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.00100	%	%	%

L985213-01 Original Sample (OS) • Duplicate (DUP)

(OS) L985213-01 04/13/18 15:36 • (DUP) R3301863-3 04/13/18 15:36

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	91.1	90.0	1	1.23	5	%

Laboratory Control Sample (LCS)

(LCS) R3301863-2 04/13/18 15:36

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc.- WA

1413.001.05.601

L985279

04/19/18 21:21

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Method Blank (MB)

(MB) R3301862-1 04/13/18 14:58

MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
%	%	%	%

Analyte

%

0.000

Total Solids

L985279-10 Original Sample (OS) • Duplicate (DUP)

(OS) L985279-10 04/13/18 14:58 • (DUP) R3301862-3 04/13/18 14:58

Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
%	%	%	%	%	%

Analyte

%

72.1

Total Solids

69.2

1

4.21

5

Laboratory Control Sample (LCS)

(LCS) R3301862-2 04/13/18 14:58

Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
%	%	%	%	%

Analyte

%

50.0

Total Solids

50.0

100

85.0-115

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Total Solids by Method 2540 G-2011

[L985279-13.14.15.16.17.18](#)

Method Blank (MB)

(MB) R3302060-1 04/14/18 07:24

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Total Solids	0.00100	%	%	%

L985289-01 Original Sample (OS) • Duplicate (DUP)

(OS) L985289-01 04/14/18 07:24 • (DUP) R3302060-3 04/14/18 07:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Total Solids	78.2	77.5	1	0.880	%	5

Laboratory Control Sample (LCS)

(LCS) R3302060-2 04/14/18 07:24

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Total Solids	50.0	50.0	100	85.0-115	%

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc.- WA

1413.001.05.601

L985279

04/19/18 21:21

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L985279-09](#)

Method Blank (MB)

(MB) R3302011-2_04/19/18 10:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
Carbon disulfide	U		0.101	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
2-Hexanone	U		0.757	5.00

Public Review Draft

1 Cp
2 Tc
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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3302011-2_04/13/18 10:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
n-Hexane	U		0.305	5.00
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.219	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Vinyl acetate	U		0.645	5.00
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethane	U		0.199	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	0.191	J	0.164	0.500
Toluene	U		0.412	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	92.5			80.0-120
(S) Dibromofluoromethane	99.6			76.0-123
(S) 4-Bromofluorobenzene	120			80.0-120

1 Cp
2 Tc
3 Ss
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302011-1 04/13/18 09:06 • (LCSD) R3302011-3 04/13/18 10:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	25.0	23.8	23.5	95.3	94.0	76.0-122			1.35	20
Carbon disulfide	25.0	26.8	25.8	107	103	55.0-127			4.00	20
Acetone	125	96.4	98.0	77.1	78.4	10.0-160			1.61	23
Acrylonitrile	125	80.3	80.2	64.3	64.2	60.0-142			0.130	20
trans-1,4-Dichloro-2-butene	25.0	20.0	20.0	80.1	80.2	55.0-134			0.0876	20
Bromobenzene	25.0	26.6	25.8	106	103	79.0-120			3.14	20
Bromodichloromethane	25.0	22.3	22.3	89.1	89.2	76.0-120			0.151	20
2-Hexanone	125	84.8	84.7	67.8	67.8	58.0-147			0.0161	20
Bromoform	25.0	28.3	28.1	113	112	67.0-132			0.710	20
Bromomethane	25.0	22.2	20.5	88.7	82.1	18.0-160			7.78	20
n-Hexane	25.0	17.5	16.6	70.1	66.6	56.0-124			5.12	20
Iodomethane	125	123	116	98.5	93.2	57.0-140			5.55	20
n-Butylbenzene	25.0	25.7	24.1	103	96.4	72.0-126			6.23	20
sec-Butylbenzene	25.0	25.2	23.6	101	94.4	74.0-121			6.61	20
tert-Butylbenzene	25.0	24.8	23.8	99.4	95.1	75.0-122			4.39	20
Carbon tetrachloride	25.0	19.7	19.8	78.8	79.2	63.0-122			0.457	20
Benzene	25.0	25.8	24.6	103	98.4	69.0-123			4.65	20
Chlorobenzene	25.0	23.2	23.0	92.7	92.1	79.0-121			0.666	20
Chlorodibromomethane	25.0	22.7	22.4	90.7	89.6	75.0-125			1.24	20
Chloroethane	25.0	22.2	22.6	88.7	90.3	47.0-152			1.79	20
Chloroform	25.0	24.5	23.3	98.0	93.1	72.0-121			5.10	20
Chloromethane	25.0	17.9	16.8	71.7	67.1	48.0-139			6.73	20
2-Chlorotoluene	25.0	26.7	25.8	107	103	74.0-122			3.39	20
4-Chlorotoluene	25.0	26.1	24.9	105	99.4	79.0-120			5.04	20
1,2-Dibromo-3-Chloropropane	25.0	21.6	21.8	86.5	87.0	64.0-127			0.676	20
1,2-Dibromoethane	25.0	23.0	22.4	92.1	89.7	77.0-123			2.65	20
Dibromomethane	25.0	23.9	24.5	95.8	97.8	78.0-120			2.13	20
1,2-Dichlorobenzene	25.0	23.3	22.0	93.0	87.9	80.0-120			5.64	20
1,3-Dichlorobenzene	25.0	23.5	22.1	94.1	88.4	72.0-123			6.27	20
1,4-Dichlorobenzene	25.0	23.8	22.6	95.1	90.4	77.0-120			5.07	20
Dichlorodifluoromethane	25.0	25.3	23.0	101	92.1	49.0-155			9.61	20
1,1-Dichloroethane	25.0	21.2	20.8	84.7	83.2	70.0-126			1.74	20
1,2-Dichloroethane	25.0	19.2	19.5	76.9	78.0	67.0-126			1.46	20
1,1-Dichloroethene	25.0	26.4	24.9	106	99.4	64.0-129			6.17	20
Vinyl acetate	125	104	100	82.9	80.4	46.0-160			3.10	20
cis-1,2-Dichloroethene	25.0	24.5	23.4	98.0	93.8	73.0-120			4.38	20
trans-1,2-Dichloroethene	25.0	24.7	24.2	98.9	96.8	71.0-121			2.09	20
1,2-Dichloropropane	25.0	22.5	21.9	89.9	87.7	75.0-125			2.49	20
1,1-Dichloropropene	25.0	26.5	24.6	106	98.4	71.0-129			7.53	20
1,3-Dichloropropane	25.0	24.1	23.7	96.2	94.9	80.0-121			1.34	20

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1 Cp
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302011-1_04/13/18 09:06 • (LCSD) R3302011-3_04/13/18 10:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	25.0	23.8	24.2	95.4	97.0	79.0-123			1.71	20
trans-1,3-Dichloropropene	25.0	23.7	23.0	94.7	92.1	74.0-127			2.83	20
2,2-Dichloropropane	25.0	23.8	22.9	95.1	91.5	60.0-125			3.84	20
Di-isopropyl ether	25.0	16.9	16.5	67.6	66.1	59.0-133			2.24	20
Hexachloro-1,3-butadiene	25.0	21.1	20.5	84.2	82.0	64.0-131			2.67	20
Isopropylbenzene	25.0	30.6	29.7	122	119	75.0-120	J4		2.88	20
p-Isopropyltoluene	25.0	23.8	23.6	95.3	94.4	74.0-126			0.956	20
2-Butanone (MEK)	125	84.9	85.7	67.9	68.6	37.0-158			0.969	20
Methylene Chloride	25.0	24.0	23.7	96.0	94.7	66.0-121			1.43	20
4-Methyl-2-pentanone (MIBK)	125	79.5	79.9	63.6	63.9	59.0-143			0.506	20
Ethylbenzene	25.0	23.9	22.5	95.7	89.8	77.0-120			6.28	20
n-Propylbenzene	25.0	28.6	26.7	114	107	79.0-120			6.69	20
Styrene	25.0	31.5	30.6	126	122	78.0-124	J4		3.13	20
1,1,1,2-Tetrachloroethane	25.0	21.0	20.4	84.0	81.6	75.0-122			2.91	20
1,1,2-Tetrachloroethane	25.0	27.7	26.9	111	108	71.0-122			3.02	20
Tetrachloroethene	25.0	21.8	21.2	87.2	84.8	70.0-127			2.81	20
1,1,2-Trichlorotrifluoroethane	25.0	27.4	26.6	109	106	61.0-136			2.91	20
1,2,3-Trichlorobenzene	25.0	21.2	20.7	84.8	82.7	61.0-133			2.52	20
1,2,4-Trichlorobenzene	25.0	22.7	21.5	90.8	85.9	69.0-129			5.55	20
1,1,1-Trichloroethane	25.0	22.2	21.0	88.7	83.8	68.0-122			5.68	20
Methyl tert-butyl ether	25.0	22.9	23.1	91.4	92.5	64.0-123			1.20	20
1,1,2-Trichloroethane	25.0	24.7	24.6	98.7	98.3	78.0-120			0.337	20
Trichloroethene	25.0	23.4	22.8	93.4	91.1	78.0-120			2.58	20
Naphthalene	25.0	21.4	20.0	85.8	80.0	62.0-128			6.98	20
Trichlorofluoromethane	25.0	25.2	23.8	101	95.3	56.0-137			5.63	20
1,2,3-Trichloropropane	25.0	24.2	23.4	96.8	93.6	72.0-124			3.35	20
1,2,3-Trimethylbenzene	25.0	23.8	23.2	95.3	92.8	75.0-120			2.62	20
1,2,4-Trimethylbenzene	25.0	24.6	23.7	98.5	94.7	75.0-120			3.96	20
1,3,5-Trimethylbenzene	25.0	25.3	25.1	101	100	75.0-120			0.612	20
Vinyl chloride	25.0	25.4	22.5	102	90.1	64.0-133			12.0	20
Toluene	25.0	22.8	22.0	91.1	87.9	77.0-120			3.62	20
Xylenes, Total	75.0	67.6	65.7	90.1	87.6	77.0-120			2.85	20
(S) Toluene-d8				96.8	97.1	80.0-120				
(S) Dibromofluoromethane				97.5	98.5	76.0-123				
(S) 4-Bromofluorobenzene				119	116	80.0-120				

Public Review Draft

1 Cp
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L985279-01,02,03,04,05,06,07,08,10,11,12,13,14](#)

Method Blank (MB)

(MB) R3301937-3 04/14/18 13:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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1 Cp
2 Tc
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L985279-01,02,03,04,05,06,07,08,10,11,12,13,14](#)

Method Blank (MB)

(MB) R3301937-3 04/14/18 13:13

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	109			80.0-120
(S) Dibromofluoromethane	88.7			74.0-131
(S) 4-Bromofluorobenzene	95.9			64.0-132

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1 Cp
2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier		LCSD Qualifier		RPD %	RPD Limits %
Acetone	0.125	0.120	0.116	96.3	92.8	11.0-160					3.69	23
Acrylonitrile	0.125	0.143	0.138	114	111	61.0-143					3.03	20
Benzene	0.0250	0.0257	0.0252	103	101	71.0-124					1.86	20
Bromobenzene	0.0250	0.0251	0.0250	100	99.9	78.0-120					0.345	20
Bromodichloromethane	0.0250	0.0268	0.0262	107	105	75.0-120					2.15	20
Bromochloromethane	0.0250	0.0275	0.0268	110	107	80.0-121					2.64	20
Bromoform	0.0250	0.0278	0.0266	111	107	65.0-133					4.13	20
Bromomethane	0.0250	0.0238	0.0240	95.3	95.9	26.0-160					0.583	20
n-Butylbenzene	0.0250	0.0264	0.0263	106	105	73.0-126					0.313	20
sec-Butylbenzene	0.0250	0.0258	0.0260	103	104	75.0-121					0.661	20
tert-Butylbenzene	0.0250	0.0269	0.0264	108	106	74.0-122					1.94	20
Carbon disulfide	0.0250	0.0248	0.0243	99.3	97.3	53.0-130					2.05	20
Carbon tetrachloride	0.0250	0.0275	0.0251	110	100	66.0-123					8.91	20
Chlorobenzene	0.0250	0.0284	0.0283	113	113	79.0-121					0.276	20
Chlorodibromomethane	0.0250	0.0286	0.0280	114	112	74.0-128					1.80	20
Chloroethane	0.0250	0.0238	0.0238	95.0	95.2	51.0-147					0.197	20
Chloroform	0.0250	0.0262	0.0263	105	105	73.0-123					0.384	20
Chloromethane	0.0250	0.0250	0.0245	99.8	98.1	51.0-138					1.77	20
2-Chlorotoluene	0.0250	0.0262	0.0257	105	103	72.0-124					1.70	20
4-Chlorotoluene	0.0250	0.0255	0.0253	102	101	78.0-120					0.774	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0268	0.0262	107	105	65.0-126					2.28	20
1,2-Dibromoethane	0.0250	0.0286	0.0278	115	111	78.0-122					2.99	20
Dibromomethane	0.0250	0.0270	0.0264	108	106	79.0-120					2.30	20
1,2-Dichlorobenzene	0.0250	0.0270	0.0267	108	107	80.0-120					0.882	20
1,3-Dichlorobenzene	0.0250	0.0265	0.0264	106	106	72.0-123					0.293	20
1,4-Dichlorobenzene	0.0250	0.0256	0.0254	103	101	77.0-120					1.09	20
trans-1,4-Dichloro-2-butene	0.0250	0.0291	0.0277	117	111	68.0-126					5.18	20
Dichlorodifluoromethane	0.0250	0.0250	0.0233	99.9	93.4	49.0-155					6.69	20
1,1-Dichloroethane	0.0250	0.0268	0.0271	107	108	70.0-128					1.15	20
1,2-Dichloroethane	0.0250	0.0264	0.0263	106	105	69.0-128					0.621	20
1,1-Dichloroethene	0.0250	0.0260	0.0256	104	103	63.0-131					1.26	20
cis-1,2-Dichloroethene	0.0250	0.0262	0.0260	105	104	74.0-123					0.825	20
trans-1,2-Dichloroethene	0.0250	0.0269	0.0264	108	106	72.0-122					1.93	20
1,2-Dichloropropane	0.0250	0.0278	0.0282	111	113	75.0-126					1.39	20
1,1-Dichloropropene	0.0250	0.0257	0.0257	103	103	72.0-130					0.0374	20
1,3-Dichloropropene	0.0250	0.0281	0.0274	112	112	80.0-121					2.75	20
cis-1,3-Dichloropropene	0.0250	0.0279	0.0280	112	112	80.0-125					0.480	20
trans-1,3-Dichloropropene	0.0250	0.0292	0.0286	117	115	75.0-129					2.01	20
2,2-Dichloropropane	0.0250	0.0265	0.0256	106	102	60.0-129					3.55	20
Di-isopropyl ether	0.0250	0.0277	0.0273	111	109	62.0-133					1.44	20

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301937-1 04/14/18 11:27 • (LCSD) R3301937-2 04/14/18 11:48

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0280	0.0278	112	111	77.0-120			0.413	20
Hexachloro-1,3-butadiene	0.0250	0.0309	0.0316	124	126	68.0-128			2.03	20
2-Hexanone	0.125	0.152	0.142	121	114	61.0-143			6.26	20
n-Hexane	0.0250	0.0237	0.0239	95.0	95.6	57.0-125			0.599	20
Iodomethane	0.125	0.137	0.135	110	108	67.0-132			1.76	20
Isopropylbenzene	0.0250	0.0258	0.0259	103	104	75.0-120			0.267	20
p-Isopropyltoluene	0.0250	0.0276	0.0276	110	111	74.0-125			0.284	20
2-Butanone (MEK)	0.125	0.136	0.129	109	103	37.0-159			5.32	20
Methylene Chloride	0.0250	0.0257	0.0255	103	102	67.0-123			0.692	20
4-Methyl-2-pentanone (MIBK)	0.125	0.153	0.145	122	116	60.0-144			5.49	20
Methyl tert-butyl ether	0.0250	0.0277	0.0271	111	108	66.0-125			2.17	20
Naphthalene	0.0250	0.0273	0.0266	109	106	64.0-125			2.55	20
n-Propylbenzene	0.0250	0.0260	0.0259	104	103	78.0-120			0.611	20
Styrene	0.0250	0.0259	0.0257	104	103	78.0-124			1.08	20
1,1,1,2-Tetrachloroethane	0.0250	0.0297	0.0290	119	116	74.0-124			2.39	20
1,1,2,2-Tetrachloroethane	0.0250	0.0257	0.0249	103	99.7	73.0-120			2.90	20
Tetrachloroethene	0.0250	0.0296	0.0299	118	120	70.0-127			1.18	20
Toluene	0.0250	0.0268	0.0263	107	105	77.0-120			1.67	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0269	0.0261	108	105	64.0-135			2.84	20
1,2,3-Trichlorobenzene	0.0250	0.0288	0.0290	115	116	68.0-126			0.461	20
1,2,4-Trichlorobenzene	0.0250	0.0281	0.0280	112	112	70.0-127			0.474	20
1,1,1-Trichloroethane	0.0250	0.0267	0.0265	107	106	69.0-125			0.581	20
1,1,2-Trichloroethane	0.0250	0.0273	0.0270	109	108	78.0-120			0.853	20
Trichloroethene	0.0250	0.0289	0.0290	116	116	79.0-120			0.322	20
Trichlorofluoromethane	0.0250	0.0265	0.0259	106	104	59.0-136			2.26	20
1,2,3-Trichloropropane	0.0250	0.0259	0.0244	104	97.4	73.0-124			6.24	20
1,2,3-Trimethylbenzene	0.0250	0.0260	0.0256	104	102	76.0-120			1.62	20
1,2,4-Trimethylbenzene	0.0250	0.0262	0.0257	105	103	75.0-120			1.85	20
1,3,5-Trimethylbenzene	0.0250	0.0265	0.0261	106	104	75.0-120			1.62	20
Vinyl acetate	0.125	0.135	0.128	108	102	58.0-156			5.82	20
Vinyl chloride	0.0250	0.0260	0.0257	104	103	63.0-134			1.53	20
Xylenes, Total	0.0750	0.0864	0.0845	115	113	77.0-120			2.22	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										

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1 Cp
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6 Qc
7 Gl
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9 Sc



Method Blank (MB)

(MB) R3302214-5 04/15/18 13:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Acetone	U		0.0100	0.0500
Acrylonitrile	U		0.00179	0.0100
Benzene	U		0.000270	0.00100
Bromobenzene	U		0.000284	0.00100
Bromodichloromethane	U		0.000254	0.00100
Bromochloromethane	U		0.000390	0.00500
Bromoform	U		0.000424	0.00100
Bromomethane	U		0.00134	0.00500
n-Butylbenzene	U		0.000258	0.00100
sec-Butylbenzene	U		0.000201	0.00100
tert-Butylbenzene	U		0.000206	0.00100
Carbon disulfide	U		0.000221	0.00100
Carbon tetrachloride	U		0.000328	0.00100
Chlorobenzene	U		0.000212	0.00100
Chlorodibromomethane	U		0.000373	0.00100
Chloroethane	U		0.000946	0.00500
Chloroform	U		0.000229	0.00500
Chloromethane	U		0.000375	0.00250
2-Chlorotoluene	U		0.000301	0.00100
4-Chlorotoluene	U		0.000240	0.00100
1,2-Dibromo-3-Chloropropane	U		0.00105	0.00500
1,2-Dibromoethane	U		0.000343	0.00100
Dibromomethane	U		0.000382	0.00100
1,2-Dichlorobenzene	U		0.000305	0.00100
1,3-Dichlorobenzene	U		0.000239	0.00100
1,4-Dichlorobenzene	U		0.000226	0.00100
trans-1,4-Dichloro-2-butene	U		0.000778	0.00250
Dichlorodifluoromethane	U		0.000713	0.00500
1,1-Dichloroethane	U		0.000199	0.00100
1,2-Dichloroethane	U		0.000265	0.00100
1,1-Dichloroethene	U		0.000303	0.00100
cis-1,2-Dichloroethene	U		0.000235	0.00100
trans-1,2-Dichloroethene	U		0.000264	0.00100
1,2-Dichloropropane	U		0.000358	0.00100
1,1-Dichloropropene	U		0.000317	0.00100
1,3-Dichloropropene	U		0.000207	0.00100
cis-1,3-Dichloropropene	U		0.000262	0.00100
trans-1,3-Dichloropropene	U		0.000267	0.00100
2,2-Dichloropropane	U		0.000279	0.00100
Di-isopropyl ether	U		0.000248	0.00100

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L985279-15.16.17.18](#)

Method Blank (MB)

(MB) R3302214-5 04/15/18 13:39

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	mg/kg		mg/kg	mg/kg
Ethylbenzene	U		0.000297	0.00100
Hexachloro-1,3-butadiene	U		0.000342	0.00100
2-Hexanone	U		0.00137	0.0100
n-Hexane	U		0.000290	0.0100
Iodomethane	U		0.00253	0.0100
Isopropylbenzene	U		0.000243	0.00100
p-Isopropyltoluene	U		0.000204	0.00100
2-Butanone (MEK)	U		0.00468	0.0100
Methylene Chloride	U		0.00100	0.00500
4-Methyl-2-pentanone (MIBK)	U		0.00188	0.0100
Methyl tert-butyl ether	U		0.000212	0.00100
Naphthalene	U		0.00100	0.00500
n-Propylbenzene	U		0.000206	0.00100
Styrene	U		0.000234	0.00100
1,1,1,2-Tetrachloroethane	U		0.000264	0.00100
1,1,2,2-Tetrachloroethane	U		0.000365	0.00100
Tetrachloroethene	U		0.000276	0.00100
Toluene	U		0.000434	0.00500
1,1,2-Trichlorotrifluoroethane	U		0.000365	0.00100
1,2,3-Trichlorobenzene	U		0.000306	0.00100
1,2,4-Trichlorobenzene	U		0.000388	0.00100
1,1,1-Trichloroethane	U		0.000286	0.00100
1,1,2-Trichloroethane	U		0.000277	0.00100
Trichloroethene	U		0.000279	0.00100
Trichlorofluoromethane	U		0.000382	0.00500
1,2,3-Trichloropropane	U		0.000741	0.00250
1,2,3-Trimethylbenzene	U		0.000287	0.00100
1,2,4-Trimethylbenzene	U		0.000211	0.00100
1,3,5-Trimethylbenzene	U		0.000266	0.00100
Vinyl acetate	U		0.00239	0.0100
Vinyl chloride	U		0.000291	0.00100
Xylenes, Total	U		0.000698	0.00300
(S) Toluene-d8	110			80.0-120
(S) Dibromofluoromethane	92.8			74.0-131
(S) 4-Bromofluorobenzene	95.0			64.0-132

1 Cp
2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302214-1 04/15/18 11:11 • (LCSD) R3302214-2 04/15/18 11:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	0.125	0.112	0.112	89.3	89.4	11.0-160			0.195	23
Acrylonitrile	0.125	0.133	0.132	106	106	61.0-143			0.351	20
Benzene	0.0250	0.0250	0.0254	100	101	71.0-124			1.32	20
Bromobenzene	0.0250	0.0247	0.0254	98.9	102	78.0-120			2.60	20
Bromodichloromethane	0.0250	0.0258	0.0269	103	108	75.0-120			4.21	20
Bromochloromethane	0.0250	0.0262	0.0270	105	108	80.0-121			2.88	20
Bromoform	0.0250	0.0271	0.0272	109	109	65.0-133			0.283	20
Bromomethane	0.0250	0.0236	0.0234	94.3	93.8	26.0-160			0.586	20
n-Butylbenzene	0.0250	0.0263	0.0273	105	109	73.0-126			3.41	20
sec-Butylbenzene	0.0250	0.0259	0.0272	104	109	75.0-121			4.68	20
tert-Butylbenzene	0.0250	0.0265	0.0274	106	110	74.0-122			3.29	20
Carbon disulfide	0.0250	0.0252	0.0260	101	104	53.0-130			3.08	20
Carbon tetrachloride	0.0250	0.0261	0.0273	104	109	66.0-123			4.34	20
Chlorobenzene	0.0250	0.0279	0.0287	112	115	79.0-121			2.91	20
Chlorodibromomethane	0.0250	0.0280	0.0290	112	116	74.0-128			3.64	20
Chloroethane	0.0250	0.0230	0.0230	91.8	92.0	51.0-147			0.183	20
Chloroform	0.0250	0.0250	0.0259	100	104	73.0-123			3.54	20
Chloromethane	0.0250	0.0243	0.0239	97.3	95.5	51.0-138			1.85	20
2-Chlorotoluene	0.0250	0.0260	0.0268	104	107	72.0-124			3.03	20
4-Chlorotoluene	0.0250	0.0251	0.0259	100	103	78.0-120			2.92	20
1,2-Dibromo-3-Chloropropane	0.0250	0.0259	0.0259	104	104	65.0-126			0.0619	20
1,2-Dibromoethane	0.0250	0.0277	0.0288	111	115	78.0-122			3.89	20
Dibromomethane	0.0250	0.0253	0.0266	101	106	79.0-120			4.72	20
1,2-Dichlorobenzene	0.0250	0.0268	0.0278	107	111	80.0-120			3.63	20
1,3-Dichlorobenzene	0.0250	0.0264	0.0275	106	110	72.0-123			4.06	20
1,4-Dichlorobenzene	0.0250	0.0254	0.0265	102	106	77.0-120			4.07	20
trans-1,4-Dichloro-2-butene	0.0250	0.0272	0.0265	109	106	68.0-126			2.68	20
Dichlorodifluoromethane	0.0250	0.0252	0.0247	101	98.7	49.0-155			2.10	20
1,1-Dichloroethane	0.0250	0.0259	0.0271	104	108	70.0-128			4.63	20
1,2-Dichloroethane	0.0250	0.0251	0.0258	100	103	69.0-128			2.78	20
1,1-Dichloroethene	0.0250	0.0256	0.0267	102	107	63.0-131			4.46	20
cis-1,2-Dichloroethene	0.0250	0.0251	0.0261	100	104	74.0-123			3.98	20
trans-1,2-Dichloroethene	0.0250	0.0255	0.0267	102	107	72.0-122			4.35	20
1,2-Dichloropropane	0.0250	0.0268	0.0284	107	114	75.0-126			5.82	20
1,1-Dichloropropene	0.0250	0.0250	0.0261	100	104	72.0-130			4.27	20
1,3-Dichloropropene	0.0250	0.0270	0.0272	108	109	80.0-121			0.543	20
cis-1,3-Dichloropropene	0.0250	0.0277	0.0286	111	114	80.0-125			3.19	20
trans-1,3-Dichloropropene	0.0250	0.0280	0.0285	112	114	75.0-129			1.82	20
2,2-Dichloropropane	0.0250	0.0245	0.0270	98.1	108	60.0-129			9.47	20
Diisopropyl ether	0.0250	0.0256	0.0269	102	107	62.0-133			4.96	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302214-1 04/15/18 11:11 • (LCSD) R3302214-2 04/15/18 11:32

Analyte	Spike Amount mg/kg	LCS Result mg/kg	LCSD Result mg/kg	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	0.0250	0.0278	0.0290	111	116	77.0-120			4.24	20
Hexachloro-1,3-butadiene	0.0250	0.0302	0.0319	121	128	68.0-128			5.50	20
2-Hexanone	0.125	0.137	0.141	110	113	61.0-143			2.33	20
n-Hexane	0.0250	0.0248	0.0253	99.4	101	57.0-125			1.91	20
Iodomethane	0.125	0.132	0.139	106	111	67.0-132			4.99	20
Isopropylbenzene	0.0250	0.0260	0.0270	104	108	75.0-120			3.61	20
p-Isopropyltoluene	0.0250	0.0273	0.0288	109	115	74.0-125			5.09	20
2-Butanone (MEK)	0.125	0.124	0.123	99.2	98.8	37.0-159			0.451	20
Methylene Chloride	0.0250	0.0250	0.0254	99.9	102	67.0-123			1.84	20
4-Methyl-2-pentanone (MIBK)	0.125	0.143	0.143	114	115	60.0-144			0.357	20
Methyl tert-butyl ether	0.0250	0.0253	0.0263	101	105	66.0-125			3.86	20
Naphthalene	0.0250	0.0265	0.0269	106	108	64.0-125			1.71	20
n-Propylbenzene	0.0250	0.0259	0.0266	104	106	78.0-120			2.59	20
Styrene	0.0250	0.0259	0.0267	104	107	78.0-124			2.97	20
1,1,1,2-Tetrachloroethane	0.0250	0.0286	0.0300	114	120	74.0-124			4.81	20
1,1,2,2-Tetrachloroethane	0.0250	0.0249	0.0258	99.5	103	73.0-120			3.66	20
Tetrachloroethene	0.0250	0.0295	0.0299	118	120	70.0-127			1.42	20
Toluene	0.0250	0.0264	0.0272	106	109	77.0-120			3.17	20
1,1,2-Trichlorotrifluoroethane	0.0250	0.0266	0.0280	107	112	64.0-135			5.17	20
1,2,3-Trichlorobenzene	0.0250	0.0281	0.0288	112	115	68.0-126			2.73	20
1,2,4-Trichlorobenzene	0.0250	0.0271	0.0287	108	115	70.0-127			5.51	20
1,1,1-Trichloroethane	0.0250	0.0253	0.0267	101	107	69.0-125			5.47	20
1,1,2-Trichloroethane	0.0250	0.0264	0.0272	105	109	78.0-120			3.27	20
Trichloroethene	0.0250	0.0279	0.0296	112	118	79.0-120			5.86	20
Trichlorofluoromethane	0.0250	0.0253	0.0247	101	99.0	59.0-136			2.06	20
1,2,3-Trichloropropane	0.0250	0.0254	0.0258	102	103	73.0-124			1.58	20
1,2,3-Trimethylbenzene	0.0250	0.0257	0.0267	103	107	76.0-120			3.75	20
1,2,4-Trimethylbenzene	0.0250	0.0259	0.0269	104	108	75.0-120			3.68	20
1,3,5-Trimethylbenzene	0.0250	0.0263	0.0273	105	109	75.0-120			3.48	20
Vinyl acetate	0.125	0.124	0.125	99.4	100	58.0-156			0.837	20
Vinyl chloride	0.0250	0.0255	0.0256	102	103	63.0-134			0.536	20
Xylenes, Total	0.0750	0.0844	0.0878	113	117	77.0-120			3.95	20
<i>(S) Toluene-d8</i>										
<i>(S) Dibromofluoromethane</i>										
<i>(S) 4-Bromofluorobenzene</i>										
				91.3	90.0	64.0-132				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

(dry)	Results are reported based on the dry weight of the sample. [this will only be present on a dry report basis for soils].
MDL	Method Detection Limit.
MDL (dry)	Method Detection Limit.
RDL	Reported Detection Limit.
RDL (dry)	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J4	The associated batch QC was outside the established quality control range for accuracy.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

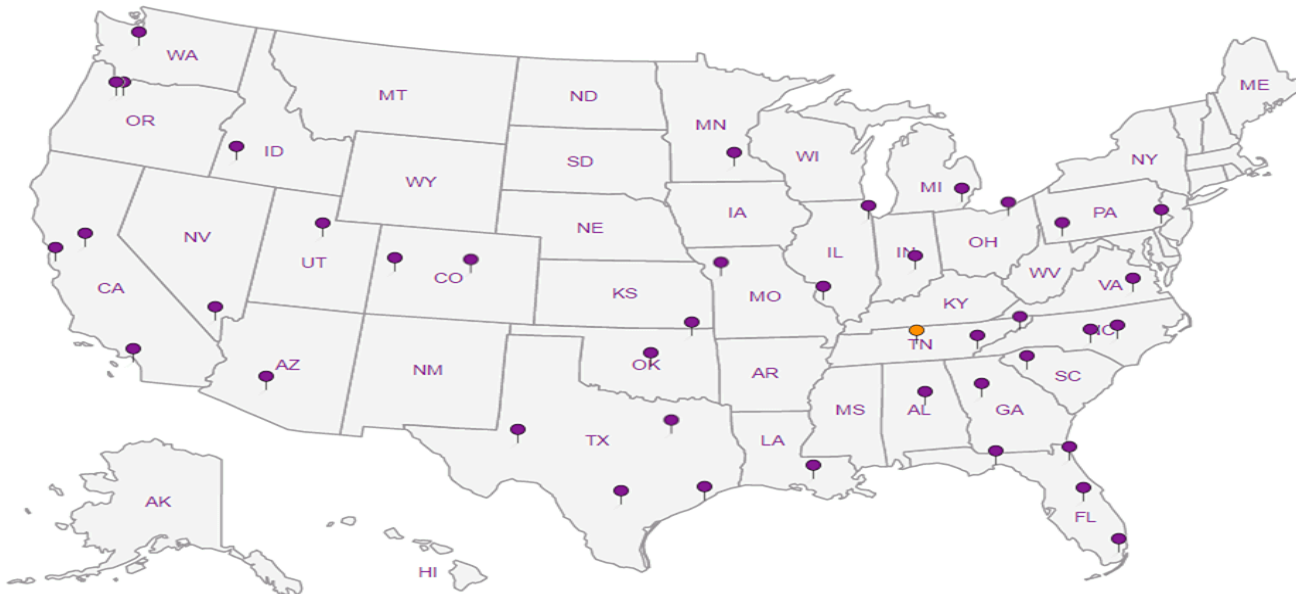
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹Drinking Water ²Underground Storage Tanks ³Aquatic Toxicity ⁴Chemical/Microbiological ⁵Mold ⁶Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to: Brian O'Neal/Bill Haldeman
Email To: boneal@pesenv.com; bhaldeaman@pesenv.com

Project Description:
Phone: 206-529-3980
Fax: 206-529-3985
Client Project # 1413.001.05.601
Site/Facility ID #
City/State Collected: Seattle WA
Lab Project # PESENVSWA-ALP
P.O. #

Collected by (print): *Karen Sprungstad*
Collected by (signature): *[Signature]*
Rush? (Lab MUST Be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day
Date Results Needed

Immediately Packed on Ice N Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MW-148-11	Grab	SS	11	4/9/18	955	84	V8260C VOCs 40ml/NaHS04/Syr/MeOH
MW-148-20		SS	20		1005		dry wt, voc screen 2ozClr-NoPres
MW-148-30		SS	30		1020		
MW-148-40		SS	40		1045		
MW-148-50		SS	50		1100		
MW-148-60		SS	60		1120		
MW-148-70		SS	70		1130		
MW-148-80		SS	80		1210		
TRIP BLANK		SS		12-11-17			

Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Blossay
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks:

Samples returned via: UPS FedEx Courier

Tracking # 4269 9216
Received by: (Signature) *[Signature]*
Temp: 4.3 °C
Bottles received: 1
Vial No. 1
MeOH

Relinquished by: (Signature) *[Signature]*
Date: 4/11/18
Time: 1600

Relinquished by: (Signature) *[Signature]*
Date: 4/11/18
Time: 1600

Received for Lab by: (Signature) *[Signature]*
Date: 4/12/18
Time: 8:45

Hold: NCF OK

Chain of Custody Page 1 of 2

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

A. S. C. I. E. N. C. E. S.
a subsidiary of *[Logo]*

L# 1985279
F005

Actnum: PESENV3WVA
Template: T134174
Prelogin: P645191
TSR: 110 - Brian Ford
PB:

Shipped Via: FedEX Ground

Remarks: Sample # (lab only)

Condition: NCF / OK

Sample Receipt Checklist

COC Seal Present/Intact: Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

If applicable: Y N

VOR zero headspace: Y N

Preservation correct/checked: Y N

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to: Brian O'Neal/Bill Haldeman
Email To: boneal@pesenv.com; bhdaldeman@pesenv.com

Project: **Seattle WA**

Client Project #
Lab Project # **PESENVSWA-ALP**

Phone: 206-529-3980
Fax: 206-529-3985

Collected by (print): **Rachel McLaughlin**

Collected by (signature): *R.M. McLaughlin*

Site/Facility ID #

Quote #

Rush? (Lab MUST be Notified)
 Same Day
 Five Day
 Next Day
 5 Day (Rad Only)
 Two Day
 10 Day (Rad Only)
 Three Day

Date Results Needed

No. of Cntrs

Packed on Ice N Y X

Sample ID

Comp/Grab

Matrix *

Depth

Date

Pres
Chk

Analysis / Container / Preservative

V8260C VOCs 40ml/NaHSO4/Syr/MeOH
dry wt,voc screen 2ozClr-NoPres

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres Chk	Analysis / Container / Preservative
MW-143-10	Grab	SS	10	4-11-18	0938	5	X	V8260C VOCs 40ml/NaHSO4/Syr/MeOH
MW-143-20		SS	20		1000	1	X	
MW-143-30		SS	30		1020	1	X	
MW-143-40		SS	40		1040	1	X	
MW-143-50		SS	50		1055	1	X	
MW-143-60		SS	60		1120	1	X	
MW-143-70		SS	70		1200	1	X	
MW-143-80		SS	80		1300	1	X	
MW-902-20		SS	20		1422	1	X	

Remarks:

Samples returned via:
 UPS _____ FedEx _____ Courier _____

Relinquished by: (Signature) *R.T. McLaughlin* Date: 4/11/18 Time: 1600

Relinquished by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Tracking # **42169 9216**
 Received by: (Signature) _____
 Received for lab by: (Signature) _____

Trip Blank Received: **3000**
 Yes/No Yes No
 HCL/MeOH HCL MeOH

pH _____ Temp _____
 Flow _____ Other _____
 Temp: 4.3°C Bottles Received: 77
 Date: 4/12/18 Time: 8:15

Hold: _____
 If preservation required by login: Date/Time _____
 Condition: NCF OK

IESC
 A B S C I E N C E S
 a subsidiary of **Procedural**

13065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

Chain of Custody Page 2 of 2

Accnum: PESENVSWA
 Template: T134663
 Prelogin: P647548
 TSR: 110 - Brian Ford
 PB: 4-4-18 cm
 Shipped Via: FedEx Ground

SAMPLE RECEIPT CHECKLIST

COC Seal Present/Intact: Y N

COC Signed/Accurate: Y N

Bottles arrive intact: Y N

Correct bottles used: Y N

Sufficient volume sent: Y N

IL Applicable: Y N

VQA zero Headpace: Y N

Preservation Correct/Checked: Y N



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.7		1	04/13/2018 15:36	WG1097916

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0266	J	0.0115	0.0577	1	04/14/2018 18:31	WG1098127
Acrylonitrile	U		0.00207	0.0115	1	04/14/2018 18:31	WG1098127
Benzene	0.000728	J	0.000311	0.00115	1	04/14/2018 18:31	WG1098127
Bromobenzene	U		0.000328	0.00115	1	04/14/2018 18:31	WG1098127
Bromodichloromethane	U		0.000293	0.00115	1	04/14/2018 18:31	WG1098127
Bromochloromethane	U		0.000450	0.00577	1	04/14/2018 18:31	WG1098127
Bromoform	U		0.000489	0.00115	1	04/14/2018 18:31	WG1098127
Bromomethane	U		0.00155	0.00577	1	04/14/2018 18:31	WG1098127
n-Butylbenzene	U		0.000298	0.00115	1	04/14/2018 18:31	WG1098127
sec-Butylbenzene	U		0.000232	0.00115	1	04/14/2018 18:31	WG1098127
tert-Butylbenzene	U		0.000238	0.00115	1	04/14/2018 18:31	WG1098127
Carbon disulfide	0.00130		0.000255	0.00115	1	04/14/2018 18:31	WG1098127
Carbon tetrachloride	U		0.000378	0.00115	1	04/14/2018 18:31	WG1098127
Chlorobenzene	U		0.000245	0.00115	1	04/14/2018 18:31	WG1098127
Chlorodibromomethane	U		0.000430	0.00115	1	04/14/2018 18:31	WG1098127
Chloroethane	U		0.00109	0.00577	1	04/14/2018 18:31	WG1098127
Chloroform	U		0.000264	0.00577	1	04/14/2018 18:31	WG1098127
Chloromethane	U		0.000433	0.00288	1	04/14/2018 18:31	WG1098127
2-Chlorotoluene	U		0.000347	0.00115	1	04/14/2018 18:31	WG1098127
4-Chlorotoluene	U		0.000277	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00121	0.00577	1	04/14/2018 18:31	WG1098127
1,2-Dibromoethane	U		0.000396	0.00115	1	04/14/2018 18:31	WG1098127
Dibromomethane	U		0.000441	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dichlorobenzene	U		0.000352	0.00115	1	04/14/2018 18:31	WG1098127
1,3-Dichlorobenzene	U		0.000276	0.00115	1	04/14/2018 18:31	WG1098127
1,4-Dichlorobenzene	U		0.000261	0.00115	1	04/14/2018 18:31	WG1098127
Dichlorodifluoromethane	U		0.000823	0.00577	1	04/14/2018 18:31	WG1098127
1,1-Dichloroethane	U		0.000230	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dichloroethane	U		0.000306	0.00115	1	04/14/2018 18:31	WG1098127
1,1-Dichloroethene	U		0.000350	0.00115	1	04/14/2018 18:31	WG1098127
cis-1,2-Dichloroethene	U		0.000271	0.00115	1	04/14/2018 18:31	WG1098127
trans-1,2-Dichloroethene	U		0.000305	0.00115	1	04/14/2018 18:31	WG1098127
1,2-Dichloropropane	U		0.000413	0.00115	1	04/14/2018 18:31	WG1098127
1,1-Dichloropropene	U		0.000366	0.00115	1	04/14/2018 18:31	WG1098127
1,3-Dichloropropane	U		0.000239	0.00115	1	04/14/2018 18:31	WG1098127
cis-1,3-Dichloropropene	U		0.000302	0.00115	1	04/14/2018 18:31	WG1098127
trans-1,3-Dichloropropene	U		0.000308	0.00115	1	04/14/2018 18:31	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000898	0.00288	1	04/14/2018 18:31	WG1098127
2,2-Dichloropropane	U		0.000322	0.00115	1	04/14/2018 18:31	WG1098127
Di-isopropyl ether	U		0.000286	0.00115	1	04/14/2018 18:31	WG1098127
Ethylbenzene	U		0.000343	0.00115	1	04/14/2018 18:31	WG1098127
Hexachloro-1,3-butadiene	U		0.000395	0.00115	1	04/14/2018 18:31	WG1098127
2-Hexanone	U		0.00158	0.0115	1	04/14/2018 18:31	WG1098127
n-Hexane	0.00937	J	0.000335	0.0115	1	04/14/2018 18:31	WG1098127
Iodomethane	U		0.00292	0.0115	1	04/14/2018 18:31	WG1098127
Isopropylbenzene	U		0.000280	0.00115	1	04/14/2018 18:31	WG1098127
p-Isopropyltoluene	U		0.000235	0.00115	1	04/14/2018 18:31	WG1098127
2-Butanone (MEK)	0.00585	J	0.00540	0.0115	1	04/14/2018 18:31	WG1098127
Methylene Chloride	U		0.00115	0.00577	1	04/14/2018 18:31	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00217	0.0115	1	04/14/2018 18:31	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 09:55

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000245	0.00115	1	04/14/2018 18:31	WG1098127
Naphthalene	U		0.00115	0.00577	1	04/14/2018 18:31	WG1098127
n-Propylbenzene	U		0.000238	0.00115	1	04/14/2018 18:31	WG1098127
Styrene	U		0.000270	0.00115	1	04/14/2018 18:31	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000305	0.00115	1	04/14/2018 18:31	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000421	0.00115	1	04/14/2018 18:31	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000421	0.00115	1	04/14/2018 18:31	WG1098127
Tetrachloroethene	U		0.000318	0.00115	1	04/14/2018 18:31	WG1098127
Toluene	U		0.000501	0.00577	1	04/14/2018 18:31	WG1098127
1,2,3-Trichlorobenzene	U		0.000353	0.00115	1	04/14/2018 18:31	WG1098127
1,2,4-Trichlorobenzene	U		0.000448	0.00115	1	04/14/2018 18:31	WG1098127
1,1,1-Trichloroethane	U		0.000330	0.00115	1	04/14/2018 18:31	WG1098127
1,1,2-Trichloroethane	U		0.000320	0.00115	1	04/14/2018 18:31	WG1098127
Trichloroethene	U		0.000322	0.00115	1	04/14/2018 18:31	WG1098127
Trichlorofluoromethane	U		0.000441	0.00577	1	04/14/2018 18:31	WG1098127
1,2,3-Trichloropropane	U		0.000855	0.00288	1	04/14/2018 18:31	WG1098127
1,2,4-Trimethylbenzene	U		0.000243	0.00115	1	04/14/2018 18:31	WG1098127
1,2,3-Trimethylbenzene	U		0.000331	0.00115	1	04/14/2018 18:31	WG1098127
1,3,5-Trimethylbenzene	U		0.000307	0.00115	1	04/14/2018 18:31	WG1098127
Vinyl acetate	U		0.00276	0.0115	1	04/14/2018 18:31	WG1098127
Vinyl chloride	U		0.000336	0.00115	1	04/14/2018 18:31	WG1098127
Xylenes, Total	U		0.000805	0.00346	1	04/14/2018 18:31	WG1098127
(S) Toluene-d8	99.7			80.0-120		04/14/2018 18:31	WG1098127
(S) Dibromofluoromethane	97.8			74.0-131		04/14/2018 18:31	WG1098127
(S) 4-Bromofluorobenzene	94.3			64.0-132		04/14/2018 18:31	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 10:05

L985279

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.2		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0108	0.0542	1	04/14/2018 18:52	WG1098127
Acrylonitrile	U		0.00194	0.0108	1	04/14/2018 18:52	WG1098127
Benzene	U		0.000293	0.00108	1	04/14/2018 18:52	WG1098127
Bromobenzene	U		0.000308	0.00108	1	04/14/2018 18:52	WG1098127
Bromodichloromethane	U		0.000276	0.00108	1	04/14/2018 18:52	WG1098127
Bromochloromethane	U		0.000423	0.00542	1	04/14/2018 18:52	WG1098127
Bromoform	U		0.000460	0.00108	1	04/14/2018 18:52	WG1098127
Bromomethane	U		0.00145	0.00542	1	04/14/2018 18:52	WG1098127
n-Butylbenzene	U		0.000280	0.00108	1	04/14/2018 18:52	WG1098127
sec-Butylbenzene	U		0.000218	0.00108	1	04/14/2018 18:52	WG1098127
tert-Butylbenzene	U		0.000223	0.00108	1	04/14/2018 18:52	WG1098127
Carbon disulfide	0.000247 J	J	0.000240	0.00108	1	04/14/2018 18:52	WG1098127
Carbon tetrachloride	U		0.000356	0.00108	1	04/14/2018 18:52	WG1098127
Chlorobenzene	U		0.000230	0.00108	1	04/14/2018 18:52	WG1098127
Chlorodibromomethane	U		0.000405	0.00108	1	04/14/2018 18:52	WG1098127
Chloroethane	U		0.00103	0.00542	1	04/14/2018 18:52	WG1098127
Chloroform	U		0.000248	0.00542	1	04/14/2018 18:52	WG1098127
Chloromethane	U		0.000407	0.00271	1	04/14/2018 18:52	WG1098127
2-Chlorotoluene	U		0.000327	0.00108	1	04/14/2018 18:52	WG1098127
4-Chlorotoluene	U		0.000260	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00542	1	04/14/2018 18:52	WG1098127
1,2-Dibromoethane	U		0.000372	0.00108	1	04/14/2018 18:52	WG1098127
Dibromomethane	U		0.000414	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dichlorobenzene	U		0.000331	0.00108	1	04/14/2018 18:52	WG1098127
1,3-Dichlorobenzene	U		0.000259	0.00108	1	04/14/2018 18:52	WG1098127
1,4-Dichlorobenzene	U		0.000245	0.00108	1	04/14/2018 18:52	WG1098127
Dichlorodifluoromethane	U		0.000773	0.00542	1	04/14/2018 18:52	WG1098127
1,1-Dichloroethane	U		0.000216	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dichloroethane	U		0.000287	0.00108	1	04/14/2018 18:52	WG1098127
1,1-Dichloroethene	U		0.000329	0.00108	1	04/14/2018 18:52	WG1098127
cis-1,2-Dichloroethene	U		0.000255	0.00108	1	04/14/2018 18:52	WG1098127
trans-1,2-Dichloroethene	U		0.000286	0.00108	1	04/14/2018 18:52	WG1098127
1,2-Dichloropropane	U		0.000388	0.00108	1	04/14/2018 18:52	WG1098127
1,1-Dichloropropene	U		0.000344	0.00108	1	04/14/2018 18:52	WG1098127
1,3-Dichloropropane	U		0.000225	0.00108	1	04/14/2018 18:52	WG1098127
cis-1,3-Dichloropropene	U		0.000284	0.00108	1	04/14/2018 18:52	WG1098127
trans-1,3-Dichloropropene	U		0.000290	0.00108	1	04/14/2018 18:52	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000844	0.00271	1	04/14/2018 18:52	WG1098127
2,2-Dichloropropane	U		0.000303	0.00108	1	04/14/2018 18:52	WG1098127
Di-isopropyl ether	U		0.000269	0.00108	1	04/14/2018 18:52	WG1098127
Ethylbenzene	U		0.000322	0.00108	1	04/14/2018 18:52	WG1098127
Hexachloro-1,3-butadiene	U		0.000371	0.00108	1	04/14/2018 18:52	WG1098127
2-Hexanone	U		0.00149	0.0108	1	04/14/2018 18:52	WG1098127
n-Hexane	U		0.000315	0.0108	1	04/14/2018 18:52	WG1098127
Iodomethane	U		0.00274	0.0108	1	04/14/2018 18:52	WG1098127
Isopropylbenzene	U		0.000264	0.00108	1	04/14/2018 18:52	WG1098127
p-Isopropyltoluene	U		0.000221	0.00108	1	04/14/2018 18:52	WG1098127
2-Butanone (MEK)	U		0.00508	0.0108	1	04/14/2018 18:52	WG1098127
Methylene Chloride	U		0.00108	0.00542	1	04/14/2018 18:52	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0108	1	04/14/2018 18:52	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 10:05

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00108	1	04/14/2018 18:52	WG1098127
Naphthalene	U		0.00108	0.00542	1	04/14/2018 18:52	WG1098127
n-Propylbenzene	U		0.000223	0.00108	1	04/14/2018 18:52	WG1098127
Styrene	U		0.000254	0.00108	1	04/14/2018 18:52	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000286	0.00108	1	04/14/2018 18:52	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000396	0.00108	1	04/14/2018 18:52	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000396	0.00108	1	04/14/2018 18:52	WG1098127
Tetrachloroethene	0.00188		0.000299	0.00108	1	04/14/2018 18:52	WG1098127
Toluene	U		0.000471	0.00542	1	04/14/2018 18:52	WG1098127
1,2,3-Trichlorobenzene	U		0.000332	0.00108	1	04/14/2018 18:52	WG1098127
1,2,4-Trichlorobenzene	U		0.000421	0.00108	1	04/14/2018 18:52	WG1098127
1,1,1-Trichloroethane	U		0.000310	0.00108	1	04/14/2018 18:52	WG1098127
1,1,2-Trichloroethane	U		0.000300	0.00108	1	04/14/2018 18:52	WG1098127
Trichloroethene	U		0.000303	0.00108	1	04/14/2018 18:52	WG1098127
Trichlorofluoromethane	U		0.000414	0.00542	1	04/14/2018 18:52	WG1098127
1,2,3-Trichloropropane	U		0.000804	0.00271	1	04/14/2018 18:52	WG1098127
1,2,4-Trimethylbenzene	U		0.000229	0.00108	1	04/14/2018 18:52	WG1098127
1,2,3-Trimethylbenzene	U		0.000311	0.00108	1	04/14/2018 18:52	WG1098127
1,3,5-Trimethylbenzene	U		0.000289	0.00108	1	04/14/2018 18:52	WG1098127
Vinyl acetate	U		0.00259	0.0108	1	04/14/2018 18:52	WG1098127
Vinyl chloride	U		0.000316	0.00108	1	04/14/2018 18:52	WG1098127
Xylenes, Total	U		0.000757	0.00325	1	04/14/2018 18:52	WG1098127
(S) Toluene-d8	101			80.0-120		04/14/2018 18:52	WG1098127
(S) Dibromofluoromethane	103			74.0-131		04/14/2018 18:52	WG1098127
(S) 4-Bromofluorobenzene	94.2			64.0-132		04/14/2018 18:52	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 10:20

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0561	1	04/14/2018 19:14	WG1098127
Acrylonitrile	U		0.00201	0.0112	1	04/14/2018 19:14	WG1098127
Benzene	U		0.000303	0.00112	1	04/14/2018 19:14	WG1098127
Bromobenzene	U		0.000319	0.00112	1	04/14/2018 19:14	WG1098127
Bromodichloromethane	U		0.000285	0.00112	1	04/14/2018 19:14	WG1098127
Bromochloromethane	U		0.000438	0.00561	1	04/14/2018 19:14	WG1098127
Bromoform	U		0.000476	0.00112	1	04/14/2018 19:14	WG1098127
Bromomethane	U		0.00150	0.00561	1	04/14/2018 19:14	WG1098127
n-Butylbenzene	U		0.000290	0.00112	1	04/14/2018 19:14	WG1098127
sec-Butylbenzene	U		0.000226	0.00112	1	04/14/2018 19:14	WG1098127
tert-Butylbenzene	U		0.000231	0.00112	1	04/14/2018 19:14	WG1098127
Carbon disulfide	U		0.000248	0.00112	1	04/14/2018 19:14	WG1098127
Carbon tetrachloride	U		0.000368	0.00112	1	04/14/2018 19:14	WG1098127
Chlorobenzene	U		0.000238	0.00112	1	04/14/2018 19:14	WG1098127
Chlorodibromomethane	U		0.000419	0.00112	1	04/14/2018 19:14	WG1098127
Chloroethane	U		0.00106	0.00561	1	04/14/2018 19:14	WG1098127
Chloroform	U		0.000257	0.00561	1	04/14/2018 19:14	WG1098127
Chloromethane	U		0.000421	0.00281	1	04/14/2018 19:14	WG1098127
2-Chlorotoluene	U		0.000338	0.00112	1	04/14/2018 19:14	WG1098127
4-Chlorotoluene	U		0.000269	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00118	0.00561	1	04/14/2018 19:14	WG1098127
1,2-Dibromoethane	U		0.000385	0.00112	1	04/14/2018 19:14	WG1098127
Dibromomethane	U		0.000429	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dichlorobenzene	U		0.000342	0.00112	1	04/14/2018 19:14	WG1098127
1,3-Dichlorobenzene	U		0.000268	0.00112	1	04/14/2018 19:14	WG1098127
1,4-Dichlorobenzene	U		0.000254	0.00112	1	04/14/2018 19:14	WG1098127
Dichlorodifluoromethane	U		0.000801	0.00561	1	04/14/2018 19:14	WG1098127
1,1-Dichloroethane	U		0.000223	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dichloroethane	U		0.000298	0.00112	1	04/14/2018 19:14	WG1098127
1,1-Dichloroethene	U		0.000340	0.00112	1	04/14/2018 19:14	WG1098127
cis-1,2-Dichloroethene	0.00364		0.000264	0.00112	1	04/14/2018 19:14	WG1098127
trans-1,2-Dichloroethene	U		0.000296	0.00112	1	04/14/2018 19:14	WG1098127
1,2-Dichloropropane	U		0.000402	0.00112	1	04/14/2018 19:14	WG1098127
1,1-Dichloropropene	U		0.000356	0.00112	1	04/14/2018 19:14	WG1098127
1,3-Dichloropropane	U		0.000232	0.00112	1	04/14/2018 19:14	WG1098127
cis-1,3-Dichloropropene	U		0.000294	0.00112	1	04/14/2018 19:14	WG1098127
trans-1,3-Dichloropropene	U		0.000300	0.00112	1	04/14/2018 19:14	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000874	0.00281	1	04/14/2018 19:14	WG1098127
2,2-Dichloropropane	U		0.000313	0.00112	1	04/14/2018 19:14	WG1098127
Di-isopropyl ether	U		0.000278	0.00112	1	04/14/2018 19:14	WG1098127
Ethylbenzene	U		0.000334	0.00112	1	04/14/2018 19:14	WG1098127
Hexachloro-1,3-butadiene	U		0.000384	0.00112	1	04/14/2018 19:14	WG1098127
2-Hexanone	U		0.00154	0.0112	1	04/14/2018 19:14	WG1098127
n-Hexane	0.000376	J U	0.000326	0.0112	1	04/14/2018 19:14	WG1098127
Iodomethane	U		0.00284	0.0112	1	04/14/2018 19:14	WG1098127
Isopropylbenzene	U		0.000273	0.00112	1	04/14/2018 19:14	WG1098127
p-Isopropyltoluene	U		0.000229	0.00112	1	04/14/2018 19:14	WG1098127
2-Butanone (MEK)	U		0.00526	0.0112	1	04/14/2018 19:14	WG1098127
Methylene Chloride	U		0.00112	0.00561	1	04/14/2018 19:14	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00211	0.0112	1	04/14/2018 19:14	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 10:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000238	0.00112	1	04/14/2018 19:14	WG1098127
Naphthalene	U		0.00112	0.00561	1	04/14/2018 19:14	WG1098127
n-Propylbenzene	U		0.000231	0.00112	1	04/14/2018 19:14	WG1098127
Styrene	U		0.000263	0.00112	1	04/14/2018 19:14	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000296	0.00112	1	04/14/2018 19:14	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000410	0.00112	1	04/14/2018 19:14	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000410	0.00112	1	04/14/2018 19:14	WG1098127
Tetrachloroethene	U		0.000310	0.00112	1	04/14/2018 19:14	WG1098127
Toluene	U		0.000487	0.00561	1	04/14/2018 19:14	WG1098127
1,2,3-Trichlorobenzene	U		0.000344	0.00112	1	04/14/2018 19:14	WG1098127
1,2,4-Trichlorobenzene	U		0.000436	0.00112	1	04/14/2018 19:14	WG1098127
1,1,1-Trichloroethane	U		0.000321	0.00112	1	04/14/2018 19:14	WG1098127
1,1,2-Trichloroethane	U		0.000311	0.00112	1	04/14/2018 19:14	WG1098127
Trichloroethene	U		0.000313	0.00112	1	04/14/2018 19:14	WG1098127
Trichlorofluoromethane	U		0.000429	0.00561	1	04/14/2018 19:14	WG1098127
1,2,3-Trichloropropane	U		0.000832	0.00281	1	04/14/2018 19:14	WG1098127
1,2,4-Trimethylbenzene	U		0.000237	0.00112	1	04/14/2018 19:14	WG1098127
1,2,3-Trimethylbenzene	U		0.000322	0.00112	1	04/14/2018 19:14	WG1098127
1,3,5-Trimethylbenzene	U		0.000299	0.00112	1	04/14/2018 19:14	WG1098127
Vinyl acetate	U		0.00268	0.0112	1	04/14/2018 19:14	WG1098127
Vinyl chloride	0.0144		0.000327	0.00112	1	04/14/2018 19:14	WG1098127
Xylenes, Total	U		0.000784	0.00337	1	04/14/2018 19:14	WG1098127
<i>(S) Toluene-d8</i>	101			80.0-120		04/14/2018 19:14	WG1098127
<i>(S) Dibromofluoromethane</i>	104			74.0-131		04/14/2018 19:14	WG1098127
<i>(S) 4-Bromofluorobenzene</i>	93.6			64.0-132		04/14/2018 19:14	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 10:45

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	92.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0109	0.0543	1	04/14/2018 19:35	WG1098127
Acrylonitrile	U		0.00194	0.0109	1	04/14/2018 19:35	WG1098127
Benzene	U		0.000293	0.00109	1	04/14/2018 19:35	WG1098127
Bromobenzene	U		0.000309	0.00109	1	04/14/2018 19:35	WG1098127
Bromodichloromethane	U		0.000276	0.00109	1	04/14/2018 19:35	WG1098127
Bromochloromethane	U		0.000424	0.00543	1	04/14/2018 19:35	WG1098127
Bromoform	U		0.000461	0.00109	1	04/14/2018 19:35	WG1098127
Bromomethane	U		0.00146	0.00543	1	04/14/2018 19:35	WG1098127
n-Butylbenzene	U		0.000280	0.00109	1	04/14/2018 19:35	WG1098127
sec-Butylbenzene	U		0.000218	0.00109	1	04/14/2018 19:35	WG1098127
tert-Butylbenzene	U		0.000224	0.00109	1	04/14/2018 19:35	WG1098127
Carbon disulfide	0.000261	J J	0.000240	0.00109	1	04/14/2018 19:35	WG1098127
Carbon tetrachloride	U		0.000356	0.00109	1	04/14/2018 19:35	WG1098127
Chlorobenzene	U		0.000230	0.00109	1	04/14/2018 19:35	WG1098127
Chlorodibromomethane	U		0.000405	0.00109	1	04/14/2018 19:35	WG1098127
Chloroethane	U		0.00103	0.00543	1	04/14/2018 19:35	WG1098127
Chloroform	U		0.000249	0.00543	1	04/14/2018 19:35	WG1098127
Chloromethane	U		0.000407	0.00272	1	04/14/2018 19:35	WG1098127
2-Chlorotoluene	U		0.000327	0.00109	1	04/14/2018 19:35	WG1098127
4-Chlorotoluene	U		0.000261	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00114	0.00543	1	04/14/2018 19:35	WG1098127
1,2-Dibromoethane	U		0.000373	0.00109	1	04/14/2018 19:35	WG1098127
Dibromomethane	U		0.000415	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dichlorobenzene	U		0.000331	0.00109	1	04/14/2018 19:35	WG1098127
1,3-Dichlorobenzene	U		0.000260	0.00109	1	04/14/2018 19:35	WG1098127
1,4-Dichlorobenzene	U		0.000246	0.00109	1	04/14/2018 19:35	WG1098127
Dichlorodifluoromethane	U		0.000775	0.00543	1	04/14/2018 19:35	WG1098127
1,1-Dichloroethane	U		0.000216	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dichloroethane	U		0.000288	0.00109	1	04/14/2018 19:35	WG1098127
1,1-Dichloroethene	U		0.000329	0.00109	1	04/14/2018 19:35	WG1098127
cis-1,2-Dichloroethene	0.00113		0.000255	0.00109	1	04/14/2018 19:35	WG1098127
trans-1,2-Dichloroethene	U		0.000287	0.00109	1	04/14/2018 19:35	WG1098127
1,2-Dichloropropane	U		0.000389	0.00109	1	04/14/2018 19:35	WG1098127
1,1-Dichloropropene	U		0.000344	0.00109	1	04/14/2018 19:35	WG1098127
1,3-Dichloropropane	U		0.000225	0.00109	1	04/14/2018 19:35	WG1098127
cis-1,3-Dichloropropene	U		0.000285	0.00109	1	04/14/2018 19:35	WG1098127
trans-1,3-Dichloropropene	U		0.000290	0.00109	1	04/14/2018 19:35	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000845	0.00272	1	04/14/2018 19:35	WG1098127
2,2-Dichloropropane	U		0.000303	0.00109	1	04/14/2018 19:35	WG1098127
Di-isopropyl ether	U		0.000269	0.00109	1	04/14/2018 19:35	WG1098127
Ethylbenzene	U		0.000323	0.00109	1	04/14/2018 19:35	WG1098127
Hexachloro-1,3-butadiene	U		0.000372	0.00109	1	04/14/2018 19:35	WG1098127
2-Hexanone	U		0.00149	0.0109	1	04/14/2018 19:35	WG1098127
n-Hexane	U		0.000315	0.0109	1	04/14/2018 19:35	WG1098127
Iodomethane	U		0.00275	0.0109	1	04/14/2018 19:35	WG1098127
Isopropylbenzene	U		0.000264	0.00109	1	04/14/2018 19:35	WG1098127
p-Isopropyltoluene	U		0.000222	0.00109	1	04/14/2018 19:35	WG1098127
2-Butanone (MEK)	U		0.00508	0.0109	1	04/14/2018 19:35	WG1098127
Methylene Chloride	U		0.00109	0.00543	1	04/14/2018 19:35	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00204	0.0109	1	04/14/2018 19:35	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 10:45

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000230	0.00109	1	04/14/2018 19:35	WG1098127
Naphthalene	U		0.00109	0.00543	1	04/14/2018 19:35	WG1098127
n-Propylbenzene	U		0.000224	0.00109	1	04/14/2018 19:35	WG1098127
Styrene	U		0.000254	0.00109	1	04/14/2018 19:35	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000287	0.00109	1	04/14/2018 19:35	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000397	0.00109	1	04/14/2018 19:35	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000397	0.00109	1	04/14/2018 19:35	WG1098127
Tetrachloroethene	0.000801	J	0.000300	0.00109	1	04/14/2018 19:35	WG1098127
Toluene	U		0.000471	0.00543	1	04/14/2018 19:35	WG1098127
1,2,3-Trichlorobenzene	U		0.000332	0.00109	1	04/14/2018 19:35	WG1098127
1,2,4-Trichlorobenzene	U		0.000421	0.00109	1	04/14/2018 19:35	WG1098127
1,1,1-Trichloroethane	U		0.000311	0.00109	1	04/14/2018 19:35	WG1098127
1,1,2-Trichloroethane	U		0.000301	0.00109	1	04/14/2018 19:35	WG1098127
Trichloroethene	0.000551	J	0.000303	0.00109	1	04/14/2018 19:35	WG1098127
Trichlorofluoromethane	U		0.000415	0.00543	1	04/14/2018 19:35	WG1098127
1,2,3-Trichloropropane	U		0.000805	0.00272	1	04/14/2018 19:35	WG1098127
1,2,4-Trimethylbenzene	U		0.000229	0.00109	1	04/14/2018 19:35	WG1098127
1,2,3-Trimethylbenzene	U		0.000312	0.00109	1	04/14/2018 19:35	WG1098127
1,3,5-Trimethylbenzene	U		0.000289	0.00109	1	04/14/2018 19:35	WG1098127
Vinyl acetate	U		0.00260	0.0109	1	04/14/2018 19:35	WG1098127
Vinyl chloride	U		0.000316	0.00109	1	04/14/2018 19:35	WG1098127
Xylenes, Total	U		0.000758	0.00326	1	04/14/2018 19:35	WG1098127
(S) Toluene-d8	98.5			80.0-120		04/14/2018 19:35	WG1098127
(S) Dibromofluoromethane	102			74.0-131		04/14/2018 19:35	WG1098127
(S) 4-Bromofluorobenzene	96.8			64.0-132		04/14/2018 19:35	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 11:00

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.7		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0110	0.0551	1	04/14/2018 19:56	WG1098127
Acrylonitrile	U		0.00197	0.0110	1	04/14/2018 19:56	WG1098127
Benzene	U		0.000298	0.00110	1	04/14/2018 19:56	WG1098127
Bromobenzene	U		0.000313	0.00110	1	04/14/2018 19:56	WG1098127
Bromodichloromethane	U		0.000280	0.00110	1	04/14/2018 19:56	WG1098127
Bromochloromethane	U		0.000430	0.00551	1	04/14/2018 19:56	WG1098127
Bromoform	U		0.000468	0.00110	1	04/14/2018 19:56	WG1098127
Bromomethane	U		0.00148	0.00551	1	04/14/2018 19:56	WG1098127
n-Butylbenzene	U		0.000285	0.00110	1	04/14/2018 19:56	WG1098127
sec-Butylbenzene	U		0.000222	0.00110	1	04/14/2018 19:56	WG1098127
tert-Butylbenzene	U		0.000227	0.00110	1	04/14/2018 19:56	WG1098127
Carbon disulfide	0.000256 J	J	0.000244	0.00110	1	04/14/2018 19:56	WG1098127
Carbon tetrachloride	U		0.000362	0.00110	1	04/14/2018 19:56	WG1098127
Chlorobenzene	U		0.000234	0.00110	1	04/14/2018 19:56	WG1098127
Chlorodibromomethane	U		0.000411	0.00110	1	04/14/2018 19:56	WG1098127
Chloroethane	U		0.00104	0.00551	1	04/14/2018 19:56	WG1098127
Chloroform	U		0.000253	0.00551	1	04/14/2018 19:56	WG1098127
Chloromethane	U		0.000414	0.00276	1	04/14/2018 19:56	WG1098127
2-Chlorotoluene	U		0.000332	0.00110	1	04/14/2018 19:56	WG1098127
4-Chlorotoluene	U		0.000265	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00551	1	04/14/2018 19:56	WG1098127
1,2-Dibromoethane	U		0.000378	0.00110	1	04/14/2018 19:56	WG1098127
Dibromomethane	U		0.000421	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dichlorobenzene	U		0.000336	0.00110	1	04/14/2018 19:56	WG1098127
1,3-Dichlorobenzene	U		0.000264	0.00110	1	04/14/2018 19:56	WG1098127
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/14/2018 19:56	WG1098127
Dichlorodifluoromethane	U		0.000786	0.00551	1	04/14/2018 19:56	WG1098127
1,1-Dichloroethane	U		0.000219	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dichloroethane	U		0.000292	0.00110	1	04/14/2018 19:56	WG1098127
1,1-Dichloroethene	U		0.000334	0.00110	1	04/14/2018 19:56	WG1098127
cis-1,2-Dichloroethene	U		0.000259	0.00110	1	04/14/2018 19:56	WG1098127
trans-1,2-Dichloroethene	U		0.000291	0.00110	1	04/14/2018 19:56	WG1098127
1,2-Dichloropropane	U		0.000395	0.00110	1	04/14/2018 19:56	WG1098127
1,1-Dichloropropene	U		0.000350	0.00110	1	04/14/2018 19:56	WG1098127
1,3-Dichloropropane	U		0.000228	0.00110	1	04/14/2018 19:56	WG1098127
cis-1,3-Dichloropropene	U		0.000289	0.00110	1	04/14/2018 19:56	WG1098127
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	04/14/2018 19:56	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000858	0.00276	1	04/14/2018 19:56	WG1098127
2,2-Dichloropropane	U		0.000308	0.00110	1	04/14/2018 19:56	WG1098127
Di-isopropyl ether	U		0.000274	0.00110	1	04/14/2018 19:56	WG1098127
Ethylbenzene	U		0.000328	0.00110	1	04/14/2018 19:56	WG1098127
Hexachloro-1,3-butadiene	U		0.000377	0.00110	1	04/14/2018 19:56	WG1098127
2-Hexanone	U		0.00151	0.0110	1	04/14/2018 19:56	WG1098127
n-Hexane	U		0.000320	0.0110	1	04/14/2018 19:56	WG1098127
Iodomethane	U		0.00279	0.0110	1	04/14/2018 19:56	WG1098127
Isopropylbenzene	U		0.000268	0.00110	1	04/14/2018 19:56	WG1098127
p-Isopropyltoluene	U		0.000225	0.00110	1	04/14/2018 19:56	WG1098127
2-Butanone (MEK)	U		0.00516	0.0110	1	04/14/2018 19:56	WG1098127
Methylene Chloride	U		0.00110	0.00551	1	04/14/2018 19:56	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/14/2018 19:56	WG1098127

JC 5/9/18

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/09/18 11:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000234	0.00110	1	04/14/2018 19:56	WG1098127
Naphthalene	U		0.00110	0.00551	1	04/14/2018 19:56	WG1098127
n-Propylbenzene	U		0.000227	0.00110	1	04/14/2018 19:56	WG1098127
Styrene	U		0.000258	0.00110	1	04/14/2018 19:56	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000291	0.00110	1	04/14/2018 19:56	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000403	0.00110	1	04/14/2018 19:56	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000403	0.00110	1	04/14/2018 19:56	WG1098127
Tetrachloroethene	U		0.000304	0.00110	1	04/14/2018 19:56	WG1098127
Toluene	U		0.000479	0.00551	1	04/14/2018 19:56	WG1098127
1,2,3-Trichlorobenzene	U		0.000338	0.00110	1	04/14/2018 19:56	WG1098127
1,2,4-Trichlorobenzene	U		0.000428	0.00110	1	04/14/2018 19:56	WG1098127
1,1,1-Trichloroethane	U		0.000315	0.00110	1	04/14/2018 19:56	WG1098127
1,1,2-Trichloroethane	U		0.000306	0.00110	1	04/14/2018 19:56	WG1098127
Trichloroethene	U		0.000308	0.00110	1	04/14/2018 19:56	WG1098127
Trichlorofluoromethane	U		0.000421	0.00551	1	04/14/2018 19:56	WG1098127
1,2,3-Trichloropropane	U		0.000817	0.00276	1	04/14/2018 19:56	WG1098127
1,2,4-Trimethylbenzene	U		0.000233	0.00110	1	04/14/2018 19:56	WG1098127
1,2,3-Trimethylbenzene	U		0.000317	0.00110	1	04/14/2018 19:56	WG1098127
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/14/2018 19:56	WG1098127
Vinyl acetate	U		0.00264	0.0110	1	04/14/2018 19:56	WG1098127
Vinyl chloride	U		0.000321	0.00110	1	04/14/2018 19:56	WG1098127
Xylenes, Total	U		0.000770	0.00331	1	04/14/2018 19:56	WG1098127
(S) Toluene-d8	102			80.0-120		04/14/2018 19:56	WG1098127
(S) Dibromofluoromethane	96.8			74.0-131		04/14/2018 19:56	WG1098127
(S) 4-Bromofluorobenzene	98.8			64.0-132		04/14/2018 19:56	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.2		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0126	0.0631	1	04/14/2018 20:18	WG1098127
Acrylonitrile	U		0.00226	0.0126	1	04/14/2018 20:18	WG1098127
Benzene	U		0.000341	0.00126	1	04/14/2018 20:18	WG1098127
Bromobenzene	U		0.000358	0.00126	1	04/14/2018 20:18	WG1098127
Bromodichloromethane	U		0.000321	0.00126	1	04/14/2018 20:18	WG1098127
Bromochloromethane	U		0.000492	0.00631	1	04/14/2018 20:18	WG1098127
Bromoform	U		0.000535	0.00126	1	04/14/2018 20:18	WG1098127
Bromomethane	U		0.00169	0.00631	1	04/14/2018 20:18	WG1098127
n-Butylbenzene	U		0.000326	0.00126	1	04/14/2018 20:18	WG1098127
sec-Butylbenzene	U		0.000254	0.00126	1	04/14/2018 20:18	WG1098127
tert-Butylbenzene	U		0.000260	0.00126	1	04/14/2018 20:18	WG1098127
Carbon disulfide	U		0.000279	0.00126	1	04/14/2018 20:18	WG1098127
Carbon tetrachloride	U		0.000414	0.00126	1	04/14/2018 20:18	WG1098127
Chlorobenzene	U		0.000268	0.00126	1	04/14/2018 20:18	WG1098127
Chlorodibromomethane	U		0.000471	0.00126	1	04/14/2018 20:18	WG1098127
Chloroethane	U		0.00119	0.00631	1	04/14/2018 20:18	WG1098127
Chloroform	U		0.000289	0.00631	1	04/14/2018 20:18	WG1098127
Chloromethane	U		0.000473	0.00315	1	04/14/2018 20:18	WG1098127
2-Chlorotoluene	U		0.000380	0.00126	1	04/14/2018 20:18	WG1098127
4-Chlorotoluene	U		0.000303	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00132	0.00631	1	04/14/2018 20:18	WG1098127
1,2-Dibromoethane	U		0.000433	0.00126	1	04/14/2018 20:18	WG1098127
Dibromomethane	U		0.000482	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dichlorobenzene	U		0.000385	0.00126	1	04/14/2018 20:18	WG1098127
1,3-Dichlorobenzene	U		0.000302	0.00126	1	04/14/2018 20:18	WG1098127
1,4-Dichlorobenzene	U		0.000285	0.00126	1	04/14/2018 20:18	WG1098127
Dichlorodifluoromethane	U		0.000900	0.00631	1	04/14/2018 20:18	WG1098127
1,1-Dichloroethane	U		0.000251	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dichloroethane	U		0.000334	0.00126	1	04/14/2018 20:18	WG1098127
1,1-Dichloroethene	U		0.000382	0.00126	1	04/14/2018 20:18	WG1098127
cis-1,2-Dichloroethene	U		0.000297	0.00126	1	04/14/2018 20:18	WG1098127
trans-1,2-Dichloroethene	U		0.000333	0.00126	1	04/14/2018 20:18	WG1098127
1,2-Dichloropropane	U		0.000452	0.00126	1	04/14/2018 20:18	WG1098127
1,1-Dichloropropene	U		0.000400	0.00126	1	04/14/2018 20:18	WG1098127
1,3-Dichloropropane	U		0.000261	0.00126	1	04/14/2018 20:18	WG1098127
cis-1,3-Dichloropropene	U		0.000331	0.00126	1	04/14/2018 20:18	WG1098127
trans-1,3-Dichloropropene	U		0.000337	0.00126	1	04/14/2018 20:18	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000982	0.00315	1	04/14/2018 20:18	WG1098127
2,2-Dichloropropane	U		0.000352	0.00126	1	04/14/2018 20:18	WG1098127
Di-isopropyl ether	U		0.000313	0.00126	1	04/14/2018 20:18	WG1098127
Ethylbenzene	U		0.000375	0.00126	1	04/14/2018 20:18	WG1098127
Hexachloro-1,3-butadiene	U		0.000432	0.00126	1	04/14/2018 20:18	WG1098127
2-Hexanone	U		0.00173	0.0126	1	04/14/2018 20:18	WG1098127
n-Hexane	U		0.000366	0.0126	1	04/14/2018 20:18	WG1098127
Iodomethane	U		0.00319	0.0126	1	04/14/2018 20:18	WG1098127
Isopropylbenzene	U		0.000307	0.00126	1	04/14/2018 20:18	WG1098127
p-Isopropyltoluene	U		0.000257	0.00126	1	04/14/2018 20:18	WG1098127
2-Butanone (MEK)	U		0.00591	0.0126	1	04/14/2018 20:18	WG1098127
Methylene Chloride	U		0.00126	0.00631	1	04/14/2018 20:18	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00237	0.0126	1	04/14/2018 20:18	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 11:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000268	0.00126	1	04/14/2018 20:18	WG1098127
Naphthalene	U		0.00126	0.00631	1	04/14/2018 20:18	WG1098127
n-Propylbenzene	U		0.000260	0.00126	1	04/14/2018 20:18	WG1098127
Styrene	U		0.000295	0.00126	1	04/14/2018 20:18	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000333	0.00126	1	04/14/2018 20:18	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000461	0.00126	1	04/14/2018 20:18	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000461	0.00126	1	04/14/2018 20:18	WG1098127
Tetrachloroethene	U		0.000348	0.00126	1	04/14/2018 20:18	WG1098127
Toluene	U		0.000548	0.00631	1	04/14/2018 20:18	WG1098127
1,2,3-Trichlorobenzene	U		0.000386	0.00126	1	04/14/2018 20:18	WG1098127
1,2,4-Trichlorobenzene	U		0.000490	0.00126	1	04/14/2018 20:18	WG1098127
1,1,1-Trichloroethane	U		0.000361	0.00126	1	04/14/2018 20:18	WG1098127
1,1,2-Trichloroethane	U		0.000350	0.00126	1	04/14/2018 20:18	WG1098127
Trichloroethene	U		0.000352	0.00126	1	04/14/2018 20:18	WG1098127
Trichlorofluoromethane	U		0.000482	0.00631	1	04/14/2018 20:18	WG1098127
1,2,3-Trichloropropane	U		0.000935	0.00315	1	04/14/2018 20:18	WG1098127
1,2,4-Trimethylbenzene	U		0.000266	0.00126	1	04/14/2018 20:18	WG1098127
1,2,3-Trimethylbenzene	U		0.000362	0.00126	1	04/14/2018 20:18	WG1098127
1,3,5-Trimethylbenzene	U		0.000336	0.00126	1	04/14/2018 20:18	WG1098127
Vinyl acetate	U		0.00302	0.0126	1	04/14/2018 20:18	WG1098127
Vinyl chloride	U		0.000367	0.00126	1	04/14/2018 20:18	WG1098127
Xylenes, Total	U		0.000881	0.00379	1	04/14/2018 20:18	WG1098127
(S) Toluene-d8	101			80.0-120		04/14/2018 20:18	WG1098127
(S) Dibromofluoromethane	101			74.0-131		04/14/2018 20:18	WG1098127
(S) 4-Bromofluorobenzene	94.8			64.0-132		04/14/2018 20:18	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 11:30

L985279

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	79.4		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0198	J	0.0126	0.0630	1	04/14/2018 20:40	WG1098127
Acrylonitrile	U		0.00226	0.0126	1	04/14/2018 20:40	WG1098127
Benzene	U		0.000340	0.00126	1	04/14/2018 20:40	WG1098127
Bromobenzene	U		0.000358	0.00126	1	04/14/2018 20:40	WG1098127
Bromodichloromethane	U		0.000320	0.00126	1	04/14/2018 20:40	WG1098127
Bromochloromethane	U		0.000491	0.00630	1	04/14/2018 20:40	WG1098127
Bromoform	U		0.000534	0.00126	1	04/14/2018 20:40	WG1098127
Bromomethane	U		0.00169	0.00630	1	04/14/2018 20:40	WG1098127
n-Butylbenzene	U		0.000325	0.00126	1	04/14/2018 20:40	WG1098127
sec-Butylbenzene	U		0.000253	0.00126	1	04/14/2018 20:40	WG1098127
tert-Butylbenzene	U		0.000260	0.00126	1	04/14/2018 20:40	WG1098127
Carbon disulfide	0.000395	J	0.000278	0.00126	1	04/14/2018 20:40	WG1098127
Carbon tetrachloride	U		0.000413	0.00126	1	04/14/2018 20:40	WG1098127
Chlorobenzene	U		0.000267	0.00126	1	04/14/2018 20:40	WG1098127
Chlorodibromomethane	U		0.000470	0.00126	1	04/14/2018 20:40	WG1098127
Chloroethane	U		0.00119	0.00630	1	04/14/2018 20:40	WG1098127
Chloroform	U		0.000289	0.00630	1	04/14/2018 20:40	WG1098127
Chloromethane	U		0.000473	0.00315	1	04/14/2018 20:40	WG1098127
2-Chlorotoluene	U		0.000379	0.00126	1	04/14/2018 20:40	WG1098127
4-Chlorotoluene	U		0.000302	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00132	0.00630	1	04/14/2018 20:40	WG1098127
1,2-Dibromoethane	U		0.000432	0.00126	1	04/14/2018 20:40	WG1098127
Dibromomethane	U		0.000481	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dichlorobenzene	U		0.000384	0.00126	1	04/14/2018 20:40	WG1098127
1,3-Dichlorobenzene	U		0.000301	0.00126	1	04/14/2018 20:40	WG1098127
1,4-Dichlorobenzene	U		0.000285	0.00126	1	04/14/2018 20:40	WG1098127
Dichlorodifluoromethane	U		0.000898	0.00630	1	04/14/2018 20:40	WG1098127
1,1-Dichloroethane	U		0.000251	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dichloroethane	U		0.000334	0.00126	1	04/14/2018 20:40	WG1098127
1,1-Dichloroethene	U		0.000382	0.00126	1	04/14/2018 20:40	WG1098127
cis-1,2-Dichloroethene	0.000380	J	0.000296	0.00126	1	04/14/2018 20:40	WG1098127
trans-1,2-Dichloroethene	U		0.000333	0.00126	1	04/14/2018 20:40	WG1098127
1,2-Dichloropropane	U		0.000451	0.00126	1	04/14/2018 20:40	WG1098127
1,1-Dichloropropene	U		0.000399	0.00126	1	04/14/2018 20:40	WG1098127
1,3-Dichloropropane	U		0.000261	0.00126	1	04/14/2018 20:40	WG1098127
cis-1,3-Dichloropropene	U		0.000330	0.00126	1	04/14/2018 20:40	WG1098127
trans-1,3-Dichloropropene	U		0.000336	0.00126	1	04/14/2018 20:40	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000980	0.00315	1	04/14/2018 20:40	WG1098127
2,2-Dichloropropane	U		0.000352	0.00126	1	04/14/2018 20:40	WG1098127
Di-isopropyl ether	U		0.000313	0.00126	1	04/14/2018 20:40	WG1098127
Ethylbenzene	U		0.000374	0.00126	1	04/14/2018 20:40	WG1098127
Hexachloro-1,3-butadiene	U		0.000431	0.00126	1	04/14/2018 20:40	WG1098127
2-Hexanone	U		0.00173	0.0126	1	04/14/2018 20:40	WG1098127
n-Hexane	0.00557	J	0.000365	0.0126	1	04/14/2018 20:40	WG1098127
Iodomethane	U		0.00319	0.0126	1	04/14/2018 20:40	WG1098127
Isopropylbenzene	U		0.000306	0.00126	1	04/14/2018 20:40	WG1098127
p-Isopropyltoluene	U		0.000257	0.00126	1	04/14/2018 20:40	WG1098127
2-Butanone (MEK)	U		0.00590	0.0126	1	04/14/2018 20:40	WG1098127
Methylene Chloride	U		0.00126	0.00630	1	04/14/2018 20:40	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00237	0.0126	1	04/14/2018 20:40	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 11:30

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000267	0.00126	1	04/14/2018 20:40	WG1098127
Naphthalene	U		0.00126	0.00630	1	04/14/2018 20:40	WG1098127
n-Propylbenzene	U		0.000260	0.00126	1	04/14/2018 20:40	WG1098127
Styrene	U		0.000295	0.00126	1	04/14/2018 20:40	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000333	0.00126	1	04/14/2018 20:40	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000460	0.00126	1	04/14/2018 20:40	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000460	0.00126	1	04/14/2018 20:40	WG1098127
Tetrachloroethene	0.000618	J	0.000348	0.00126	1	04/14/2018 20:40	WG1098127
Toluene	U		0.000547	0.00630	1	04/14/2018 20:40	WG1098127
1,2,3-Trichlorobenzene	U		0.000386	0.00126	1	04/14/2018 20:40	WG1098127
1,2,4-Trichlorobenzene	U		0.000489	0.00126	1	04/14/2018 20:40	WG1098127
1,1,1-Trichloroethane	U		0.000360	0.00126	1	04/14/2018 20:40	WG1098127
1,1,2-Trichloroethane	U		0.000349	0.00126	1	04/14/2018 20:40	WG1098127
Trichloroethene	U		0.000352	0.00126	1	04/14/2018 20:40	WG1098127
Trichlorofluoromethane	U		0.000481	0.00630	1	04/14/2018 20:40	WG1098127
1,2,3-Trichloropropane	U		0.000934	0.00315	1	04/14/2018 20:40	WG1098127
1,2,4-Trimethylbenzene	U		0.000266	0.00126	1	04/14/2018 20:40	WG1098127
1,2,3-Trimethylbenzene	U		0.000362	0.00126	1	04/14/2018 20:40	WG1098127
1,3,5-Trimethylbenzene	U		0.000335	0.00126	1	04/14/2018 20:40	WG1098127
Vinyl acetate	U		0.00301	0.0126	1	04/14/2018 20:40	WG1098127
Vinyl chloride	U		0.000367	0.00126	1	04/14/2018 20:40	WG1098127
Xylenes, Total	U		0.000880	0.00378	1	04/14/2018 20:40	WG1098127
(S) Toluene-d8	102			80.0-120		04/14/2018 20:40	WG1098127
(S) Dibromofluoromethane	103			74.0-131		04/14/2018 20:40	WG1098127
(S) 4-Bromofluorobenzene	96.6			64.0-132		04/14/2018 20:40	WG1098127

- 1 Cp
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Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	85.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0118	J	0.0118	0.0588	1	04/14/2018 21:21	WG1098127
Acrylonitrile	U		0.00210	0.0118	1	04/14/2018 21:21	WG1098127
Benzene	U		0.000317	0.00118	1	04/14/2018 21:21	WG1098127
Bromobenzene	U		0.000334	0.00118	1	04/14/2018 21:21	WG1098127
Bromodichloromethane	U		0.000298	0.00118	1	04/14/2018 21:21	WG1098127
Bromochloromethane	U		0.000458	0.00588	1	04/14/2018 21:21	WG1098127
Bromoform	U		0.000498	0.00118	1	04/14/2018 21:21	WG1098127
Bromomethane	U		0.00157	0.00588	1	04/14/2018 21:21	WG1098127
n-Butylbenzene	U		0.000303	0.00118	1	04/14/2018 21:21	WG1098127
sec-Butylbenzene	U		0.000236	0.00118	1	04/14/2018 21:21	WG1098127
tert-Butylbenzene	U		0.000242	0.00118	1	04/14/2018 21:21	WG1098127
Carbon disulfide	U		0.000260	0.00118	1	04/14/2018 21:21	WG1098127
Carbon tetrachloride	U		0.000385	0.00118	1	04/14/2018 21:21	WG1098127
Chlorobenzene	U		0.000249	0.00118	1	04/14/2018 21:21	WG1098127
Chlorodibromomethane	U		0.000438	0.00118	1	04/14/2018 21:21	WG1098127
Chloroethane	U		0.00111	0.00588	1	04/14/2018 21:21	WG1098127
Chloroform	U		0.000269	0.00588	1	04/14/2018 21:21	WG1098127
Chloromethane	U		0.000441	0.00294	1	04/14/2018 21:21	WG1098127
2-Chlorotoluene	U		0.000354	0.00118	1	04/14/2018 21:21	WG1098127
4-Chlorotoluene	U		0.000282	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00123	0.00588	1	04/14/2018 21:21	WG1098127
1,2-Dibromoethane	U		0.000403	0.00118	1	04/14/2018 21:21	WG1098127
Dibromomethane	U		0.000449	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dichlorobenzene	U		0.000358	0.00118	1	04/14/2018 21:21	WG1098127
1,3-Dichlorobenzene	U		0.000281	0.00118	1	04/14/2018 21:21	WG1098127
1,4-Dichlorobenzene	U		0.000266	0.00118	1	04/14/2018 21:21	WG1098127
Dichlorodifluoromethane	U		0.000838	0.00588	1	04/14/2018 21:21	WG1098127
1,1-Dichloroethane	U		0.000234	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dichloroethane	U		0.000311	0.00118	1	04/14/2018 21:21	WG1098127
1,1-Dichloroethene	U		0.000356	0.00118	1	04/14/2018 21:21	WG1098127
cis-1,2-Dichloroethene	0.000314	J	0.000276	0.00118	1	04/14/2018 21:21	WG1098127
trans-1,2-Dichloroethene	U		0.000310	0.00118	1	04/14/2018 21:21	WG1098127
1,2-Dichloropropane	U		0.000421	0.00118	1	04/14/2018 21:21	WG1098127
1,1-Dichloropropene	U		0.000373	0.00118	1	04/14/2018 21:21	WG1098127
1,3-Dichloropropane	U		0.000243	0.00118	1	04/14/2018 21:21	WG1098127
cis-1,3-Dichloropropene	U		0.000308	0.00118	1	04/14/2018 21:21	WG1098127
trans-1,3-Dichloropropene	U		0.000314	0.00118	1	04/14/2018 21:21	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000914	0.00294	1	04/14/2018 21:21	WG1098127
2,2-Dichloropropane	U		0.000328	0.00118	1	04/14/2018 21:21	WG1098127
Di-isopropyl ether	U		0.000291	0.00118	1	04/14/2018 21:21	WG1098127
Ethylbenzene	U		0.000349	0.00118	1	04/14/2018 21:21	WG1098127
Hexachloro-1,3-butadiene	U		0.000402	0.00118	1	04/14/2018 21:21	WG1098127
2-Hexanone	U		0.00161	0.0118	1	04/14/2018 21:21	WG1098127
n-Hexane	0.00183	J	0.000341	0.0118	1	04/14/2018 21:21	WG1098127
Iodomethane	U		0.00297	0.0118	1	04/14/2018 21:21	WG1098127
Isopropylbenzene	U		0.000286	0.00118	1	04/14/2018 21:21	WG1098127
p-Isopropyltoluene	U		0.000240	0.00118	1	04/14/2018 21:21	WG1098127
2-Butanone (MEK)	U		0.00550	0.0118	1	04/14/2018 21:21	WG1098127
Methylene Chloride	U		0.00118	0.00588	1	04/14/2018 21:21	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00221	0.0118	1	04/14/2018 21:21	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 12:10

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000249	0.00118	1	04/14/2018 21:21	WG1098127
Naphthalene	U		0.00118	0.00588	1	04/14/2018 21:21	WG1098127
n-Propylbenzene	U		0.000242	0.00118	1	04/14/2018 21:21	WG1098127
Styrene	U		0.000275	0.00118	1	04/14/2018 21:21	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000310	0.00118	1	04/14/2018 21:21	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000429	0.00118	1	04/14/2018 21:21	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000429	0.00118	1	04/14/2018 21:21	WG1098127
Tetrachloroethene	0.000585	J	0.000324	0.00118	1	04/14/2018 21:21	WG1098127
Toluene	U		0.000510	0.00588	1	04/14/2018 21:21	WG1098127
1,2,3-Trichlorobenzene	U		0.000360	0.00118	1	04/14/2018 21:21	WG1098127
1,2,4-Trichlorobenzene	U		0.000456	0.00118	1	04/14/2018 21:21	WG1098127
1,1,1-Trichloroethane	U		0.000336	0.00118	1	04/14/2018 21:21	WG1098127
1,1,2-Trichloroethane	U		0.000326	0.00118	1	04/14/2018 21:21	WG1098127
Trichloroethene	U		0.000328	0.00118	1	04/14/2018 21:21	WG1098127
Trichlorofluoromethane	U		0.000449	0.00588	1	04/14/2018 21:21	WG1098127
1,2,3-Trichloropropane	U		0.000871	0.00294	1	04/14/2018 21:21	WG1098127
1,2,4-Trimethylbenzene	U		0.000248	0.00118	1	04/14/2018 21:21	WG1098127
1,2,3-Trimethylbenzene	U		0.000337	0.00118	1	04/14/2018 21:21	WG1098127
1,3,5-Trimethylbenzene	U		0.000313	0.00118	1	04/14/2018 21:21	WG1098127
Vinyl acetate	U		0.00281	0.0118	1	04/14/2018 21:21	WG1098127
Vinyl chloride	U		0.000342	0.00118	1	04/14/2018 21:21	WG1098127
Xylenes, Total	U		0.000820	0.00353	1	04/14/2018 21:21	WG1098127
(S) Toluene-d8	100			80.0-120		04/14/2018 21:21	WG1098127
(S) Dibromofluoromethane	97.6			74.0-131		04/14/2018 21:21	WG1098127
(S) 4-Bromofluorobenzene	96.1			64.0-132		04/14/2018 21:21	WG1098127

- 1 Cp
- 2 Tc
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- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/09/18 00:00

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	UJ JO	1.05	25.0	1	04/13/2018 14:46	WG1097806
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/13/2018 14:46	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 14:46	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 14:46	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 14:46	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 14:46	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 14:46	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 14:46	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 14:46	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 14:46	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 14:46	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 14:46	WG1097806
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/13/2018 14:46	WG1097806
Chlorobenzene	U		0.140	0.500	1	04/13/2018 14:46	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 14:46	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 14:46	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 14:46	WG1097806
Chloromethane	U	UJ JO	0.153	1.25	1	04/13/2018 14:46	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 14:46	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 14:46	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 14:46	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 14:46	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 14:46	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 14:46	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 14:46	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 14:46	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 14:46	WG1097806
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/13/2018 14:46	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 14:46	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 14:46	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 14:46	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 14:46	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 14:46	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 14:46	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 14:46	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 14:46	WG1097806
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/13/2018 14:46	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 14:46	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 14:46	WG1097806
2-Hexanone	U	UJ JO	0.757	5.00	1	04/13/2018 14:46	WG1097806
n-Hexane	U	UJ JO	0.305	5.00	1	04/13/2018 14:46	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 14:46	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 14:46	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 14:46	WG1097806
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/13/2018 14:46	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 14:46	WG1097806
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/13/2018 14:46	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 14:46	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 14:46	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 14:46	WG1097806
Styrene	U	J4	0.117	0.500	1	04/13/2018 14:46	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 14:46	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 14:46	WG1097806

- 1 Cp
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JC 5/9/18



Collected date/time: 04/09/18 00:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 14:46	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 14:46	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 14:46	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 14:46	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 14:46	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 14:46	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 14:46	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 14:46	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 14:46	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 14:46	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 14:46	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 14:46	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 14:46	WG1097806
Vinyl acetate	U		0.645	5.00	1	04/13/2018 14:46	WG1097806
Vinyl chloride	U		0.118	0.500	1	04/13/2018 14:46	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 14:46	WG1097806
(S) Toluene-d8	93.9			80.0-120		04/13/2018 14:46	WG1097806
(S) Dibromofluoromethane	102			76.0-123		04/13/2018 14:46	WG1097806
(S) 4-Bromofluorobenzene	118			80.0-120		04/13/2018 14:46	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	72.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0437	J	0.0139	0.0693	1	04/14/2018 21:42	WG1098127
Acrylonitrile	U		0.00248	0.0139	1	04/14/2018 21:42	WG1098127
Benzene	0.00459		0.000374	0.00139	1	04/14/2018 21:42	WG1098127
Bromobenzene	U		0.000394	0.00139	1	04/14/2018 21:42	WG1098127
Bromodichloromethane	U		0.000352	0.00139	1	04/14/2018 21:42	WG1098127
Bromochloromethane	U		0.000541	0.00693	1	04/14/2018 21:42	WG1098127
Bromoform	U		0.000588	0.00139	1	04/14/2018 21:42	WG1098127
Bromomethane	U		0.00186	0.00693	1	04/14/2018 21:42	WG1098127
n-Butylbenzene	U		0.000358	0.00139	1	04/14/2018 21:42	WG1098127
sec-Butylbenzene	U		0.000279	0.00139	1	04/14/2018 21:42	WG1098127
tert-Butylbenzene	U		0.000286	0.00139	1	04/14/2018 21:42	WG1098127
Carbon disulfide	0.000789	J	0.000306	0.00139	1	04/14/2018 21:42	WG1098127
Carbon tetrachloride	U		0.000455	0.00139	1	04/14/2018 21:42	WG1098127
Chlorobenzene	U		0.000294	0.00139	1	04/14/2018 21:42	WG1098127
Chlorodibromomethane	U		0.000517	0.00139	1	04/14/2018 21:42	WG1098127
Chloroethane	U		0.00131	0.00693	1	04/14/2018 21:42	WG1098127
Chloroform	U		0.000317	0.00693	1	04/14/2018 21:42	WG1098127
Chloromethane	U		0.000520	0.00347	1	04/14/2018 21:42	WG1098127
2-Chlorotoluene	U		0.000417	0.00139	1	04/14/2018 21:42	WG1098127
4-Chlorotoluene	U		0.000333	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00146	0.00693	1	04/14/2018 21:42	WG1098127
1,2-Dibromoethane	U		0.000475	0.00139	1	04/14/2018 21:42	WG1098127
Dibromomethane	U		0.000530	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dichlorobenzene	U		0.000423	0.00139	1	04/14/2018 21:42	WG1098127
1,3-Dichlorobenzene	U		0.000331	0.00139	1	04/14/2018 21:42	WG1098127
1,4-Dichlorobenzene	U		0.000313	0.00139	1	04/14/2018 21:42	WG1098127
Dichlorodifluoromethane	U		0.000988	0.00693	1	04/14/2018 21:42	WG1098127
1,1-Dichloroethane	0.000609	J	0.000276	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dichloroethane	U		0.000367	0.00139	1	04/14/2018 21:42	WG1098127
1,1-Dichloroethene	U		0.000420	0.00139	1	04/14/2018 21:42	WG1098127
cis-1,2-Dichloroethene	U		0.000326	0.00139	1	04/14/2018 21:42	WG1098127
trans-1,2-Dichloroethene	U		0.000366	0.00139	1	04/14/2018 21:42	WG1098127
1,2-Dichloropropane	U		0.000496	0.00139	1	04/14/2018 21:42	WG1098127
1,1-Dichloropropene	U		0.000439	0.00139	1	04/14/2018 21:42	WG1098127
1,3-Dichloropropane	U		0.000287	0.00139	1	04/14/2018 21:42	WG1098127
cis-1,3-Dichloropropene	U		0.000363	0.00139	1	04/14/2018 21:42	WG1098127
trans-1,3-Dichloropropene	U		0.000370	0.00139	1	04/14/2018 21:42	WG1098127
trans-1,4-Dichloro-2-butene	U		0.00108	0.00347	1	04/14/2018 21:42	WG1098127
2,2-Dichloropropane	U		0.000387	0.00139	1	04/14/2018 21:42	WG1098127
Di-isopropyl ether	U		0.000344	0.00139	1	04/14/2018 21:42	WG1098127
Ethylbenzene	U		0.000412	0.00139	1	04/14/2018 21:42	WG1098127
Hexachloro-1,3-butadiene	U		0.000474	0.00139	1	04/14/2018 21:42	WG1098127
2-Hexanone	U		0.00190	0.0139	1	04/14/2018 21:42	WG1098127
n-Hexane	0.00289	J	0.000402	0.0139	1	04/14/2018 21:42	WG1098127
Iodomethane	U		0.00351	0.0139	1	04/14/2018 21:42	WG1098127
Isopropylbenzene	U		0.000337	0.00139	1	04/14/2018 21:42	WG1098127
p-Isopropyltoluene	U		0.000283	0.00139	1	04/14/2018 21:42	WG1098127
2-Butanone (MEK)	U		0.00649	0.0139	1	04/14/2018 21:42	WG1098127
Methylene Chloride	U		0.00139	0.00693	1	04/14/2018 21:42	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00261	0.0139	1	04/14/2018 21:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 09:38

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000294	0.00139	1	04/14/2018 21:42	WG1098127
Naphthalene	U		0.00139	0.00693	1	04/14/2018 21:42	WG1098127
n-Propylbenzene	U		0.000286	0.00139	1	04/14/2018 21:42	WG1098127
Styrene	U		0.000324	0.00139	1	04/14/2018 21:42	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000366	0.00139	1	04/14/2018 21:42	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000506	0.00139	1	04/14/2018 21:42	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000506	0.00139	1	04/14/2018 21:42	WG1098127
Tetrachloroethene	0.000499	J U	0.000383	0.00139	1	04/14/2018 21:42	WG1098127
Toluene	U		0.000602	0.00693	1	04/14/2018 21:42	WG1098127
1,2,3-Trichlorobenzene	U		0.000424	0.00139	1	04/14/2018 21:42	WG1098127
1,2,4-Trichlorobenzene	U		0.000538	0.00139	1	04/14/2018 21:42	WG1098127
1,1,1-Trichloroethane	0.000715	J U	0.000396	0.00139	1	04/14/2018 21:42	WG1098127
1,1,2-Trichloroethane	U		0.000384	0.00139	1	04/14/2018 21:42	WG1098127
Trichloroethene	U		0.000387	0.00139	1	04/14/2018 21:42	WG1098127
Trichlorofluoromethane	U		0.000530	0.00693	1	04/14/2018 21:42	WG1098127
1,2,3-Trichloropropane	U		0.00103	0.00347	1	04/14/2018 21:42	WG1098127
1,2,4-Trimethylbenzene	U		0.000292	0.00139	1	04/14/2018 21:42	WG1098127
1,2,3-Trimethylbenzene	U		0.000398	0.00139	1	04/14/2018 21:42	WG1098127
1,3,5-Trimethylbenzene	U		0.000369	0.00139	1	04/14/2018 21:42	WG1098127
Vinyl acetate	U		0.00331	0.0139	1	04/14/2018 21:42	WG1098127
Vinyl chloride	U		0.000403	0.00139	1	04/14/2018 21:42	WG1098127
Xylenes, Total	U		0.000968	0.00416	1	04/14/2018 21:42	WG1098127
(S) Toluene-d8	99.3			80.0-120		04/14/2018 21:42	WG1098127
(S) Dibromofluoromethane	95.1			74.0-131		04/14/2018 21:42	WG1098127
(S) 4-Bromofluorobenzene	102			64.0-132		04/14/2018 21:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	86.1		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	0.0142	J	0.0116	0.0581	1	04/15/2018 14:21	WG1098127
Acrylonitrile	U		0.00208	0.0116	1	04/15/2018 14:21	WG1098127
Benzene	U		0.000314	0.00116	1	04/15/2018 14:21	WG1098127
Bromobenzene	U		0.000330	0.00116	1	04/15/2018 14:21	WG1098127
Bromodichloromethane	U		0.000295	0.00116	1	04/15/2018 14:21	WG1098127
Bromochloromethane	U		0.000453	0.00581	1	04/15/2018 14:21	WG1098127
Bromoform	U		0.000493	0.00116	1	04/15/2018 14:21	WG1098127
Bromomethane	U		0.00156	0.00581	1	04/15/2018 14:21	WG1098127
n-Butylbenzene	U		0.000300	0.00116	1	04/15/2018 14:21	WG1098127
sec-Butylbenzene	U		0.000233	0.00116	1	04/15/2018 14:21	WG1098127
tert-Butylbenzene	U		0.000239	0.00116	1	04/15/2018 14:21	WG1098127
Carbon disulfide	0.000833	J	0.000257	0.00116	1	04/15/2018 14:21	WG1098127
Carbon tetrachloride	U		0.000381	0.00116	1	04/15/2018 14:21	WG1098127
Chlorobenzene	U		0.000246	0.00116	1	04/15/2018 14:21	WG1098127
Chlorodibromomethane	U		0.000433	0.00116	1	04/15/2018 14:21	WG1098127
Chloroethane	U		0.00110	0.00581	1	04/15/2018 14:21	WG1098127
Chloroform	U		0.000266	0.00581	1	04/15/2018 14:21	WG1098127
Chloromethane	U		0.000436	0.00290	1	04/15/2018 14:21	WG1098127
2-Chlorotoluene	U		0.000350	0.00116	1	04/15/2018 14:21	WG1098127
4-Chlorotoluene	U		0.000279	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00122	0.00581	1	04/15/2018 14:21	WG1098127
1,2-Dibromoethane	U		0.000398	0.00116	1	04/15/2018 14:21	WG1098127
Dibromomethane	U		0.000444	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dichlorobenzene	U		0.000354	0.00116	1	04/15/2018 14:21	WG1098127
1,3-Dichlorobenzene	U		0.000278	0.00116	1	04/15/2018 14:21	WG1098127
1,4-Dichlorobenzene	U		0.000263	0.00116	1	04/15/2018 14:21	WG1098127
Dichlorodifluoromethane	U		0.000828	0.00581	1	04/15/2018 14:21	WG1098127
1,1-Dichloroethane	U		0.000231	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dichloroethane	U		0.000308	0.00116	1	04/15/2018 14:21	WG1098127
1,1-Dichloroethene	U		0.000352	0.00116	1	04/15/2018 14:21	WG1098127
cis-1,2-Dichloroethene	U		0.000273	0.00116	1	04/15/2018 14:21	WG1098127
trans-1,2-Dichloroethene	U		0.000307	0.00116	1	04/15/2018 14:21	WG1098127
1,2-Dichloropropane	U		0.000416	0.00116	1	04/15/2018 14:21	WG1098127
1,1-Dichloropropene	U		0.000368	0.00116	1	04/15/2018 14:21	WG1098127
1,3-Dichloropropane	U		0.000240	0.00116	1	04/15/2018 14:21	WG1098127
cis-1,3-Dichloropropene	U		0.000304	0.00116	1	04/15/2018 14:21	WG1098127
trans-1,3-Dichloropropene	U		0.000310	0.00116	1	04/15/2018 14:21	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000904	0.00290	1	04/15/2018 14:21	WG1098127
2,2-Dichloropropane	U		0.000324	0.00116	1	04/15/2018 14:21	WG1098127
Di-isopropyl ether	U		0.000288	0.00116	1	04/15/2018 14:21	WG1098127
Ethylbenzene	U		0.000345	0.00116	1	04/15/2018 14:21	WG1098127
Hexachloro-1,3-butadiene	U		0.000397	0.00116	1	04/15/2018 14:21	WG1098127
2-Hexanone	U		0.00159	0.0116	1	04/15/2018 14:21	WG1098127
n-Hexane	U		0.000337	0.0116	1	04/15/2018 14:21	WG1098127
Iodomethane	U		0.00294	0.0116	1	04/15/2018 14:21	WG1098127 JC 5/9/18
Isopropylbenzene	U		0.000282	0.00116	1	04/15/2018 14:21	WG1098127
p-Isopropyltoluene	0.000329	J	0.000237	0.00116	1	04/15/2018 14:21	WG1098127
2-Butanone (MEK)	U		0.00544	0.0116	1	04/15/2018 14:21	WG1098127
Methylene Chloride	U		0.00116	0.00581	1	04/15/2018 14:21	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00218	0.0116	1	04/15/2018 14:21	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/11/18 10:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000246	0.00116	1	04/15/2018 14:21	WG1098127
Naphthalene	U		0.00116	0.00581	1	04/15/2018 14:21	WG1098127
n-Propylbenzene	U		0.000239	0.00116	1	04/15/2018 14:21	WG1098127
Styrene	U		0.000272	0.00116	1	04/15/2018 14:21	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000307	0.00116	1	04/15/2018 14:21	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000424	0.00116	1	04/15/2018 14:21	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000424	0.00116	1	04/15/2018 14:21	WG1098127
Tetrachloroethene	U		0.000321	0.00116	1	04/15/2018 14:21	WG1098127
Toluene	U		0.000504	0.00581	1	04/15/2018 14:21	WG1098127
1,2,3-Trichlorobenzene	U		0.000355	0.00116	1	04/15/2018 14:21	WG1098127
1,2,4-Trichlorobenzene	U		0.000451	0.00116	1	04/15/2018 14:21	WG1098127
1,1,1-Trichloroethane	U		0.000332	0.00116	1	04/15/2018 14:21	WG1098127
1,1,2-Trichloroethane	U		0.000322	0.00116	1	04/15/2018 14:21	WG1098127
Trichloroethene	U		0.000324	0.00116	1	04/15/2018 14:21	WG1098127
Trichlorofluoromethane	U		0.000444	0.00581	1	04/15/2018 14:21	WG1098127
1,2,3-Trichloropropane	U		0.000861	0.00290	1	04/15/2018 14:21	WG1098127
1,2,4-Trimethylbenzene	U		0.000245	0.00116	1	04/15/2018 14:21	WG1098127
1,2,3-Trimethylbenzene	U		0.000333	0.00116	1	04/15/2018 14:21	WG1098127
1,3,5-Trimethylbenzene	U		0.000309	0.00116	1	04/15/2018 14:21	WG1098127
Vinyl acetate	U		0.00278	0.0116	1	04/15/2018 14:21	WG1098127
Vinyl chloride	U		0.000338	0.00116	1	04/15/2018 14:21	WG1098127
Xylenes, Total	U		0.000811	0.00348	1	04/15/2018 14:21	WG1098127
(S) Toluene-d8	104			80.0-120		04/15/2018 14:21	WG1098127
(S) Dibromofluoromethane	96.2			74.0-131		04/15/2018 14:21	WG1098127
(S) 4-Bromofluorobenzene	94.9			64.0-132		04/15/2018 14:21	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.8		1	04/13/2018 14:58	WG1097927

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0114	0.0569	1	04/15/2018 14:42	WG1098127
Acrylonitrile	U		0.00204	0.0114	1	04/15/2018 14:42	WG1098127
Benzene	U		0.000307	0.00114	1	04/15/2018 14:42	WG1098127
Bromobenzene	U		0.000323	0.00114	1	04/15/2018 14:42	WG1098127
Bromodichloromethane	U		0.000289	0.00114	1	04/15/2018 14:42	WG1098127
Bromochloromethane	U		0.000444	0.00569	1	04/15/2018 14:42	WG1098127
Bromoform	U		0.000483	0.00114	1	04/15/2018 14:42	WG1098127
Bromomethane	U		0.00153	0.00569	1	04/15/2018 14:42	WG1098127
n-Butylbenzene	U		0.000294	0.00114	1	04/15/2018 14:42	WG1098127
sec-Butylbenzene	U		0.000229	0.00114	1	04/15/2018 14:42	WG1098127
tert-Butylbenzene	U		0.000235	0.00114	1	04/15/2018 14:42	WG1098127
Carbon disulfide	U		0.000252	0.00114	1	04/15/2018 14:42	WG1098127
Carbon tetrachloride	U		0.000373	0.00114	1	04/15/2018 14:42	WG1098127
Chlorobenzene	U		0.000241	0.00114	1	04/15/2018 14:42	WG1098127
Chlorodibromomethane	U		0.000425	0.00114	1	04/15/2018 14:42	WG1098127
Chloroethane	U		0.00108	0.00569	1	04/15/2018 14:42	WG1098127
Chloroform	U		0.000261	0.00569	1	04/15/2018 14:42	WG1098127
Chloromethane	U		0.000427	0.00285	1	04/15/2018 14:42	WG1098127
2-Chlorotoluene	U		0.000343	0.00114	1	04/15/2018 14:42	WG1098127
4-Chlorotoluene	U		0.000273	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00569	1	04/15/2018 14:42	WG1098127
1,2-Dibromoethane	U		0.000391	0.00114	1	04/15/2018 14:42	WG1098127
Dibromomethane	U		0.000435	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dichlorobenzene	U		0.000347	0.00114	1	04/15/2018 14:42	WG1098127
1,3-Dichlorobenzene	U		0.000272	0.00114	1	04/15/2018 14:42	WG1098127
1,4-Dichlorobenzene	U		0.000257	0.00114	1	04/15/2018 14:42	WG1098127
Dichlorodifluoromethane	U		0.000812	0.00569	1	04/15/2018 14:42	WG1098127
1,1-Dichloroethane	U		0.000227	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dichloroethane	U		0.000302	0.00114	1	04/15/2018 14:42	WG1098127
1,1-Dichloroethene	U		0.000345	0.00114	1	04/15/2018 14:42	WG1098127
cis-1,2-Dichloroethene	0.000547	J J	0.000268	0.00114	1	04/15/2018 14:42	WG1098127
trans-1,2-Dichloroethene	U		0.000301	0.00114	1	04/15/2018 14:42	WG1098127
1,2-Dichloropropane	U		0.000408	0.00114	1	04/15/2018 14:42	WG1098127
1,1-Dichloropropene	U		0.000361	0.00114	1	04/15/2018 14:42	WG1098127
1,3-Dichloropropane	U		0.000236	0.00114	1	04/15/2018 14:42	WG1098127
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	04/15/2018 14:42	WG1098127
trans-1,3-Dichloropropene	U		0.000304	0.00114	1	04/15/2018 14:42	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000886	0.00285	1	04/15/2018 14:42	WG1098127
2,2-Dichloropropane	U		0.000318	0.00114	1	04/15/2018 14:42	WG1098127
Di-isopropyl ether	U		0.000282	0.00114	1	04/15/2018 14:42	WG1098127
Ethylbenzene	U		0.000338	0.00114	1	04/15/2018 14:42	WG1098127
Hexachloro-1,3-butadiene	U		0.000389	0.00114	1	04/15/2018 14:42	WG1098127
2-Hexanone	U		0.00156	0.0114	1	04/15/2018 14:42	WG1098127
n-Hexane	U		0.000330	0.0114	1	04/15/2018 14:42	WG1098127
Iodomethane	U		0.00288	0.0114	1	04/15/2018 14:42	WG1098127
Isopropylbenzene	U		0.000277	0.00114	1	04/15/2018 14:42	WG1098127
p-Isopropyltoluene	U		0.000232	0.00114	1	04/15/2018 14:42	WG1098127
2-Butanone (MEK)	U		0.00533	0.0114	1	04/15/2018 14:42	WG1098127
Methylene Chloride	U		0.00114	0.00569	1	04/15/2018 14:42	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	04/15/2018 14:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 10:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	04/15/2018 14:42	WG1098127
Naphthalene	U		0.00114	0.00569	1	04/15/2018 14:42	WG1098127
n-Propylbenzene	U		0.000235	0.00114	1	04/15/2018 14:42	WG1098127
Styrene	U		0.000266	0.00114	1	04/15/2018 14:42	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000301	0.00114	1	04/15/2018 14:42	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000416	0.00114	1	04/15/2018 14:42	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000416	0.00114	1	04/15/2018 14:42	WG1098127
Tetrachloroethene	U		0.000314	0.00114	1	04/15/2018 14:42	WG1098127
Toluene	U		0.000494	0.00569	1	04/15/2018 14:42	WG1098127
1,2,3-Trichlorobenzene	U		0.000348	0.00114	1	04/15/2018 14:42	WG1098127
1,2,4-Trichlorobenzene	U		0.000442	0.00114	1	04/15/2018 14:42	WG1098127
1,1,1-Trichloroethane	U		0.000326	0.00114	1	04/15/2018 14:42	WG1098127
1,1,2-Trichloroethane	U		0.000315	0.00114	1	04/15/2018 14:42	WG1098127
Trichloroethene	U		0.000318	0.00114	1	04/15/2018 14:42	WG1098127
Trichlorofluoromethane	U		0.000435	0.00569	1	04/15/2018 14:42	WG1098127
1,2,3-Trichloropropane	U		0.000844	0.00285	1	04/15/2018 14:42	WG1098127
1,2,4-Trimethylbenzene	U		0.000240	0.00114	1	04/15/2018 14:42	WG1098127
1,2,3-Trimethylbenzene	U		0.000327	0.00114	1	04/15/2018 14:42	WG1098127
1,3,5-Trimethylbenzene	U		0.000303	0.00114	1	04/15/2018 14:42	WG1098127
Vinyl acetate	U		0.00272	0.0114	1	04/15/2018 14:42	WG1098127
Vinyl chloride	0.000928	J	0.000331	0.00114	1	04/15/2018 14:42	WG1098127
Xylenes, Total	U		0.000795	0.00342	1	04/15/2018 14:42	WG1098127
(S) Toluene-d8	101			80.0-120		04/15/2018 14:42	WG1098127
(S) Dibromofluoromethane	95.0			74.0-131		04/15/2018 14:42	WG1098127
(S) 4-Bromofluorobenzene	96.4			64.0-132		04/15/2018 14:42	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	83.8		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0119	0.0596	1	04/15/2018 15:04	WG1098127
Acrylonitrile	U		0.00214	0.0119	1	04/15/2018 15:04	WG1098127
Benzene	U		0.000322	0.00119	1	04/15/2018 15:04	WG1098127
Bromobenzene	U		0.000339	0.00119	1	04/15/2018 15:04	WG1098127
Bromodichloromethane	U		0.000303	0.00119	1	04/15/2018 15:04	WG1098127
Bromochloromethane	U		0.000465	0.00596	1	04/15/2018 15:04	WG1098127
Bromoform	U		0.000506	0.00119	1	04/15/2018 15:04	WG1098127
Bromomethane	U		0.00160	0.00596	1	04/15/2018 15:04	WG1098127
n-Butylbenzene	U		0.000308	0.00119	1	04/15/2018 15:04	WG1098127
sec-Butylbenzene	U		0.000240	0.00119	1	04/15/2018 15:04	WG1098127
tert-Butylbenzene	U		0.000246	0.00119	1	04/15/2018 15:04	WG1098127
Carbon disulfide	U		0.000264	0.00119	1	04/15/2018 15:04	WG1098127
Carbon tetrachloride	U		0.000391	0.00119	1	04/15/2018 15:04	WG1098127
Chlorobenzene	U		0.000253	0.00119	1	04/15/2018 15:04	WG1098127
Chlorodibromomethane	U		0.000445	0.00119	1	04/15/2018 15:04	WG1098127
Chloroethane	U		0.00113	0.00596	1	04/15/2018 15:04	WG1098127
Chloroform	U		0.000273	0.00596	1	04/15/2018 15:04	WG1098127
Chloromethane	U		0.000447	0.00298	1	04/15/2018 15:04	WG1098127
2-Chlorotoluene	U		0.000359	0.00119	1	04/15/2018 15:04	WG1098127
4-Chlorotoluene	U		0.000286	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00125	0.00596	1	04/15/2018 15:04	WG1098127
1,2-Dibromoethane	U		0.000409	0.00119	1	04/15/2018 15:04	WG1098127
Dibromomethane	U		0.000456	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dichlorobenzene	U		0.000364	0.00119	1	04/15/2018 15:04	WG1098127
1,3-Dichlorobenzene	U		0.000285	0.00119	1	04/15/2018 15:04	WG1098127
1,4-Dichlorobenzene	U		0.000270	0.00119	1	04/15/2018 15:04	WG1098127
Dichlorodifluoromethane	U		0.000850	0.00596	1	04/15/2018 15:04	WG1098127
1,1-Dichloroethane	U		0.000237	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dichloroethane	U		0.000316	0.00119	1	04/15/2018 15:04	WG1098127
1,1-Dichloroethene	U		0.000361	0.00119	1	04/15/2018 15:04	WG1098127
cis-1,2-Dichloroethene	0.00203		0.000280	0.00119	1	04/15/2018 15:04	WG1098127
trans-1,2-Dichloroethene	U		0.000315	0.00119	1	04/15/2018 15:04	WG1098127
1,2-Dichloropropane	U		0.000427	0.00119	1	04/15/2018 15:04	WG1098127
1,1-Dichloropropene	U		0.000378	0.00119	1	04/15/2018 15:04	WG1098127
1,3-Dichloropropane	U		0.000247	0.00119	1	04/15/2018 15:04	WG1098127
cis-1,3-Dichloropropene	U		0.000313	0.00119	1	04/15/2018 15:04	WG1098127
trans-1,3-Dichloropropene	U		0.000318	0.00119	1	04/15/2018 15:04	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000928	0.00298	1	04/15/2018 15:04	WG1098127
2,2-Dichloropropane	U		0.000333	0.00119	1	04/15/2018 15:04	WG1098127
Di-isopropyl ether	U		0.000296	0.00119	1	04/15/2018 15:04	WG1098127
Ethylbenzene	U		0.000354	0.00119	1	04/15/2018 15:04	WG1098127
Hexachloro-1,3-butadiene	U		0.000408	0.00119	1	04/15/2018 15:04	WG1098127
2-Hexanone	U		0.00163	0.0119	1	04/15/2018 15:04	WG1098127
n-Hexane	0.00257	J U	0.000346	0.0119	1	04/15/2018 15:04	WG1098127
Iodomethane	U		0.00302	0.0119	1	04/15/2018 15:04	WG1098127
Isopropylbenzene	U		0.000290	0.00119	1	04/15/2018 15:04	WG1098127
p-Isopropyltoluene	U		0.000243	0.00119	1	04/15/2018 15:04	WG1098127
2-Butanone (MEK)	U		0.00558	0.0119	1	04/15/2018 15:04	WG1098127
Methylene Chloride	U		0.00119	0.00596	1	04/15/2018 15:04	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00224	0.0119	1	04/15/2018 15:04	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 10:40

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000253	0.00119	1	04/15/2018 15:04	WG1098127
Naphthalene	U		0.00119	0.00596	1	04/15/2018 15:04	WG1098127
n-Propylbenzene	U		0.000246	0.00119	1	04/15/2018 15:04	WG1098127
Styrene	U		0.000279	0.00119	1	04/15/2018 15:04	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000315	0.00119	1	04/15/2018 15:04	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000435	0.00119	1	04/15/2018 15:04	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000435	0.00119	1	04/15/2018 15:04	WG1098127
Tetrachloroethene	U		0.000329	0.00119	1	04/15/2018 15:04	WG1098127
Toluene	U		0.000518	0.00596	1	04/15/2018 15:04	WG1098127
1,2,3-Trichlorobenzene	U		0.000365	0.00119	1	04/15/2018 15:04	WG1098127
1,2,4-Trichlorobenzene	U		0.000463	0.00119	1	04/15/2018 15:04	WG1098127
1,1,1-Trichloroethane	U		0.000341	0.00119	1	04/15/2018 15:04	WG1098127
1,1,2-Trichloroethane	U		0.000330	0.00119	1	04/15/2018 15:04	WG1098127
Trichloroethene	U		0.000333	0.00119	1	04/15/2018 15:04	WG1098127
Trichlorofluoromethane	U		0.000456	0.00596	1	04/15/2018 15:04	WG1098127
1,2,3-Trichloropropane	U		0.000884	0.00298	1	04/15/2018 15:04	WG1098127
1,2,4-Trimethylbenzene	U		0.000252	0.00119	1	04/15/2018 15:04	WG1098127
1,2,3-Trimethylbenzene	U		0.000342	0.00119	1	04/15/2018 15:04	WG1098127
1,3,5-Trimethylbenzene	U		0.000317	0.00119	1	04/15/2018 15:04	WG1098127
Vinyl acetate	U		0.00285	0.0119	1	04/15/2018 15:04	WG1098127
Vinyl chloride	0.000521	J	0.000347	0.00119	1	04/15/2018 15:04	WG1098127
Xylenes, Total	U		0.000833	0.00358	1	04/15/2018 15:04	WG1098127
(S) Toluene-d8	103			80.0-120		04/15/2018 15:04	WG1098127
(S) Dibromofluoromethane	97.1			74.0-131		04/15/2018 15:04	WG1098127
(S) 4-Bromofluorobenzene	95.7			64.0-132		04/15/2018 15:04	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	87.3		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0115	0.0573	1	04/15/2018 15:47	WG1098127
Acrylonitrile	U		0.00205	0.0115	1	04/15/2018 15:47	WG1098127
Benzene	U		0.000309	0.00115	1	04/15/2018 15:47	WG1098127
Bromobenzene	U		0.000325	0.00115	1	04/15/2018 15:47	WG1098127
Bromodichloromethane	U		0.000291	0.00115	1	04/15/2018 15:47	WG1098127
Bromochloromethane	U		0.000447	0.00573	1	04/15/2018 15:47	WG1098127
Bromoform	U		0.000486	0.00115	1	04/15/2018 15:47	WG1098127
Bromomethane	U		0.00153	0.00573	1	04/15/2018 15:47	WG1098127
n-Butylbenzene	U		0.000295	0.00115	1	04/15/2018 15:47	WG1098127
sec-Butylbenzene	U		0.000230	0.00115	1	04/15/2018 15:47	WG1098127
tert-Butylbenzene	U		0.000236	0.00115	1	04/15/2018 15:47	WG1098127
Carbon disulfide	U		0.000253	0.00115	1	04/15/2018 15:47	WG1098127
Carbon tetrachloride	U		0.000376	0.00115	1	04/15/2018 15:47	WG1098127
Chlorobenzene	U		0.000243	0.00115	1	04/15/2018 15:47	WG1098127
Chlorodibromomethane	U		0.000427	0.00115	1	04/15/2018 15:47	WG1098127
Chloroethane	U		0.00108	0.00573	1	04/15/2018 15:47	WG1098127
Chloroform	U		0.000262	0.00573	1	04/15/2018 15:47	WG1098127
Chloromethane	U		0.000429	0.00286	1	04/15/2018 15:47	WG1098127
2-Chlorotoluene	U		0.000345	0.00115	1	04/15/2018 15:47	WG1098127
4-Chlorotoluene	U		0.000275	0.00115	1	04/15/2018 15:47	WG1098127
1,2-Dibromo-3-Chloropropane	U		0.00120	0.00573	1	04/15/2018 15:47	WG1098127
1,2-Dibromoethane	U		0.000393	0.00115	1	04/15/2018 15:47	WG1098127
Dibromomethane	U		0.000438	0.00115	1	04/15/2018 15:47	WG1098127
1,2-Dichlorobenzene	U		0.000349	0.00115	1	04/15/2018 15:47	WG1098127
1,3-Dichlorobenzene	U		0.000274	0.00115	1	04/15/2018 15:47	WG1098127
1,4-Dichlorobenzene	U		0.000259	0.00115	1	04/15/2018 15:47	WG1098127
Dichlorodifluoromethane	U		0.000817	0.00573	1	04/15/2018 15:47	WG1098127
1,1-Dichloroethane	U		0.000228	0.00115	1	04/15/2018 15:47	WG1098127
1,2-Dichloroethane	U		0.000304	0.00115	1	04/15/2018 15:47	WG1098127
1,1-Dichloroethene	0.000867	J	U	0.000347	0.00115	04/15/2018 15:47	WG1098127
cis-1,2-Dichloroethene	0.207			0.00673	0.0286	25 04/17/2018 14:55	WG1098127
trans-1,2-Dichloroethene	0.00117			0.000302	0.00115	04/15/2018 15:47	WG1098127
1,2-Dichloropropane	U		0.000410	0.00115	1	04/15/2018 15:47	WG1098127
1,1-Dichloropropene	U		0.000363	0.00115	1	04/15/2018 15:47	WG1098127
1,3-Dichloropropane	U		0.000237	0.00115	1	04/15/2018 15:47	WG1098127
cis-1,3-Dichloropropene	U		0.000300	0.00115	1	04/15/2018 15:47	WG1098127
trans-1,3-Dichloropropene	U		0.000306	0.00115	1	04/15/2018 15:47	WG1098127
trans-1,4-Dichloro-2-butene	U		0.000891	0.00286	1	04/15/2018 15:47	WG1098127
2,2-Dichloropropane	U		0.000320	0.00115	1	04/15/2018 15:47	WG1098127
Di-isopropyl ether	U		0.000284	0.00115	1	04/15/2018 15:47	WG1098127
Ethylbenzene	U		0.000340	0.00115	1	04/15/2018 15:47	WG1098127
Hexachloro-1,3-butadiene	U		0.000392	0.00115	1	04/15/2018 15:47	WG1098127
2-Hexanone	U		0.00157	0.0115	1	04/15/2018 15:47	WG1098127
n-Hexane	0.000594	J	U	0.000332	0.0115	04/15/2018 15:47	WG1098127
Iodomethane	U		0.00290	0.0115	1	04/15/2018 15:47	WG1098127
Isopropylbenzene	U		0.000278	0.00115	1	04/15/2018 15:47	WG1098127
p-Isopropyltoluene	U		0.000234	0.00115	1	04/15/2018 15:47	WG1098127
2-Butanone (MEK)	U		0.00536	0.0115	1	04/15/2018 15:47	WG1098127
Methylene Chloride	U		0.00115	0.00573	1	04/15/2018 15:47	WG1098127
4-Methyl-2-pentanone (MIBK)	U		0.00215	0.0115	1	04/15/2018 15:47	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 10:55

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000243	0.00115	1	04/15/2018 15:47	WG1098127
Naphthalene	U		0.00115	0.00573	1	04/15/2018 15:47	WG1098127
n-Propylbenzene	U		0.000236	0.00115	1	04/15/2018 15:47	WG1098127
Styrene	U		0.000268	0.00115	1	04/15/2018 15:47	WG1098127
1,1,1,2-Tetrachloroethane	U		0.000302	0.00115	1	04/15/2018 15:47	WG1098127
1,1,2,2-Tetrachloroethane	U		0.000418	0.00115	1	04/15/2018 15:47	WG1098127
1,1,2-Trichlorotrifluoroethane	U		0.000418	0.00115	1	04/15/2018 15:47	WG1098127
Tetrachloroethene	0.00589		0.000316	0.00115	1	04/15/2018 15:47	WG1098127
Toluene	U		0.000497	0.00573	1	04/15/2018 15:47	WG1098127
1,2,3-Trichlorobenzene	U		0.000350	0.00115	1	04/15/2018 15:47	WG1098127
1,2,4-Trichlorobenzene	U		0.000444	0.00115	1	04/15/2018 15:47	WG1098127
1,1,1-Trichloroethane	U		0.000328	0.00115	1	04/15/2018 15:47	WG1098127
1,1,2-Trichloroethane	U		0.000317	0.00115	1	04/15/2018 15:47	WG1098127
Trichloroethene	0.00729		0.000320	0.00115	1	04/15/2018 15:47	WG1098127
Trichlorofluoromethane	U		0.000438	0.00573	1	04/15/2018 15:47	WG1098127
1,2,3-Trichloropropane	U		0.000849	0.00286	1	04/15/2018 15:47	WG1098127
1,2,4-Trimethylbenzene	U		0.000242	0.00115	1	04/15/2018 15:47	WG1098127
1,2,3-Trimethylbenzene	U		0.000329	0.00115	1	04/15/2018 15:47	WG1098127
1,3,5-Trimethylbenzene	U		0.000305	0.00115	1	04/15/2018 15:47	WG1098127
Vinyl acetate	U		0.00274	0.0115	1	04/15/2018 15:47	WG1098127
Vinyl chloride	0.0227		0.000333	0.00115	1	04/15/2018 15:47	WG1098127
Xylenes, Total	U		0.000799	0.00344	1	04/15/2018 15:47	WG1098127
(S) Toluene-d8	112			80.0-120		04/17/2018 14:55	WG1098127
(S) Toluene-d8	102			80.0-120		04/15/2018 15:47	WG1098127
(S) Dibromofluoromethane	101			74.0-131		04/17/2018 14:55	WG1098127
(S) Dibromofluoromethane	98.3			74.0-131		04/15/2018 15:47	WG1098127
(S) 4-Bromofluorobenzene	96.2			64.0-132		04/15/2018 15:47	WG1098127
(S) 4-Bromofluorobenzene	99.3			64.0-132		04/17/2018 14:55	WG1098127

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 11:20

L985279

Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.0		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0111	0.0556	1	04/15/2018 16:08	WG1098553
Acrylonitrile	U		0.00199	0.0111	1	04/15/2018 16:08	WG1098553
Benzene	U		0.000300	0.00111	1	04/15/2018 16:08	WG1098553
Bromobenzene	U		0.000316	0.00111	1	04/15/2018 16:08	WG1098553
Bromodichloromethane	U		0.000282	0.00111	1	04/15/2018 16:08	WG1098553
Bromochloromethane	U		0.000433	0.00556	1	04/15/2018 16:08	WG1098553
Bromoform	U		0.000471	0.00111	1	04/15/2018 16:08	WG1098553
Bromomethane	U		0.00149	0.00556	1	04/15/2018 16:08	WG1098553
n-Butylbenzene	U		0.000287	0.00111	1	04/15/2018 16:08	WG1098553
sec-Butylbenzene	U		0.000223	0.00111	1	04/15/2018 16:08	WG1098553
tert-Butylbenzene	U		0.000229	0.00111	1	04/15/2018 16:08	WG1098553
Carbon disulfide	0.000323	J J	0.000246	0.00111	1	04/15/2018 16:08	WG1098553
Carbon tetrachloride	U		0.000365	0.00111	1	04/15/2018 16:08	WG1098553
Chlorobenzene	U		0.000236	0.00111	1	04/15/2018 16:08	WG1098553
Chlorodibromomethane	U		0.000415	0.00111	1	04/15/2018 16:08	WG1098553
Chloroethane	U		0.00105	0.00556	1	04/15/2018 16:08	WG1098553
Chloroform	U		0.000255	0.00556	1	04/15/2018 16:08	WG1098553
Chloromethane	U		0.000417	0.00278	1	04/15/2018 16:08	WG1098553
2-Chlorotoluene	U		0.000335	0.00111	1	04/15/2018 16:08	WG1098553
4-Chlorotoluene	U		0.000267	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00556	1	04/15/2018 16:08	WG1098553
1,2-Dibromoethane	U		0.000381	0.00111	1	04/15/2018 16:08	WG1098553
Dibromomethane	U		0.000425	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dichlorobenzene	U		0.000339	0.00111	1	04/15/2018 16:08	WG1098553
1,3-Dichlorobenzene	U		0.000266	0.00111	1	04/15/2018 16:08	WG1098553
1,4-Dichlorobenzene	U		0.000251	0.00111	1	04/15/2018 16:08	WG1098553
Dichlorodifluoromethane	U		0.000792	0.00556	1	04/15/2018 16:08	WG1098553
1,1-Dichloroethane	U		0.000221	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dichloroethane	U		0.000295	0.00111	1	04/15/2018 16:08	WG1098553
1,1-Dichloroethene	U		0.000337	0.00111	1	04/15/2018 16:08	WG1098553
cis-1,2-Dichloroethene	0.00285		0.000261	0.00111	1	04/15/2018 16:08	WG1098553
trans-1,2-Dichloroethene	0.00136		0.000293	0.00111	1	04/15/2018 16:08	WG1098553
1,2-Dichloropropane	U		0.000398	0.00111	1	04/15/2018 16:08	WG1098553
1,1-Dichloropropene	U		0.000352	0.00111	1	04/15/2018 16:08	WG1098553
1,3-Dichloropropane	U		0.000230	0.00111	1	04/15/2018 16:08	WG1098553
cis-1,3-Dichloropropene	U		0.000291	0.00111	1	04/15/2018 16:08	WG1098553
trans-1,3-Dichloropropene	U		0.000297	0.00111	1	04/15/2018 16:08	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000865	0.00278	1	04/15/2018 16:08	WG1098553
2,2-Dichloropropane	U		0.000310	0.00111	1	04/15/2018 16:08	WG1098553
Di-isopropyl ether	U		0.000276	0.00111	1	04/15/2018 16:08	WG1098553 JC 5/9/18
Ethylbenzene	U		0.000330	0.00111	1	04/15/2018 16:08	WG1098553
Hexachloro-1,3-butadiene	U		0.000380	0.00111	1	04/15/2018 16:08	WG1098553
2-Hexanone	U		0.00152	0.0111	1	04/15/2018 16:08	WG1098553
n-Hexane	U		0.000322	0.0111	1	04/15/2018 16:08	WG1098553
Iodomethane	U		0.00281	0.0111	1	04/15/2018 16:08	WG1098553
Isopropylbenzene	U		0.000270	0.00111	1	04/15/2018 16:08	WG1098553
p-Isopropyltoluene	U		0.000227	0.00111	1	04/15/2018 16:08	WG1098553
2-Butanone (MEK)	U		0.00520	0.0111	1	04/15/2018 16:08	WG1098553
Methylene Chloride	U		0.00111	0.00556	1	04/15/2018 16:08	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00209	0.0111	1	04/15/2018 16:08	WG1098553

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/11/18 11:20

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000236	0.0011	1	04/15/2018 16:08	WG1098553
Naphthalene	U		0.0011	0.00556	1	04/15/2018 16:08	WG1098553
n-Propylbenzene	U		0.000229	0.0011	1	04/15/2018 16:08	WG1098553
Styrene	U		0.000260	0.0011	1	04/15/2018 16:08	WG1098553
1,1,1,2-Tetrachloroethane	U		0.000293	0.0011	1	04/15/2018 16:08	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000406	0.0011	1	04/15/2018 16:08	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000406	0.0011	1	04/15/2018 16:08	WG1098553
Tetrachloroethene	0.00270		0.000307	0.0011	1	04/15/2018 16:08	WG1098553
Toluene	U		0.000482	0.00556	1	04/15/2018 16:08	WG1098553
1,2,3-Trichlorobenzene	U		0.000340	0.0011	1	04/15/2018 16:08	WG1098553
1,2,4-Trichlorobenzene	U		0.000431	0.0011	1	04/15/2018 16:08	WG1098553
1,1,1-Trichloroethane	U		0.000318	0.0011	1	04/15/2018 16:08	WG1098553
1,1,2-Trichloroethane	U		0.000308	0.0011	1	04/15/2018 16:08	WG1098553
Trichloroethene	0.000443	J	0.000310	0.0011	1	04/15/2018 16:08	WG1098553
Trichlorofluoromethane	U		0.000425	0.00556	1	04/15/2018 16:08	WG1098553
1,2,3-Trichloropropane	U		0.000824	0.00278	1	04/15/2018 16:08	WG1098553
1,2,4-Trimethylbenzene	U		0.000235	0.0011	1	04/15/2018 16:08	WG1098553
1,2,3-Trimethylbenzene	U		0.000319	0.0011	1	04/15/2018 16:08	WG1098553
1,3,5-Trimethylbenzene	U		0.000296	0.0011	1	04/15/2018 16:08	WG1098553
Vinyl acetate	U		0.00266	0.011	1	04/15/2018 16:08	WG1098553
Vinyl chloride	0.656		0.00809	0.0278	25	04/17/2018 13:28	WG1098553
Xylenes, Total	U		0.000776	0.00333	1	04/15/2018 16:08	WG1098553
(S) Toluene-d8	113			80.0-120		04/17/2018 13:28	WG1098553
(S) Toluene-d8	102			80.0-120		04/15/2018 16:08	WG1098553
(S) Dibromofluoromethane	99.3			74.0-131		04/15/2018 16:08	WG1098553
(S) Dibromofluoromethane	99.0			74.0-131		04/17/2018 13:28	WG1098553
(S) 4-Bromofluorobenzene	99.2			64.0-132		04/15/2018 16:08	WG1098553
(S) 4-Bromofluorobenzene	99.4			64.0-132		04/17/2018 13:28	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	90.9		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0110	0.0550	1	04/15/2018 16:29	WG1098553
Acrylonitrile	U		0.00197	0.0110	1	04/15/2018 16:29	WG1098553
Benzene	U		0.000297	0.00110	1	04/15/2018 16:29	WG1098553
Bromobenzene	U		0.000312	0.00110	1	04/15/2018 16:29	WG1098553
Bromodichloromethane	U		0.000279	0.00110	1	04/15/2018 16:29	WG1098553
Bromochloromethane	U		0.000429	0.00550	1	04/15/2018 16:29	WG1098553
Bromoform	U		0.000466	0.00110	1	04/15/2018 16:29	WG1098553
Bromomethane	U		0.00147	0.00550	1	04/15/2018 16:29	WG1098553
n-Butylbenzene	U		0.000284	0.00110	1	04/15/2018 16:29	WG1098553
sec-Butylbenzene	U		0.000221	0.00110	1	04/15/2018 16:29	WG1098553
tert-Butylbenzene	U		0.000227	0.00110	1	04/15/2018 16:29	WG1098553
Carbon disulfide	0.000487	J J	0.000243	0.00110	1	04/15/2018 16:29	WG1098553
Carbon tetrachloride	U		0.000361	0.00110	1	04/15/2018 16:29	WG1098553
Chlorobenzene	U		0.000233	0.00110	1	04/15/2018 16:29	WG1098553
Chlorodibromomethane	U		0.000410	0.00110	1	04/15/2018 16:29	WG1098553
Chloroethane	U		0.00104	0.00550	1	04/15/2018 16:29	WG1098553
Chloroform	U		0.000252	0.00550	1	04/15/2018 16:29	WG1098553
Chloromethane	U		0.000413	0.00275	1	04/15/2018 16:29	WG1098553
2-Chlorotoluene	U		0.000331	0.00110	1	04/15/2018 16:29	WG1098553
4-Chlorotoluene	U		0.000264	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00116	0.00550	1	04/15/2018 16:29	WG1098553
1,2-Dibromoethane	U		0.000377	0.00110	1	04/15/2018 16:29	WG1098553
Dibromomethane	U		0.000420	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dichlorobenzene	U		0.000336	0.00110	1	04/15/2018 16:29	WG1098553
1,3-Dichlorobenzene	U		0.000263	0.00110	1	04/15/2018 16:29	WG1098553
1,4-Dichlorobenzene	U		0.000249	0.00110	1	04/15/2018 16:29	WG1098553
Dichlorodifluoromethane	U		0.000784	0.00550	1	04/15/2018 16:29	WG1098553
1,1-Dichloroethane	U		0.000219	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dichloroethane	U		0.000292	0.00110	1	04/15/2018 16:29	WG1098553
1,1-Dichloroethene	U		0.000333	0.00110	1	04/15/2018 16:29	WG1098553
cis-1,2-Dichloroethene	0.0182		0.000259	0.00110	1	04/15/2018 16:29	WG1098553
trans-1,2-Dichloroethene	U		0.000290	0.00110	1	04/15/2018 16:29	WG1098553
1,2-Dichloropropane	U		0.000394	0.00110	1	04/15/2018 16:29	WG1098553
1,1-Dichloropropene	U		0.000349	0.00110	1	04/15/2018 16:29	WG1098553
1,3-Dichloropropane	U		0.000228	0.00110	1	04/15/2018 16:29	WG1098553
cis-1,3-Dichloropropene	U		0.000288	0.00110	1	04/15/2018 16:29	WG1098553
trans-1,3-Dichloropropene	U		0.000294	0.00110	1	04/15/2018 16:29	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000856	0.00275	1	04/15/2018 16:29	WG1098553
2,2-Dichloropropane	U		0.000307	0.00110	1	04/15/2018 16:29	WG1098553
Di-isopropyl ether	U		0.000273	0.00110	1	04/15/2018 16:29	WG1098553
Ethylbenzene	U		0.000327	0.00110	1	04/15/2018 16:29	WG1098553
Hexachloro-1,3-butadiene	U		0.000376	0.00110	1	04/15/2018 16:29	WG1098553
2-Hexanone	U		0.00151	0.0110	1	04/15/2018 16:29	WG1098553
n-Hexane	U		0.000319	0.0110	1	04/15/2018 16:29	WG1098553
Iodomethane	U		0.00278	0.0110	1	04/15/2018 16:29	WG1098553
Isopropylbenzene	U		0.000267	0.00110	1	04/15/2018 16:29	WG1098553
p-Isopropyltoluene	U		0.000224	0.00110	1	04/15/2018 16:29	WG1098553
2-Butanone (MEK)	U		0.00515	0.0110	1	04/15/2018 16:29	WG1098553
Methylene Chloride	U		0.00110	0.00550	1	04/15/2018 16:29	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00207	0.0110	1	04/15/2018 16:29	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 12:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000233	0.00110	1	04/15/2018 16:29	WG1098553
Naphthalene	U		0.00110	0.00550	1	04/15/2018 16:29	WG1098553
n-Propylbenzene	U		0.000227	0.00110	1	04/15/2018 16:29	WG1098553
Styrene	U		0.000257	0.00110	1	04/15/2018 16:29	WG1098553
1,1,1,2-Tetrachloroethane	U		0.000290	0.00110	1	04/15/2018 16:29	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000402	0.00110	1	04/15/2018 16:29	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000402	0.00110	1	04/15/2018 16:29	WG1098553
Tetrachloroethene	0.00164		0.000304	0.00110	1	04/15/2018 16:29	WG1098553
Toluene	U		0.000477	0.00550	1	04/15/2018 16:29	WG1098553
1,2,3-Trichlorobenzene	U		0.000337	0.00110	1	04/15/2018 16:29	WG1098553
1,2,4-Trichlorobenzene	U		0.000427	0.00110	1	04/15/2018 16:29	WG1098553
1,1,1-Trichloroethane	U		0.000315	0.00110	1	04/15/2018 16:29	WG1098553
1,1,2-Trichloroethane	U		0.000305	0.00110	1	04/15/2018 16:29	WG1098553
Trichloroethene	0.00106	J J	0.000307	0.00110	1	04/15/2018 16:29	WG1098553
Trichlorofluoromethane	U		0.000420	0.00550	1	04/15/2018 16:29	WG1098553
1,2,3-Trichloropropane	U		0.000815	0.00275	1	04/15/2018 16:29	WG1098553
1,2,4-Trimethylbenzene	U		0.000232	0.00110	1	04/15/2018 16:29	WG1098553
1,2,3-Trimethylbenzene	U		0.000316	0.00110	1	04/15/2018 16:29	WG1098553
1,3,5-Trimethylbenzene	U		0.000293	0.00110	1	04/15/2018 16:29	WG1098553
Vinyl acetate	U		0.00263	0.0110	1	04/15/2018 16:29	WG1098553
Vinyl chloride	0.0137		0.000320	0.00110	1	04/15/2018 16:29	WG1098553
Xylenes, Total	U		0.000768	0.00330	1	04/15/2018 16:29	WG1098553
(S) Toluene-d8	104			80.0-120		04/15/2018 16:29	WG1098553
(S) Dibromofluoromethane	99.0			74.0-131		04/15/2018 16:29	WG1098553
(S) 4-Bromofluorobenzene	98.2			64.0-132		04/15/2018 16:29	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	88.0		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0114	0.0568	1	04/15/2018 16:50	WG1098553
Acrylonitrile	U		0.00203	0.0114	1	04/15/2018 16:50	WG1098553
Benzene	U		0.000307	0.00114	1	04/15/2018 16:50	WG1098553
Bromobenzene	U		0.000323	0.00114	1	04/15/2018 16:50	WG1098553
Bromodichloromethane	U		0.000289	0.00114	1	04/15/2018 16:50	WG1098553
Bromochloromethane	U		0.000443	0.00568	1	04/15/2018 16:50	WG1098553
Bromoform	U		0.000482	0.00114	1	04/15/2018 16:50	WG1098553
Bromomethane	U		0.00152	0.00568	1	04/15/2018 16:50	WG1098553
n-Butylbenzene	U		0.000293	0.00114	1	04/15/2018 16:50	WG1098553
sec-Butylbenzene	U		0.000228	0.00114	1	04/15/2018 16:50	WG1098553
tert-Butylbenzene	U		0.000234	0.00114	1	04/15/2018 16:50	WG1098553
Carbon disulfide	0.000283	J J	0.000251	0.00114	1	04/15/2018 16:50	WG1098553
Carbon tetrachloride	U		0.000373	0.00114	1	04/15/2018 16:50	WG1098553
Chlorobenzene	U		0.000241	0.00114	1	04/15/2018 16:50	WG1098553
Chlorodibromomethane	U		0.000424	0.00114	1	04/15/2018 16:50	WG1098553
Chloroethane	U		0.00107	0.00568	1	04/15/2018 16:50	WG1098553
Chloroform	U		0.000260	0.00568	1	04/15/2018 16:50	WG1098553
Chloromethane	U		0.000426	0.00284	1	04/15/2018 16:50	WG1098553
2-Chlorotoluene	U		0.000342	0.00114	1	04/15/2018 16:50	WG1098553
4-Chlorotoluene	U		0.000273	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00119	0.00568	1	04/15/2018 16:50	WG1098553
1,2-Dibromoethane	U		0.000390	0.00114	1	04/15/2018 16:50	WG1098553
Dibromomethane	U		0.000434	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dichlorobenzene	U		0.000347	0.00114	1	04/15/2018 16:50	WG1098553
1,3-Dichlorobenzene	U		0.000272	0.00114	1	04/15/2018 16:50	WG1098553
1,4-Dichlorobenzene	U		0.000257	0.00114	1	04/15/2018 16:50	WG1098553
Dichlorodifluoromethane	U		0.000810	0.00568	1	04/15/2018 16:50	WG1098553
1,1-Dichloroethane	U		0.000226	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dichloroethane	U		0.000301	0.00114	1	04/15/2018 16:50	WG1098553
1,1-Dichloroethene	U		0.000344	0.00114	1	04/15/2018 16:50	WG1098553
cis-1,2-Dichloroethene	0.00361		0.000267	0.00114	1	04/15/2018 16:50	WG1098553
trans-1,2-Dichloroethene	U		0.000300	0.00114	1	04/15/2018 16:50	WG1098553
1,2-Dichloropropane	U		0.000407	0.00114	1	04/15/2018 16:50	WG1098553
1,1-Dichloropropene	U		0.000360	0.00114	1	04/15/2018 16:50	WG1098553
1,3-Dichloropropane	U		0.000235	0.00114	1	04/15/2018 16:50	WG1098553
cis-1,3-Dichloropropene	U		0.000298	0.00114	1	04/15/2018 16:50	WG1098553
trans-1,3-Dichloropropene	U		0.000303	0.00114	1	04/15/2018 16:50	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000884	0.00284	1	04/15/2018 16:50	WG1098553
2,2-Dichloropropane	U		0.000317	0.00114	1	04/15/2018 16:50	WG1098553
Di-isopropyl ether	U		0.000282	0.00114	1	04/15/2018 16:50	WG1098553
Ethylbenzene	U		0.000337	0.00114	1	04/15/2018 16:50	WG1098553
Hexachloro-1,3-butadiene	U		0.000389	0.00114	1	04/15/2018 16:50	WG1098553
2-Hexanone	U		0.00156	0.0114	1	04/15/2018 16:50	WG1098553
n-Hexane	U		0.000330	0.0114	1	04/15/2018 16:50	WG1098553
Iodomethane	U		0.00287	0.0114	1	04/15/2018 16:50	WG1098553
Isopropylbenzene	U		0.000276	0.00114	1	04/15/2018 16:50	WG1098553
p-Isopropyltoluene	U		0.000232	0.00114	1	04/15/2018 16:50	WG1098553
2-Butanone (MEK)	U		0.00532	0.0114	1	04/15/2018 16:50	WG1098553
Methylene Chloride	U		0.00114	0.00568	1	04/15/2018 16:50	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00214	0.0114	1	04/15/2018 16:50	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 13:00

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000241	0.00114	1	04/15/2018 16:50	WG1098553
Naphthalene	U		0.00114	0.00568	1	04/15/2018 16:50	WG1098553
n-Propylbenzene	U		0.000234	0.00114	1	04/15/2018 16:50	WG1098553
Styrene	U		0.000266	0.00114	1	04/15/2018 16:50	WG1098553
1,1,1,2-Tetrachloroethane	U		0.000300	0.00114	1	04/15/2018 16:50	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000415	0.00114	1	04/15/2018 16:50	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000415	0.00114	1	04/15/2018 16:50	WG1098553
Tetrachloroethene	U		0.000314	0.00114	1	04/15/2018 16:50	WG1098553
Toluene	U		0.000493	0.00568	1	04/15/2018 16:50	WG1098553
1,2,3-Trichlorobenzene	U		0.000348	0.00114	1	04/15/2018 16:50	WG1098553
1,2,4-Trichlorobenzene	U		0.000441	0.00114	1	04/15/2018 16:50	WG1098553
1,1,1-Trichloroethane	U		0.000325	0.00114	1	04/15/2018 16:50	WG1098553
1,1,2-Trichloroethane	U		0.000315	0.00114	1	04/15/2018 16:50	WG1098553
Trichloroethene	U		0.000317	0.00114	1	04/15/2018 16:50	WG1098553
Trichlorofluoromethane	U		0.000434	0.00568	1	04/15/2018 16:50	WG1098553
1,2,3-Trichloropropane	U		0.000842	0.00284	1	04/15/2018 16:50	WG1098553
1,2,4-Trimethylbenzene	U		0.000240	0.00114	1	04/15/2018 16:50	WG1098553
1,2,3-Trimethylbenzene	U		0.000326	0.00114	1	04/15/2018 16:50	WG1098553
1,3,5-Trimethylbenzene	U		0.000302	0.00114	1	04/15/2018 16:50	WG1098553
Vinyl acetate	U		0.00272	0.0114	1	04/15/2018 16:50	WG1098553
Vinyl chloride	0.00320		0.000331	0.00114	1	04/15/2018 16:50	WG1098553
Xylenes, Total	U		0.000793	0.00341	1	04/15/2018 16:50	WG1098553
<i>(S) Toluene-d8</i>	104			80.0-120		04/15/2018 16:50	WG1098553
<i>(S) Dibromofluoromethane</i>	94.2			74.0-131		04/15/2018 16:50	WG1098553
<i>(S) 4-Bromofluorobenzene</i>	97.2			64.0-132		04/15/2018 16:50	WG1098553

- 1 Cp
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JC 5/9/18



Total Solids by Method 2540 G-2011

Analyte	Result	Qualifier	Dilution	Analysis	Batch
	%			date / time	
Total Solids	89.4		1	04/14/2018 07:24	WG1097930

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry)	Qualifier	MDL (dry)	RDL (dry)	Dilution	Analysis	Batch
	mg/kg		mg/kg	mg/kg		date / time	
Acetone	U		0.0112	0.0560	1	04/15/2018 17:12	WG1098553
Acrylonitrile	U		0.00200	0.0112	1	04/15/2018 17:12	WG1098553
Benzene	U		0.000302	0.00112	1	04/15/2018 17:12	WG1098553
Bromobenzene	U		0.000318	0.00112	1	04/15/2018 17:12	WG1098553
Bromodichloromethane	U		0.000284	0.00112	1	04/15/2018 17:12	WG1098553
Bromochloromethane	U		0.000436	0.00560	1	04/15/2018 17:12	WG1098553
Bromoform	U		0.000474	0.00112	1	04/15/2018 17:12	WG1098553
Bromomethane	U		0.00150	0.00560	1	04/15/2018 17:12	WG1098553
n-Butylbenzene	U		0.000289	0.00112	1	04/15/2018 17:12	WG1098553
sec-Butylbenzene	U		0.000225	0.00112	1	04/15/2018 17:12	WG1098553
tert-Butylbenzene	U		0.000231	0.00112	1	04/15/2018 17:12	WG1098553
Carbon disulfide	U		0.000247	0.00112	1	04/15/2018 17:12	WG1098553
Carbon tetrachloride	U		0.000367	0.00112	1	04/15/2018 17:12	WG1098553
Chlorobenzene	U		0.000237	0.00112	1	04/15/2018 17:12	WG1098553
Chlorodibromomethane	U		0.000417	0.00112	1	04/15/2018 17:12	WG1098553
Chloroethane	U		0.00106	0.00560	1	04/15/2018 17:12	WG1098553
Chloroform	U		0.000256	0.00560	1	04/15/2018 17:12	WG1098553
Chloromethane	U		0.000420	0.00280	1	04/15/2018 17:12	WG1098553
2-Chlorotoluene	U		0.000337	0.00112	1	04/15/2018 17:12	WG1098553
4-Chlorotoluene	U		0.000269	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dibromo-3-Chloropropane	U		0.00117	0.00560	1	04/15/2018 17:12	WG1098553
1,2-Dibromoethane	U		0.000384	0.00112	1	04/15/2018 17:12	WG1098553
Dibromomethane	U		0.000427	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dichlorobenzene	U		0.000341	0.00112	1	04/15/2018 17:12	WG1098553
1,3-Dichlorobenzene	U		0.000267	0.00112	1	04/15/2018 17:12	WG1098553
1,4-Dichlorobenzene	U		0.000253	0.00112	1	04/15/2018 17:12	WG1098553
Dichlorodifluoromethane	U		0.000798	0.00560	1	04/15/2018 17:12	WG1098553
1,1-Dichloroethane	U		0.000223	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dichloroethane	U		0.000297	0.00112	1	04/15/2018 17:12	WG1098553
1,1-Dichloroethene	U		0.000339	0.00112	1	04/15/2018 17:12	WG1098553
cis-1,2-Dichloroethene	0.00256		0.000263	0.00112	1	04/15/2018 17:12	WG1098553
trans-1,2-Dichloroethene	U		0.000295	0.00112	1	04/15/2018 17:12	WG1098553
1,2-Dichloropropane	U		0.000401	0.00112	1	04/15/2018 17:12	WG1098553
1,1-Dichloropropene	U		0.000355	0.00112	1	04/15/2018 17:12	WG1098553
1,3-Dichloropropane	U		0.000232	0.00112	1	04/15/2018 17:12	WG1098553
cis-1,3-Dichloropropene	U		0.000293	0.00112	1	04/15/2018 17:12	WG1098553
trans-1,3-Dichloropropene	U		0.000299	0.00112	1	04/15/2018 17:12	WG1098553
trans-1,4-Dichloro-2-butene	U		0.000871	0.00280	1	04/15/2018 17:12	WG1098553
2,2-Dichloropropane	U		0.000312	0.00112	1	04/15/2018 17:12	WG1098553
Di-isopropyl ether	U		0.000278	0.00112	1	04/15/2018 17:12	WG1098553
Ethylbenzene	U		0.000332	0.00112	1	04/15/2018 17:12	WG1098553
Hexachloro-1,3-butadiene	U		0.000383	0.00112	1	04/15/2018 17:12	WG1098553
2-Hexanone	U		0.00153	0.0112	1	04/15/2018 17:12	WG1098553
n-Hexane	0.000474	J U	0.000325	0.0112	1	04/15/2018 17:12	WG1098553
Iodomethane	U		0.00283	0.0112	1	04/15/2018 17:12	WG1098553
Isopropylbenzene	U		0.000272	0.00112	1	04/15/2018 17:12	WG1098553
p-Isopropyltoluene	U		0.000228	0.00112	1	04/15/2018 17:12	WG1098553
2-Butanone (MEK)	U		0.00524	0.0112	1	04/15/2018 17:12	WG1098553
Methylene Chloride	U		0.00112	0.00560	1	04/15/2018 17:12	WG1098553
4-Methyl-2-pentanone (MIBK)	U		0.00210	0.0112	1	04/15/2018 17:12	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18



Collected date/time: 04/11/18 14:22

L985279

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result (dry) mg/kg	Qualifier	MDL (dry) mg/kg	RDL (dry) mg/kg	Dilution	Analysis date / time	Batch
Methyl tert-butyl ether	U		0.000237	0.00112	1	04/15/2018 17:12	WG1098553
Naphthalene	U		0.00112	0.00560	1	04/15/2018 17:12	WG1098553
n-Propylbenzene	U		0.000231	0.00112	1	04/15/2018 17:12	WG1098553
Styrene	U		0.000262	0.00112	1	04/15/2018 17:12	WG1098553
1,1,1,2-Tetrachloroethane	U		0.000295	0.00112	1	04/15/2018 17:12	WG1098553
1,1,2,2-Tetrachloroethane	U		0.000408	0.00112	1	04/15/2018 17:12	WG1098553
1,1,2-Trichlorotrifluoroethane	U		0.000408	0.00112	1	04/15/2018 17:12	WG1098553
Tetrachloroethene	U		0.000309	0.00112	1	04/15/2018 17:12	WG1098553
Toluene	U		0.000486	0.00560	1	04/15/2018 17:12	WG1098553
1,2,3-Trichlorobenzene	U		0.000342	0.00112	1	04/15/2018 17:12	WG1098553
1,2,4-Trichlorobenzene	U		0.000434	0.00112	1	04/15/2018 17:12	WG1098553
1,1,1-Trichloroethane	U		0.000320	0.00112	1	04/15/2018 17:12	WG1098553
1,1,2-Trichloroethane	U		0.000310	0.00112	1	04/15/2018 17:12	WG1098553
Trichloroethene	U		0.000312	0.00112	1	04/15/2018 17:12	WG1098553
Trichlorofluoromethane	U		0.000427	0.00560	1	04/15/2018 17:12	WG1098553
1,2,3-Trichloropropane	U		0.000829	0.00280	1	04/15/2018 17:12	WG1098553
1,2,4-Trimethylbenzene	U		0.000236	0.00112	1	04/15/2018 17:12	WG1098553
1,2,3-Trimethylbenzene	U		0.000321	0.00112	1	04/15/2018 17:12	WG1098553
1,3,5-Trimethylbenzene	U		0.000298	0.00112	1	04/15/2018 17:12	WG1098553
Vinyl acetate	U		0.00267	0.0112	1	04/15/2018 17:12	WG1098553
Vinyl chloride	0.00587		0.000326	0.00112	1	04/15/2018 17:12	WG1098553
Xylenes, Total	U		0.000781	0.00336	1	04/15/2018 17:12	WG1098553
<i>(S) Toluene-d8</i>	102			80.0-120		04/15/2018 17:12	WG1098553
<i>(S) Dibromofluoromethane</i>	97.9			74.0-131		04/15/2018 17:12	WG1098553
<i>(S) 4-Bromofluorobenzene</i>	96.4			64.0-132		04/15/2018 17:12	WG1098553

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/18

April 23, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L985379
Samples Received: 04/13/2018
Project Number: 1413.001.05.601
Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-137-041218 L985379-01 GW

Collected by Jeff Dobbins
Collected date/time 04/12/18 15:20
Received date/time 04/13/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097724	1	04/14/18 11:33	04/14/18 11:33	MCG
Wet Chemistry by Method 9056A	WG1098514	1	04/15/18 08:54	04/15/18 08:54	MAJ
Wet Chemistry by Method 9060A	WG1098241	1	04/14/18 13:53	04/14/18 13:53	SJM
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/15/18 23:40	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097878	1	04/14/18 00:40	04/14/18 00:40	LRL
Volatile Organic Compounds (GC) by Method RSK175	WG1099029	1	04/17/18 14:09	04/17/18 14:09	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097806	1	04/13/18 19:46	04/13/18 19:46	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097806	1	04/16/18 13:07	04/16/18 13:07	ACG

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

MW-112-041218 L985379-02 GW

Collected by Jeff Dobbins
Collected date/time 04/12/18 10:46
Received date/time 04/13/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097724	1	04/14/18 18:28	04/14/18 18:28	MCG
Wet Chemistry by Method 9056A	WG1098514	1	04/15/18 09:10	04/15/18 09:10	MAJ
Wet Chemistry by Method 9060A	WG1097606	1	04/13/18 21:14	04/13/18 21:14	EG
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/15/18 23:44	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097878	1	04/14/18 01:02	04/14/18 01:02	LRL
Volatile Organic Compounds (GC) by Method RSK175	WG1099029	1	04/17/18 14:15	04/17/18 14:15	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097806	1	04/13/18 20:06	04/13/18 20:06	JAH

6 Qc

7 Gl

8 Al

9 Sc

MW-140-041218 L985379-03 GW

Collected by Jeff Dobbins
Collected date/time 04/12/18 13:04
Received date/time 04/13/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097724	1	04/14/18 11:46	04/14/18 11:46	MCG
Wet Chemistry by Method 9056A	WG1098514	1	04/15/18 09:27	04/15/18 09:27	MAJ
Wet Chemistry by Method 9060A	WG1098241	1	04/14/18 14:05	04/14/18 14:05	SJM
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/16/18 00:15	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097878	1	04/14/18 01:24	04/14/18 01:24	LRL
Volatile Organic Compounds (GC) by Method RSK175	WG1099029	1	04/17/18 14:18	04/17/18 14:18	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097806	1	04/13/18 20:26	04/13/18 20:26	JAH

MW-141-041218 L985379-04 GW

Collected by Jeff Dobbins
Collected date/time 04/12/18 09:18
Received date/time 04/13/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1097724	1	04/14/18 12:31	04/14/18 12:31	MCG
Wet Chemistry by Method 9056A	WG1098514	1	04/15/18 09:44	04/15/18 09:44	MAJ
Wet Chemistry by Method 9060A	WG1097606	1	04/13/18 21:51	04/13/18 21:51	EG
Metals (ICPMS) by Method 6020A	WG1097160	1	04/13/18 11:10	04/15/18 23:54	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097878	1	04/14/18 01:46	04/14/18 01:46	LRL
Volatile Organic Compounds (GC) by Method RSK175	WG1099563	1	04/18/18 11:26	04/18/18 11:26	AMC
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097806	1	04/13/18 20:46	04/13/18 20:46	JAH

TRIP BLANK L985379-05 GW

Collected by Jeff Dobbins
Collected date/time 04/12/18 00:00
Received date/time 04/13/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1097878	1	04/13/18 21:36	04/13/18 21:36	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1097806	1	04/13/18 15:06	04/13/18 15:06	JAH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	213000		2710	20000	1	04/14/2018 11:33	WG1097724

Sample Narrative:

L985379-01 WG1097724: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10900		51.9	1000	1	04/15/2018 08:54	WG1098514
Nitrate	U	Q	22.7	100	1	04/15/2018 08:54	WG1098514
Sulfate	10800		77.4	5000	1	04/15/2018 08:54	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2900	B	102	1000	1	04/14/2018 13:53	WG1098241

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	218000		15.0	100	1	04/15/2018 23:40	WG1097160
Manganese	4410		0.250	5.00	1	04/15/2018 23:40	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

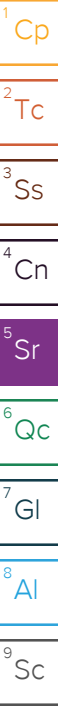
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/14/2018 00:40	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	99.7			77.0-122		04/14/2018 00:40	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1600		0.287	0.678	1	04/17/2018 14:09	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 14:09	WG1099029
Ethene	4.47		0.422	1.27	1	04/17/2018 14:09	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	3.31	J	1.05	25.0	1	04/16/2018 13:07	WG1097806
Acrylonitrile	U	JO	0.873	5.00	1	04/13/2018 19:46	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 19:46	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 19:46	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 19:46	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 19:46	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 19:46	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 19:46	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 19:46	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 19:46	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 19:46	WG1097806
Carbon disulfide	0.210	J	0.101	0.500	1	04/13/2018 19:46	WG1097806
Carbon tetrachloride	U	JO	0.159	0.500	1	04/13/2018 19:46	WG1097806





Collected date/time: 04/12/18 15:20

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/13/2018 19:46	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 19:46	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 19:46	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 19:46	WG1097806
Chloromethane	U	JO	0.153	1.25	1	04/13/2018 19:46	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 19:46	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 19:46	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 19:46	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 19:46	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 19:46	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 19:46	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 19:46	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 19:46	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 19:46	WG1097806
cis-1,2-Dichloroethene	1.79		0.0933	0.500	1	04/13/2018 19:46	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 19:46	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 19:46	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 19:46	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 19:46	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 19:46	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 19:46	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 19:46	WG1097806
Di-isopropyl ether	U	JO	0.0924	0.500	1	04/13/2018 19:46	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 19:46	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 19:46	WG1097806
2-Hexanone	U	JO	0.757	5.00	1	04/13/2018 19:46	WG1097806
n-Hexane	U	JO	0.305	5.00	1	04/13/2018 19:46	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 19:46	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 19:46	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 19:46	WG1097806
2-Butanone (MEK)	U	JO	1.28	5.00	1	04/13/2018 19:46	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 19:46	WG1097806
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	04/13/2018 19:46	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 19:46	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 19:46	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 19:46	WG1097806
Styrene	U	J4	0.117	0.500	1	04/13/2018 19:46	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 19:46	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 19:46	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 19:46	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 19:46	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 19:46	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 19:46	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 19:46	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 19:46	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 19:46	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 19:46	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 19:46	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 19:46	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 19:46	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 19:46	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 19:46	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 19:46	WG1097806
Vinyl chloride	4.26		0.118	0.500	1	04/13/2018 19:46	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 19:46	WG1097806
(S) Toluene-d8	92.8			80.0-120		04/13/2018 19:46	WG1097806
(S) Toluene-d8	104			80.0-120		04/16/2018 13:07	WG1097806
(S) Dibromofluoromethane	101			76.0-123		04/16/2018 13:07	WG1097806
(S) Dibromofluoromethane	102			76.0-123		04/13/2018 19:46	WG1097806
(S) 4-Bromofluorobenzene	103			80.0-120		04/16/2018 13:07	WG1097806
(S) 4-Bromofluorobenzene	120			80.0-120		04/13/2018 19:46	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	16700	J	2710	20000	1	04/14/2018 18:28	WG1097724

Sample Narrative:

L985379-02 WG1097724: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	2090		51.9	1000	1	04/15/2018 09:10	WG1098514
Nitrate	398	Q	22.7	100	1	04/15/2018 09:10	WG1098514
Sulfate	1310	J	77.4	5000	1	04/15/2018 09:10	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2800		102	1000	1	04/13/2018 21:14	WG1097606

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	19500		15.0	100	1	04/15/2018 23:44	WG1097160
Manganese	421		0.250	5.00	1	04/15/2018 23:44	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/14/2018 01:02	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	99.7			77.0-122		04/14/2018 01:02	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	326		0.287	0.678	1	04/17/2018 14:15	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 14:15	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 14:15	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	6.34	J JO	1.05	25.0	1	04/13/2018 20:06	WG1097806
Acrylonitrile	U	JO	0.873	5.00	1	04/13/2018 20:06	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 20:06	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 20:06	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 20:06	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 20:06	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 20:06	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 20:06	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 20:06	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 20:06	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 20:06	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 20:06	WG1097806
Carbon tetrachloride	U	JO	0.159	0.500	1	04/13/2018 20:06	WG1097806

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/12/18 10:46

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/13/2018 20:06	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 20:06	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 20:06	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 20:06	WG1097806
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/13/2018 20:06	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 20:06	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 20:06	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 20:06	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 20:06	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 20:06	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 20:06	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 20:06	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 20:06	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 20:06	WG1097806
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/13/2018 20:06	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 20:06	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 20:06	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 20:06	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 20:06	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 20:06	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 20:06	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 20:06	WG1097806
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/13/2018 20:06	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 20:06	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 20:06	WG1097806
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/13/2018 20:06	WG1097806
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/13/2018 20:06	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 20:06	WG1097806
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/13/2018 20:06	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 20:06	WG1097806
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/13/2018 20:06	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 20:06	WG1097806
4-Methyl-2-pentanone (MIBK)	2.35	<u>JJO</u>	0.823	5.00	1	04/13/2018 20:06	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 20:06	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 20:06	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 20:06	WG1097806
Styrene	U	<u>J4</u>	0.117	0.500	1	04/13/2018 20:06	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 20:06	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 20:06	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 20:06	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 20:06	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 20:06	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 20:06	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 20:06	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 20:06	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 20:06	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 20:06	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 20:06	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 20:06	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 20:06	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 20:06	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 20:06	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/12/18 10:46

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 20:06	WG1097806
Vinyl chloride	U		0.118	0.500	1	04/13/2018 20:06	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 20:06	WG1097806
<i>(S) Toluene-d8</i>	94.9			80.0-120		04/13/2018 20:06	WG1097806
<i>(S) Dibromofluoromethane</i>	104			76.0-123		04/13/2018 20:06	WG1097806
<i>(S) 4-Bromofluorobenzene</i>	122	<u>J1</u>		80.0-120		04/13/2018 20:06	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	249000		2710	20000	1	04/14/2018 11:46	WG1097724

Sample Narrative:

L985379-03 WG1097724: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15500		51.9	1000	1	04/15/2018 09:27	WG1098514
Nitrate	U	Q	22.7	100	1	04/15/2018 09:27	WG1098514
Sulfate	5730		77.4	5000	1	04/15/2018 09:27	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2400	B	102	1000	1	04/14/2018 14:05	WG1098241

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	15000		15.0	100	1	04/16/2018 00:15	WG1097160
Manganese	795		0.250	5.00	1	04/16/2018 00:15	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/14/2018 01:24	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-122		04/14/2018 01:24	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	261		0.287	0.678	1	04/17/2018 14:18	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 14:18	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 14:18	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.13	J JO	1.05	25.0	1	04/13/2018 20:26	WG1097806
Acrylonitrile	U	JO	0.873	5.00	1	04/13/2018 20:26	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 20:26	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 20:26	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 20:26	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 20:26	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 20:26	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 20:26	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 20:26	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 20:26	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 20:26	WG1097806
Carbon disulfide	0.699		0.101	0.500	1	04/13/2018 20:26	WG1097806
Carbon tetrachloride	U	JO	0.159	0.500	1	04/13/2018 20:26	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/12/18 13:04

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/13/2018 20:26	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 20:26	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 20:26	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 20:26	WG1097806
Chloromethane	U	<u>JO</u>	0.153	1.25	1	04/13/2018 20:26	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 20:26	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 20:26	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 20:26	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 20:26	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 20:26	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 20:26	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 20:26	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 20:26	WG1097806
1,1-Dichloroethene	0.355	<u>J</u>	0.188	0.500	1	04/13/2018 20:26	WG1097806
cis-1,2-Dichloroethene	2.47		0.0933	0.500	1	04/13/2018 20:26	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 20:26	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 20:26	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 20:26	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 20:26	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 20:26	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 20:26	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 20:26	WG1097806
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	04/13/2018 20:26	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 20:26	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 20:26	WG1097806
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	04/13/2018 20:26	WG1097806
n-Hexane	U	<u>JO</u>	0.305	5.00	1	04/13/2018 20:26	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 20:26	WG1097806
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/13/2018 20:26	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 20:26	WG1097806
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	04/13/2018 20:26	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 20:26	WG1097806
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/13/2018 20:26	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 20:26	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 20:26	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 20:26	WG1097806
Styrene	0.178	<u>J J4</u>	0.117	0.500	1	04/13/2018 20:26	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 20:26	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 20:26	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 20:26	WG1097806
Tetrachloroethene	0.402	<u>J</u>	0.199	0.500	1	04/13/2018 20:26	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 20:26	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 20:26	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 20:26	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 20:26	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 20:26	WG1097806
Trichloroethene	0.572		0.153	0.500	1	04/13/2018 20:26	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 20:26	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 20:26	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 20:26	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 20:26	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 20:26	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/12/18 13:04

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 20:26	WG1097806
Vinyl chloride	0.246	<u>J</u>	0.118	0.500	1	04/13/2018 20:26	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 20:26	WG1097806
<i>(S) Toluene-d8</i>	93.6			80.0-120		04/13/2018 20:26	WG1097806
<i>(S) Dibromofluoromethane</i>	105			76.0-123		04/13/2018 20:26	WG1097806
<i>(S) 4-Bromofluorobenzene</i>	122	<u>J1</u>		80.0-120		04/13/2018 20:26	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	179000		2710	20000	1	04/14/2018 12:31	WG1097724

Sample Narrative:

L985379-04 WG1097724: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	9640		51.9	1000	1	04/15/2018 09:44	WG1098514
Nitrate	U	Q	22.7	100	1	04/15/2018 09:44	WG1098514
Sulfate	7490		77.4	5000	1	04/15/2018 09:44	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4300		102	1000	1	04/13/2018 21:51	WG1097606

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	4610		15.0	100	1	04/15/2018 23:54	WG1097160
Manganese	556		0.250	5.00	1	04/15/2018 23:54	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	326	B	31.6	100	1	04/14/2018 01:46	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-122		04/14/2018 01:46	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2690		0.287	0.678	1	04/18/2018 11:26	WG1099563
Ethane	3.29		0.296	1.29	1	04/18/2018 11:26	WG1099563
Ethene	0.869	J	0.422	1.27	1	04/18/2018 11:26	WG1099563

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.38	J JO	1.05	25.0	1	04/13/2018 20:46	WG1097806
Acrylonitrile	U	JO	0.873	5.00	1	04/13/2018 20:46	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 20:46	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 20:46	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 20:46	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 20:46	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 20:46	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 20:46	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 20:46	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 20:46	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 20:46	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 20:46	WG1097806
Carbon tetrachloride	U	JO	0.159	0.500	1	04/13/2018 20:46	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/12/18 09:18

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/13/2018 20:46	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 20:46	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 20:46	WG1097806
Chloroform	0.305	J	0.0860	0.500	1	04/13/2018 20:46	WG1097806
Chloromethane	U	JO	0.153	1.25	1	04/13/2018 20:46	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 20:46	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 20:46	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 20:46	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 20:46	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 20:46	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 20:46	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 20:46	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 20:46	WG1097806
1,1-Dichloroethene	0.389	J	0.188	0.500	1	04/13/2018 20:46	WG1097806
cis-1,2-Dichloroethene	91.6		0.0933	0.500	1	04/13/2018 20:46	WG1097806
trans-1,2-Dichloroethene	5.68		0.152	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 20:46	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 20:46	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 20:46	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 20:46	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 20:46	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 20:46	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 20:46	WG1097806
Di-isopropyl ether	U	JO	0.0924	0.500	1	04/13/2018 20:46	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 20:46	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 20:46	WG1097806
2-Hexanone	U	JO	0.757	5.00	1	04/13/2018 20:46	WG1097806
n-Hexane	U	JO	0.305	5.00	1	04/13/2018 20:46	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 20:46	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 20:46	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 20:46	WG1097806
2-Butanone (MEK)	U	JO	1.28	5.00	1	04/13/2018 20:46	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 20:46	WG1097806
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	04/13/2018 20:46	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 20:46	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 20:46	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 20:46	WG1097806
Styrene	U	J4	0.117	0.500	1	04/13/2018 20:46	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 20:46	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 20:46	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 20:46	WG1097806
Tetrachloroethene	71.3		0.199	0.500	1	04/13/2018 20:46	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 20:46	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 20:46	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 20:46	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 20:46	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 20:46	WG1097806
Trichloroethene	25.6		0.153	0.500	1	04/13/2018 20:46	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 20:46	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 20:46	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 20:46	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 20:46	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 20:46	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 20:46	WG1097806
Vinyl chloride	7.01		0.118	0.500	1	04/13/2018 20:46	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 20:46	WG1097806
<i>(S) Toluene-d8</i>	93.4			80.0-120		04/13/2018 20:46	WG1097806
<i>(S) Dibromofluoromethane</i>	106			76.0-123		04/13/2018 20:46	WG1097806
<i>(S) 4-Bromofluorobenzene</i>	121	<u>J1</u>		80.0-120		04/13/2018 20:46	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/12/18 00:00

L985379

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/13/2018 21:36	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-122		04/13/2018 21:36	WG1097878

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.26	J JO	1.05	25.0	1	04/13/2018 15:06	WG1097806
Acrylonitrile	U	JO	0.873	5.00	1	04/13/2018 15:06	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 15:06	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 15:06	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 15:06	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 15:06	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 15:06	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 15:06	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 15:06	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 15:06	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 15:06	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 15:06	WG1097806
Carbon tetrachloride	U	JO	0.159	0.500	1	04/13/2018 15:06	WG1097806
Chlorobenzene	U		0.140	0.500	1	04/13/2018 15:06	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 15:06	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 15:06	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 15:06	WG1097806
Chloromethane	U	JO	0.153	1.25	1	04/13/2018 15:06	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 15:06	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 15:06	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 15:06	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 15:06	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 15:06	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 15:06	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 15:06	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 15:06	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 15:06	WG1097806
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/13/2018 15:06	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 15:06	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 15:06	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 15:06	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 15:06	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 15:06	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 15:06	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 15:06	WG1097806
Di-isopropyl ether	U	JO	0.0924	0.500	1	04/13/2018 15:06	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 15:06	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 15:06	WG1097806
2-Hexanone	U	JO	0.757	5.00	1	04/13/2018 15:06	WG1097806
n-Hexane	U	JO	0.305	5.00	1	04/13/2018 15:06	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 15:06	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 15:06	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 15:06	WG1097806
2-Butanone (MEK)	U	JO	1.28	5.00	1	04/13/2018 15:06	WG1097806



Collected date/time: 04/12/18 00:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/13/2018 15:06	WG1097806
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	04/13/2018 15:06	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 15:06	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 15:06	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 15:06	WG1097806
Styrene	U	<u>J4</u>	0.117	0.500	1	04/13/2018 15:06	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 15:06	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 15:06	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 15:06	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 15:06	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 15:06	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 15:06	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 15:06	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 15:06	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 15:06	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 15:06	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 15:06	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 15:06	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 15:06	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 15:06	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 15:06	WG1097806
Vinyl acetate	U		0.645	5.00	1	04/13/2018 15:06	WG1097806
Vinyl chloride	U		0.118	0.500	1	04/13/2018 15:06	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 15:06	WG1097806
(S) Toluene-d8	93.3			80.0-120		04/13/2018 15:06	WG1097806
(S) Dibromofluoromethane	102			76.0-123		04/13/2018 15:06	WG1097806
(S) 4-Bromofluorobenzene	116			80.0-120		04/13/2018 15:06	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

L985379-04 Original Sample (OS) • Duplicate (DUP)

(OS) L985379-04 04/14/18 12:31 • (DUP) R3301861-3 04/14/18 12:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	179000	182000	1	165		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L984575-11 Original Sample (OS) • Duplicate (DUP)

(OS) L984575-11 04/14/18 17:52 • (DUP) R3301861-8 04/14/18 18:01

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	93200	93300	1	0.141		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301861-1 04/14/18 10:11 • (LCSD) R3301861-2 04/14/18 12:22

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Alkalinity	100000	107000	103000	107	103	85.0-115			4.53	20

Sample Narrative:

LCS: Endpoint pH 4.5
LCSD: Endpoint pH 4.5





Method Blank (MB)

(MB) R3302179-1 04/14/18 13:01

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L985782-16 Original Sample (OS) • Duplicate (DUP)

(OS) L985782-16 04/14/18 23:15 • (DUP) R3302179-4 04/14/18 23:31

Analyte	Original Result		DUP Result	Dilution	DUP RPD	DUP Qualifier		DUP RPD Limits
	ug/l	ug/l				%	%	
Chloride	ND	0.000	1	1	0.000		15	
Nitrate	ND	0.000	1	1	0.000		15	
Sulfate	ND	0.000	1	1	0.000		15	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302179-2 04/14/18 13:18 • (LCSD) R3302179-3 04/14/18 13:35

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%
Chloride	40000	38700	38700	38500	96.6	96.3	96.3	80.0-120	0.308	15								
Nitrate	8000	7980	7970	7970	99.8	99.6	99.6	80.0-120	0.219	15								
Sulfate	40000	39500	39400	39400	98.8	98.6	98.6	80.0-120	0.235	15								

L985782-16 Original Sample (OS) • Matrix Spike (MS)

(OS) L985782-16 04/14/18 23:15 • (MS) R3302179-5 04/14/18 23:48

Analyte	Spike Amount		Original Result		MS Result		MS Rec.		Dilution	Rec. Limits		MS Qualifier
	ug/l	ug/l	ug/l	ug/l	%	%	%	%				
Chloride	50000	ND	ND	46300	92.6	1	80.0-120		1	80.0-120		
Nitrate	5000	ND	ND	4570	91.3	1	80.0-120		1	80.0-120		
Sulfate	50000	ND	ND	47400	94.8	1	80.0-120		1	80.0-120		

L985383-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L985383-04 04/15/18 10:52 • (MS) R3302179-7 04/15/18 11:26 • (MSD) R3302179-8 04/15/18 12:16

Analyte	Spike Amount		Original Result		MS Result		MSD Result		MS Rec.	MSD Rec.	Dilution	Rec. Limits		MS Qualifier		MSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%				%	%	%	%	%	%	%	%
Chloride	50000	ND	ND	51800	50900	102	99.9	1	80.0-120	1.73	15								
Nitrate	5000	924	924	5680	6140	95.0	104	1	80.0-120	7.82	15								

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

L985383-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L985383-04 04/15/18 10:52 • (MS) R3302179-7 04/15/18 11:26 • (MSD) R3302179-8 04/15/18 12:16

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Sulfate	50000	ND	50000	54100	92.0	100	1	80.0-120			8.04	15

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3301811-1	04/13/18 08:02	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	U		102		1000

L985239-01 Original Sample (OS) • Duplicate (DUP)

(OS) L985239-01	04/13/18 14:07 • (DUP) R3301811-3	04/13/18 14:23				
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
TOC	ug/l	ug/l		%		%
	725	624	1	14.9	↓	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301811-2	04/13/18 08:50 • (LCSD) R3301811-4	04/13/18 15:13								
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
TOC	ug/l	ug/l	ug/l	%	%	%			%	%
	75000	72600	73200	96.7	97.6	85.0-115			0.919	20

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1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3301924-1	04/14/18	12:08																		
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL																
	ug/l	ug/l	ug/l	ug/l																
TOC (Total Organic Carbon)	337	<u>J</u>	102	1000																

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3301924-2	04/14/18	12:45	• (LCSD) R3301924-4	04/14/18	15:29															
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits										
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%										
TOC	75000	78100	78700	104	105	85.0-115			0.816	20										

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3302051-1 04/15/18 22:08				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3302051-2 04/15/18 22:12 • (LCSD) R3302051-3 04/15/18 22:17		(LCS) R3302051-5 04/15/18 22:31 • (MSD) R3302051-6 04/15/18 22:36							
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	5040	5000	101	100	80.0-120			0.793	20
Manganese	50.0	50.4	49.4	101	98.8	80.0-120			2.02	20

L984988-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L984988-06 04/15/18 22:22 • (MS) R3302051-5 04/15/18 22:31 • (MSD) R3302051-6 04/15/18 22:36											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	96.2	4920	5040	96.6	98.9	1	75.0-125			2.31	20
Manganese	50.0	54.4	98.1	106	87.4	104	1	75.0-125			8.18	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L985379-01.02.03.04.05](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier ug/l	MB MDL ug/l	MB RDL ug/l
(MB) R3301818-3 04/13/18 21:14				
Gasoline Range Organics-NWTPH	35.1	J	316	100
^(S) a,a'-Trifluorotoluene(FID)	99.8			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(LCS) R3301818-2 04/13/18 20:30 • (LCSD) R3301818-1 04/13/18 20:08										
Gasoline Range Organics-NWTPH	5500	5710	5750	104	105	72.0-134			0.779	20
^(S) a,a'-Trifluorotoluene(FID)				107	107	77.0-122				

Public Review Draft

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L985379-01.02.03](#)

Method Blank (MB)

(MB) R3302413-1 04/17/18 10:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L984988-06 Original Sample (OS) • Duplicate (DUP)

(OS) L984988-06 04/17/18 12:19 • (DUP) R3302413-2 04/17/18 13:46

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Methane	U	0.000	1	0.000				20
Ethane	U	0.000	1	0.000				20
Ethene	U	0.000	1	0.000				20

L985009-05 Original Sample (OS) • Duplicate (DUP)

(OS) L985009-05 04/17/18 13:53 • (DUP) R3302413-3 04/17/18 14:21

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Methane	ND	0.000	1	0.000				20
Ethane	ND	0.000	1	0.000				20
Ethene	ND	0.000	1	0.000				20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302413-4 04/17/18 14:24 • (LCSD) R3302413-5 04/17/18 14:27

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%
Methane	67.8	75.9	75.9	75.8	112	112					85.0-115					0.156	20	
Ethane	129	122	122	119	94.3	91.9					85.0-115					2.61	20	
Ethene	127	125	125	122	98.6	96.3					85.0-115					2.38	20	





Method Blank (MB)

(MB) R3302785-1 04/18/18 11:12

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L986131-01 Original Sample (OS) • Duplicate (DUP)

(OS) L986131-01 04/18/18 11:17 • (DUP) R3302785-2 04/18/18 11:38

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	515	507	1	1.63		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L986149-01 Original Sample (OS) • Duplicate (DUP)

(OS) L986149-01 04/18/18 11:23 • (DUP) R3302785-3 04/18/18 11:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	20.6	17.0	1	18.9		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L986577-01 Original Sample (OS) • Duplicate (DUP)

(OS) L986577-01 04/18/18 13:05 • (DUP) R3302785-4 04/18/18 13:07

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	ND	0.000	1	0.000		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

1 Cp
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302785-5 04/18/18 13:11 • (LCSD) R3302785-6 04/18/18 13:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	76.2	73.0	112	108	85.0-115			4.34	20
Ethane	129	124	117	96.0	90.4	85.0-115			5.95	20
Ethene	127	127	120	100	94.2	85.0-115			6.29	20

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Method Blank (MB)

(MB) R3302011-2_04/13/18 10:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
Carbon disulfide	U		0.101	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
2-Hexanone	U		0.757	5.00

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L985379-01.02.03.04.05](#)

Method Blank (MB)

(MB) R3302011-2_04/13/18 10:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
n-Hexane	U		0.305	5.00
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.219	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Vinyl acetate	U		0.645	5.00
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	0.191	J	0.164	0.500
Toluene	U		0.412	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	92.5			80.0-120
(S) Dibromofluoromethane	99.6			76.0-123
(S) 4-Bromofluorobenzene	120			80.0-120

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302011-1 04/13/18 09:06 • (LCSD) R3302011-3 04/13/18 10:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	25.0	23.8	23.5	95.3	94.0	76.0-122			1.35	20
Carbon disulfide	25.0	26.8	25.8	107	103	55.0-127			4.00	20
Acetone	125	96.4	98.0	77.1	78.4	10.0-160			1.61	23
Acrylonitrile	125	80.3	80.2	64.3	64.2	60.0-142			0.130	20
trans-1,4-Dichloro-2-butene	25.0	20.0	20.0	80.1	80.2	55.0-134			0.0876	20
Bromobenzene	25.0	26.6	25.8	106	103	79.0-120			3.14	20
Bromodichloromethane	25.0	22.3	22.3	89.1	89.2	76.0-120			0.151	20
2-Hexanone	125	84.8	84.7	67.8	67.8	58.0-147			0.0161	20
Bromoform	25.0	28.3	28.1	113	112	67.0-132			0.710	20
Bromomethane	25.0	22.2	20.5	88.7	82.1	18.0-160			7.78	20
n-Hexane	25.0	17.5	16.6	70.1	66.6	56.0-124			5.12	20
Iodomethane	125	123	116	98.5	93.2	57.0-140			5.55	20
n-Butylbenzene	25.0	25.7	24.1	103	96.4	72.0-126			6.23	20
sec-Butylbenzene	25.0	25.2	23.6	101	94.4	74.0-121			6.61	20
tert-Butylbenzene	25.0	24.8	23.8	99.4	95.1	75.0-122			4.39	20
Carbon tetrachloride	25.0	19.7	19.8	78.8	79.2	63.0-122			0.457	20
Benzene	25.0	25.8	24.6	103	98.4	69.0-123			4.65	20
Chlorobenzene	25.0	23.2	23.0	92.7	92.1	79.0-121			0.666	20
Chlorodibromomethane	25.0	22.7	22.4	90.7	89.6	75.0-125			1.24	20
Chloroethane	25.0	22.2	22.6	88.7	90.3	47.0-152			1.79	20
Chloroform	25.0	24.5	23.3	98.0	93.1	72.0-121			5.10	20
Chloromethane	25.0	17.9	16.8	71.7	67.1	48.0-139			6.73	20
2-Chlorotoluene	25.0	26.7	25.8	107	103	74.0-122			3.39	20
4-Chlorotoluene	25.0	26.1	24.9	105	99.4	79.0-120			5.04	20
1,2-Dibromo-3-Chloropropane	25.0	21.6	21.8	86.5	87.0	64.0-127			0.676	20
1,2-Dibromoethane	25.0	23.0	22.4	92.1	89.7	77.0-123			2.65	20
Dibromomethane	25.0	23.9	24.5	95.8	97.8	78.0-120			2.13	20
1,2-Dichlorobenzene	25.0	23.3	22.0	93.0	87.9	80.0-120			5.64	20
1,3-Dichlorobenzene	25.0	23.5	22.1	94.1	88.4	72.0-123			6.27	20
1,4-Dichlorobenzene	25.0	23.8	22.6	95.1	90.4	77.0-120			5.07	20
Dichlorodifluoromethane	25.0	25.3	23.0	101	92.1	49.0-155			9.61	20
1,1-Dichloroethane	25.0	21.2	20.8	84.7	83.2	70.0-126			1.74	20
1,2-Dichloroethane	25.0	19.2	19.5	76.9	78.0	67.0-126			1.46	20
1,1-Dichloroethene	25.0	26.4	24.9	106	99.4	64.0-129			6.17	20
Vinyl acetate	125	104	100	82.9	80.4	46.0-160			3.10	20
cis-1,2-Dichloroethene	25.0	24.5	23.4	98.0	93.8	73.0-120			4.38	20
trans-1,2-Dichloroethene	25.0	24.7	24.2	98.9	96.8	71.0-121			2.09	20
1,2-Dichloropropane	25.0	22.5	21.9	89.9	87.7	75.0-125			2.49	20
1,1-Dichloropropene	25.0	26.5	24.6	106	98.4	71.0-129			7.53	20
1,3-Dichloropropane	25.0	24.1	23.7	96.2	94.9	80.0-121			1.34	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3302011-1_04/13/18 09:06 • (LCSD) R3302011-3_04/13/18 10:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,3-Dichloropropene	25.0	23.8	24.2	95.4	97.0	79.0-123			1.71	20
trans-1,3-Dichloropropene	25.0	23.7	23.0	94.7	92.1	74.0-127			2.83	20
2,2-Dichloropropane	25.0	23.8	22.9	95.1	91.5	60.0-125			3.84	20
Di-isopropyl ether	25.0	16.9	16.5	67.6	66.1	59.0-133			2.24	20
Hexachloro-1,3-butadiene	25.0	21.1	20.5	84.2	82.0	64.0-131			2.67	20
Isopropylbenzene	25.0	30.6	29.7	122	119	75.0-120	J4		2.88	20
p-Isopropyltoluene	25.0	23.8	23.6	95.3	94.4	74.0-126			0.956	20
2-Butanone (MEK)	125	84.9	85.7	67.9	68.6	37.0-158			0.969	20
Methylene Chloride	25.0	24.0	23.7	96.0	94.7	66.0-121			1.43	20
4-Methyl-2-pentanone (MIBK)	125	79.5	79.9	63.6	63.9	59.0-143			0.506	20
Ethylbenzene	25.0	23.9	22.5	95.7	89.8	77.0-120			6.28	20
n-Propylbenzene	25.0	28.6	26.7	114	107	79.0-120			6.69	20
Styrene	25.0	31.5	30.6	126	122	78.0-124	J4		3.13	20
1,1,1,2-Tetrachloroethane	25.0	21.0	20.4	84.0	81.6	75.0-122			2.91	20
1,1,2-Tetrachloroethane	25.0	27.7	26.9	111	108	71.0-122			3.02	20
Tetrachloroethene	25.0	21.8	21.2	87.2	84.8	70.0-127			2.81	20
1,1,2-Trichlorotrifluoroethane	25.0	27.4	26.6	109	106	61.0-136			2.91	20
1,2,3-Trichlorobenzene	25.0	21.2	20.7	84.8	82.7	61.0-133			2.52	20
1,2,4-Trichlorobenzene	25.0	22.7	21.5	90.8	85.9	69.0-129			5.55	20
1,1,1-Trichloroethane	25.0	22.2	21.0	88.7	83.8	68.0-122			5.68	20
Methyl tert-butyl ether	25.0	22.9	23.1	91.4	92.5	64.0-123			1.20	20
1,1,2-Trichloroethane	25.0	24.7	24.6	98.7	98.3	78.0-120			0.337	20
Trichloroethene	25.0	23.4	22.8	93.4	91.1	78.0-120			2.58	20
Naphthalene	25.0	21.4	20.0	85.8	80.0	62.0-128			6.98	20
Trichlorofluoromethane	25.0	25.2	23.8	101	95.3	56.0-137			5.63	20
1,2,3-Trichloropropane	25.0	24.2	23.4	96.8	93.6	72.0-124			3.35	20
1,2,3-Trimethylbenzene	25.0	23.8	23.2	95.3	92.8	75.0-120			2.62	20
1,2,4-Trimethylbenzene	25.0	24.6	23.7	98.5	94.7	75.0-120			3.96	20
1,3,5-Trimethylbenzene	25.0	25.3	25.1	101	100	75.0-120			0.612	20
Vinyl chloride	25.0	25.4	22.5	102	90.1	64.0-133			12.0	20
Toluene	25.0	22.8	22.0	91.1	87.9	77.0-120			3.62	20
Xylenes, Total	75.0	67.6	65.7	90.1	87.6	77.0-120			2.85	20
(S) Toluene-d8				96.8	97.1	80.0-120				
(S) Dibromofluoromethane				97.5	98.5	76.0-123				
(S) 4-Bromofluorobenzene				119	116	80.0-120				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
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Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J4	The associated batch QC was outside the established quality control range for accuracy.
Q	Sample was prepared and/or analyzed past recommended holding time. Concentrations should be considered minimum values.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

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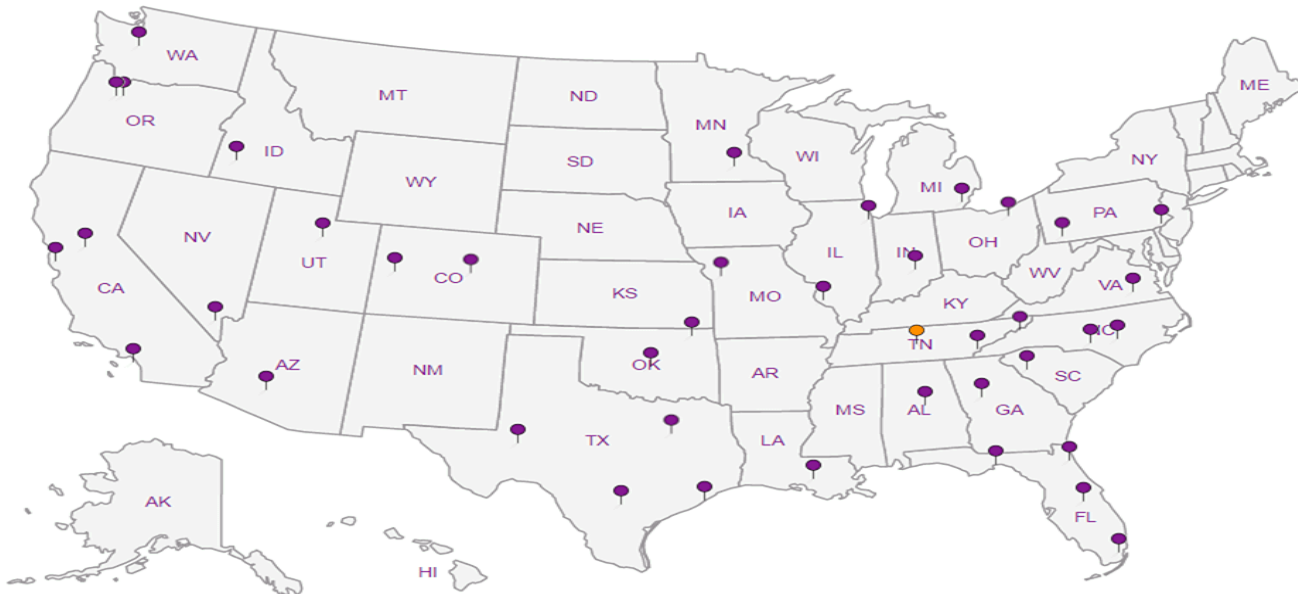
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
bhaldean@pesenv.com

Project Description: *American Linen*

City/State Collected: *Seattle WA*

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
Self Robbins

Site/Facility ID #

P.O. #

Collected by (signature):
Self Robbins

Rush? (Lab MUST be Notified)

Quote #

Immediately Packed on ice: N Y X

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of

Chain of Custody Page 1 of 1

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-8858
Phone: 800-967-8859
Fax: 615-758-8859

L# *98579*
Tabl **C178**

Account: **PESENVSWA**
Template: **T134175**
Prelogin: **P645197**
TSR: **110 - Brian Ford**
PR: *3-22-18CS*

Shipped Via: **FedEx Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Ents	*NO3,SO4,Cl,Aik* 250mlHDPE-NoPres	NWTPHGX 40mlAmb HCl	RSK175LL (EEM) 40mlAmb-HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	V8260LLC VOCs 40mlAmb-HCl
MW-137-041214	Grab	GW		4/12/18	1520	11	X	X	X	X	X	X
MW-117-041218		GW		4/12/18	1046	11	X	X	X	X	X	X
MW-140-041218		GW		4/12/18	1304	11	X	X	X	X	X	X
MW-141-041218		GW		4/12/18	0918	11	X	X	X	X	X	X
TRIP BLANK		GW				1		X				X
		GW										
		GW										
		GW										
		GW										
		GW										

Remarks: *Nitrate has a 48 hour hold time*

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Waste Water
DW - Drinking Water
OT - Other

Flow _____ Temp _____
pH _____ Other _____

Temp Blank Received: _____
VDA Zero Readspace: _____
Preservation Correct/Checked: _____

Samples Returned via: UPS FedEx Courier

Tracking # *9269 9216 6713*

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received by: (Signature) _____ Date: _____ Time: _____

Temp: *3.7°C* Bottles Received: *44*

Date: *4/13/18* Time: *0845*

Hold: _____

Condition: *NCF / GO*

Sample Receipt Checklist:
COC Seal Present/Intact: NP
COC Signed/Accurate: NP
Bottles arrive intact: NP
Correct bottles used: NP
Sufficient volume sent: NP
If Applicable
VDA Zero Readspace: NP
Preservation Correct/Checked: NP



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	213000		2710	20000	1	04/14/2018 11:33	WG1097724

Sample Narrative:

L985379-01 WG1097724: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10900		51.9	1000	1	04/15/2018 08:54	WG1098514
Nitrate	U R	Q	22.7	100	1	04/15/2018 08:54	WG1098514
Sulfate	10800		77.4	5000	1	04/15/2018 08:54	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2900	B	102	1000	1	04/14/2018 13:53	WG1098241

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	218000		15.0	100	1	04/15/2018 23:40	WG1097160
Manganese	4410		0.250	5.00	1	04/15/2018 23:40	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/14/2018 00:40	WG1097878
^(S) a,a,a-Trifluorotoluene(FID)	99.7			77.0-122		04/14/2018 00:40	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1600		0.287	0.678	1	04/17/2018 14:09	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 14:09	WG1099029
Ethene	4.47		0.422	1.27	1	04/17/2018 14:09	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	3.31	J J	1.05	25.0	1	04/16/2018 13:07	WG1097806
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/13/2018 19:46	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 19:46	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 19:46	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 19:46	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 19:46	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 19:46	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 19:46	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 19:46	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 19:46	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 19:46	WG1097806
Carbon disulfide	0.210	J J	0.101	0.500	1	04/13/2018 19:46	WG1097806
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/13/2018 19:46	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/9/2018



Collected date/time: 04/12/18 15:20

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/13/2018 19:46	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 19:46	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 19:46	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 19:46	WG1097806
Chloromethane	U	UJ JO	0.153	1.25	1	04/13/2018 19:46	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 19:46	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 19:46	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 19:46	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 19:46	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 19:46	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 19:46	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 19:46	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 19:46	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 19:46	WG1097806
cis-1,2-Dichloroethene	1.79		0.0933	0.500	1	04/13/2018 19:46	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 19:46	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 19:46	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 19:46	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 19:46	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 19:46	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 19:46	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 19:46	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 19:46	WG1097806
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/13/2018 19:46	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 19:46	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 19:46	WG1097806
2-Hexanone	U	UJ JO	0.757	5.00	1	04/13/2018 19:46	WG1097806
n-Hexane	U	JO	0.305	5.00	1	04/13/2018 19:46	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 19:46	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 19:46	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 19:46	WG1097806
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/13/2018 19:46	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 19:46	WG1097806
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/13/2018 19:46	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 19:46	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 19:46	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 19:46	WG1097806
Styrene	U	J4	0.117	0.500	1	04/13/2018 19:46	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 19:46	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 19:46	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 19:46	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 19:46	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 19:46	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 19:46	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 19:46	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 19:46	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 19:46	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 19:46	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 19:46	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 19:46	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 19:46	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 19:46	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 19:46	WG1097806

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/9/2018



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 19:46	WG1097806
Vinyl chloride	4.26		0.118	0.500	1	04/13/2018 19:46	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 19:46	WG1097806
(S) Toluene-d8	92.8			80.0-120		04/13/2018 19:46	WG1097806
(S) Toluene-d8	104			80.0-120		04/16/2018 13:07	WG1097806
(S) Dibromofluoromethane	101			76.0-123		04/16/2018 13:07	WG1097806
(S) Dibromofluoromethane	102			76.0-123		04/13/2018 19:46	WG1097806
(S) 4-Bromofluorobenzene	103			80.0-120		04/16/2018 13:07	WG1097806
(S) 4-Bromofluorobenzene	120			80.0-120		04/13/2018 19:46	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	16700	J J	2710	20000	1	04/14/2018 18:28	WG1097724

Sample Narrative:

L985379-02 WG1097724: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	2090		51.9	1000	1	04/15/2018 09:10	WG1098514
Nitrate	398	J Q	22.7	100	1	04/15/2018 09:10	WG1098514
Sulfate	1310	J J	77.4	5000	1	04/15/2018 09:10	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2800		102	1000	1	04/13/2018 21:14	WG1097606

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	19500		15.0	100	1	04/15/2018 23:44	WG1097160
Manganese	421		0.250	5.00	1	04/15/2018 23:44	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/14/2018 01:02	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	99.7			77.0-122		04/14/2018 01:02	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	326		0.287	0.678	1	04/17/2018 14:15	WG1099029
Ethane	U		0.296	1.29	1	04/17/2018 14:15	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 14:15	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	6.34	U J JO	1.05	25.0	1	04/13/2018 20:06	WG1097806
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/13/2018 20:06	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 20:06	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 20:06	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 20:06	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 20:06	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 20:06	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 20:06	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 20:06	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 20:06	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 20:06	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 20:06	WG1097806
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/13/2018 20:06	WG1097806

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/9/2018



Collected date/time: 04/12/18 10:46

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/13/2018 20:06	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 20:06	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 20:06	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 20:06	WG1097806
Chloromethane	U	UJ JO	0.153	1.25	1	04/13/2018 20:06	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 20:06	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 20:06	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 20:06	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 20:06	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 20:06	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 20:06	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 20:06	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 20:06	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 20:06	WG1097806
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/13/2018 20:06	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 20:06	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 20:06	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 20:06	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 20:06	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 20:06	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 20:06	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 20:06	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 20:06	WG1097806
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/13/2018 20:06	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 20:06	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 20:06	WG1097806
2-Hexanone	U	UJ JO	0.757	5.00	1	04/13/2018 20:06	WG1097806
n-Hexane	U	UJ JO	0.305	5.00	1	04/13/2018 20:06	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 20:06	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 20:06	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 20:06	WG1097806
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/13/2018 20:06	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 20:06	WG1097806
4-Methyl-2-pentanone (MIBK)	2.35	J+ JJJO	0.823	5.00	1	04/13/2018 20:06	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 20:06	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 20:06	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 20:06	WG1097806
Styrene	U	J4	0.117	0.500	1	04/13/2018 20:06	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 20:06	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 20:06	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 20:06	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 20:06	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 20:06	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 20:06	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 20:06	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 20:06	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 20:06	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 20:06	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 20:06	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 20:06	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 20:06	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 20:06	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 20:06	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 20:06	WG1097806
Vinyl chloride	U		0.118	0.500	1	04/13/2018 20:06	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 20:06	WG1097806
<i>(S) Toluene-d8</i>	94.9			80.0-120		04/13/2018 20:06	WG1097806
<i>(S) Dibromofluoromethane</i>	104			76.0-123		04/13/2018 20:06	WG1097806
<i>(S) 4-Bromofluorobenzene</i>	122	<u>J1</u>		80.0-120		04/13/2018 20:06	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	249000		2710	20000	1	04/14/2018 11:46	WG1097724

Sample Narrative:

L985379-03 WG1097724: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15500		51.9	1000	1	04/15/2018 09:27	WG1098514
Nitrate	U R	Q	22.7	100	1	04/15/2018 09:27	WG1098514
Sulfate	5730		77.4	5000	1	04/15/2018 09:27	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2400	B	102	1000	1	04/14/2018 14:05	WG1098241

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	15000		15.0	100	1	04/16/2018 00:15	WG1097160
Manganese	795		0.250	5.00	1	04/16/2018 00:15	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/14/2018 01:24	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-122		04/14/2018 01:24	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	261		0.287	0.678	1	04/17/2018 14:18	WG1099029 IC 5/9/2018
Ethane	U		0.296	1.29	1	04/17/2018 14:18	WG1099029
Ethene	U		0.422	1.27	1	04/17/2018 14:18	WG1099029

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.13 U	J JO	1.05	25.0	1	04/13/2018 20:26	WG1097806
Acrylonitrile	U UJ	JO	0.873	5.00	1	04/13/2018 20:26	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 20:26	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 20:26	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 20:26	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 20:26	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 20:26	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 20:26	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 20:26	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 20:26	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 20:26	WG1097806
Carbon disulfide	0.699 J+		0.101	0.500	1	04/13/2018 20:26	WG1097806
Carbon tetrachloride	U UJ	JO	0.159	0.500	1	04/13/2018 20:26	WG1097806

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/12/18 13:04

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/13/2018 20:26	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 20:26	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 20:26	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 20:26	WG1097806
Chloromethane	U	UJ JO	0.153	1.25	1	04/13/2018 20:26	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 20:26	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 20:26	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 20:26	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 20:26	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 20:26	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 20:26	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 20:26	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 20:26	WG1097806
1,1-Dichloroethene	0.355	J+ J	0.188	0.500	1	04/13/2018 20:26	WG1097806
cis-1,2-Dichloroethene	2.47	J+	0.0933	0.500	1	04/13/2018 20:26	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 20:26	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 20:26	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 20:26	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 20:26	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 20:26	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 20:26	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 20:26	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 20:26	WG1097806
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/13/2018 20:26	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 20:26	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 20:26	WG1097806
2-Hexanone	U	UJ JO	0.757	5.00	1	04/13/2018 20:26	WG1097806
n-Hexane	U	UJ JO	0.305	5.00	1	04/13/2018 20:26	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 20:26	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 20:26	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 20:26	WG1097806
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/13/2018 20:26	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 20:26	WG1097806
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/13/2018 20:26	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 20:26	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 20:26	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 20:26	WG1097806
Styrene	0.178	J+ JJ4	0.117	0.500	1	04/13/2018 20:26	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 20:26	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 20:26	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 20:26	WG1097806
Tetrachloroethene	0.402	J+ J	0.199	0.500	1	04/13/2018 20:26	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 20:26	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 20:26	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 20:26	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 20:26	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 20:26	WG1097806
Trichloroethene	0.572	J+	0.153	0.500	1	04/13/2018 20:26	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 20:26	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 20:26	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 20:26	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 20:26	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 20:26	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018



Collected date/time: 04/12/18 13:04

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 20:26	WG1097806
Vinyl chloride	0.246	J+ <u>J</u>	0.118	0.500	1	04/13/2018 20:26	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 20:26	WG1097806
(S) Toluene-d8	93.6			80.0-120		04/13/2018 20:26	WG1097806
(S) Dibromofluoromethane	105			76.0-123		04/13/2018 20:26	WG1097806
(S) 4-Bromofluorobenzene	122	<u>J1</u>		80.0-120		04/13/2018 20:26	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	179000		2710	20000	1	04/14/2018 12:31	WG1097724

Sample Narrative:

L985379-04 WG1097724: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	9640		51.9	1000	1	04/15/2018 09:44	WG1098514
Nitrate	U	R Q	22.7	100	1	04/15/2018 09:44	WG1098514
Sulfate	7490		77.4	5000	1	04/15/2018 09:44	WG1098514

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4300		102	1000	1	04/13/2018 21:51	WG1097606

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	4610		15.0	100	1	04/15/2018 23:54	WG1097160
Manganese	556		0.250	5.00	1	04/15/2018 23:54	WG1097160

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	326	B	31.6	100	1	04/14/2018 01:46	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	100			77.0-122		04/14/2018 01:46	WG1097878

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2690		0.287	0.678	1	04/18/2018 11:26	WG1099563
Ethane	3.29		0.296	1.29	1	04/18/2018 11:26	WG1099563
Ethene	0.869	J J	0.422	1.27	1	04/18/2018 11:26	WG1099563

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.38	U J JO	1.05	25.0	1	04/13/2018 20:46	WG1097806
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/13/2018 20:46	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 20:46	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 20:46	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 20:46	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 20:46	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 20:46	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 20:46	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 20:46	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 20:46	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 20:46	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 20:46	WG1097806
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/13/2018 20:46	WG1097806

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/9/2018



Collected date/time: 04/12/18 09:18

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/13/2018 20:46	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 20:46	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 20:46	WG1097806
Chloroform	0.305	J+ <u>J</u>	0.0860	0.500	1	04/13/2018 20:46	WG1097806
Chloromethane	U	<u>UJ</u> <u>JO</u>	0.153	1.25	1	04/13/2018 20:46	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 20:46	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 20:46	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 20:46	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 20:46	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 20:46	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 20:46	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 20:46	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 20:46	WG1097806
1,1-Dichloroethene	0.389	J+ <u>J</u>	0.188	0.500	1	04/13/2018 20:46	WG1097806
cis-1,2-Dichloroethene	91.6	J+	0.0933	0.500	1	04/13/2018 20:46	WG1097806
trans-1,2-Dichloroethene	5.68	J+	0.152	0.500	1	04/13/2018 20:46	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 20:46	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 20:46	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 20:46	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 20:46	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 20:46	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 20:46	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 20:46	WG1097806
Di-isopropyl ether	U	<u>UJ</u> <u>JO</u>	0.0924	0.500	1	04/13/2018 20:46	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 20:46	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 20:46	WG1097806
2-Hexanone	U	<u>UJ</u> <u>JO</u>	0.757	5.00	1	04/13/2018 20:46	WG1097806
n-Hexane	U	<u>UJ</u> <u>JO</u>	0.305	5.00	1	04/13/2018 20:46	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 20:46	WG1097806
Isopropylbenzene	U	<u>J4</u>	0.126	0.500	1	04/13/2018 20:46	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 20:46	WG1097806
2-Butanone (MEK)	U	<u>UJ</u> <u>JO</u>	1.28	5.00	1	04/13/2018 20:46	WG1097806
Methylene Chloride	U		1.07	2.50	1	04/13/2018 20:46	WG1097806
4-Methyl-2-pentanone (MIBK)	U	<u>UJ</u> <u>JO</u>	0.823	5.00	1	04/13/2018 20:46	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 20:46	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 20:46	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 20:46	WG1097806
Styrene	U	<u>J4</u>	0.117	0.500	1	04/13/2018 20:46	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 20:46	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 20:46	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 20:46	WG1097806
Tetrachloroethene	71.3	J+	0.199	0.500	1	04/13/2018 20:46	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 20:46	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 20:46	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 20:46	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 20:46	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 20:46	WG1097806
Trichloroethene	25.6	J+	0.153	0.500	1	04/13/2018 20:46	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 20:46	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 20:46	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 20:46	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 20:46	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 20:46	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/13/2018 20:46	WG1097806
Vinyl chloride	7.01	J+	0.118	0.500	1	04/13/2018 20:46	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 20:46	WG1097806
(S) Toluene-d8	93.4			80.0-120		04/13/2018 20:46	WG1097806
(S) Dibromofluoromethane	106			76.0-123		04/13/2018 20:46	WG1097806
(S) 4-Bromofluorobenzene	121	J1		80.0-120		04/13/2018 20:46	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018



Collected date/time: 04/12/18 00:00

L985379

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/13/2018 21:36	WG1097878
(S) a,a,a-Trifluorotoluene(FID)	99.8			77.0-122		04/13/2018 21:36	WG1097878

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.26	J JO	1.05	25.0	1	04/13/2018 15:06	WG1097806
Acrylonitrile	U	UJ JO	0.873	5.00	1	04/13/2018 15:06	WG1097806
Benzene	U		0.0896	0.500	1	04/13/2018 15:06	WG1097806
Bromobenzene	U		0.133	0.500	1	04/13/2018 15:06	WG1097806
Bromodichloromethane	U		0.0800	0.500	1	04/13/2018 15:06	WG1097806
Bromochloromethane	U		0.145	0.500	1	04/13/2018 15:06	WG1097806
Bromoform	U		0.186	0.500	1	04/13/2018 15:06	WG1097806
Bromomethane	U		0.157	2.50	1	04/13/2018 15:06	WG1097806
n-Butylbenzene	U		0.143	0.500	1	04/13/2018 15:06	WG1097806
sec-Butylbenzene	U		0.134	0.500	1	04/13/2018 15:06	WG1097806
tert-Butylbenzene	U		0.183	0.500	1	04/13/2018 15:06	WG1097806
Carbon disulfide	U		0.101	0.500	1	04/13/2018 15:06	WG1097806
Carbon tetrachloride	U	UJ JO	0.159	0.500	1	04/13/2018 15:06	WG1097806
Chlorobenzene	U		0.140	0.500	1	04/13/2018 15:06	WG1097806
Chlorodibromomethane	U		0.128	0.500	1	04/13/2018 15:06	WG1097806
Chloroethane	U		0.141	2.50	1	04/13/2018 15:06	WG1097806
Chloroform	U		0.0860	0.500	1	04/13/2018 15:06	WG1097806
Chloromethane	U	UJ JO	0.153	1.25	1	04/13/2018 15:06	WG1097806
2-Chlorotoluene	U		0.111	0.500	1	04/13/2018 15:06	WG1097806
4-Chlorotoluene	U		0.0972	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/13/2018 15:06	WG1097806
1,2-Dibromoethane	U		0.193	0.500	1	04/13/2018 15:06	WG1097806
Dibromomethane	U		0.117	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dichlorobenzene	U		0.101	0.500	1	04/13/2018 15:06	WG1097806
1,3-Dichlorobenzene	U		0.130	0.500	1	04/13/2018 15:06	WG1097806
1,4-Dichlorobenzene	U		0.121	0.500	1	04/13/2018 15:06	WG1097806
Dichlorodifluoromethane	U		0.127	2.50	1	04/13/2018 15:06	WG1097806
1,1-Dichloroethane	U		0.114	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dichloroethane	U		0.108	0.500	1	04/13/2018 15:06	WG1097806
1,1-Dichloroethene	U		0.188	0.500	1	04/13/2018 15:06	WG1097806
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/13/2018 15:06	WG1097806
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/13/2018 15:06	WG1097806
1,2-Dichloropropane	U		0.190	0.500	1	04/13/2018 15:06	WG1097806
1,1-Dichloropropene	U		0.128	0.500	1	04/13/2018 15:06	WG1097806
1,3-Dichloropropane	U		0.147	1.00	1	04/13/2018 15:06	WG1097806
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/13/2018 15:06	WG1097806
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/13/2018 15:06	WG1097806
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/13/2018 15:06	WG1097806
2,2-Dichloropropane	U		0.0929	0.500	1	04/13/2018 15:06	WG1097806
Di-isopropyl ether	U	UJ JO	0.0924	0.500	1	04/13/2018 15:06	WG1097806
Ethylbenzene	U		0.158	0.500	1	04/13/2018 15:06	WG1097806
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/13/2018 15:06	WG1097806
2-Hexanone	U	UJ JO	0.757	5.00	1	04/13/2018 15:06	WG1097806
n-Hexane	U	UJ JO	0.305	5.00	1	04/13/2018 15:06	WG1097806
Iodomethane	U		0.377	10.0	1	04/13/2018 15:06	WG1097806
Isopropylbenzene	U	J4	0.126	0.500	1	04/13/2018 15:06	WG1097806
p-Isopropyltoluene	U		0.138	0.500	1	04/13/2018 15:06	WG1097806
2-Butanone (MEK)	U	UJ JO	1.28	5.00	1	04/13/2018 15:06	WG1097806

JC 5/9/2018



Collected date/time: 04/12/18 00:00

L985379

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/13/2018 15:06	WG1097806
4-Methyl-2-pentanone (MIBK)	U	UJ JO	0.823	5.00	1	04/13/2018 15:06	WG1097806
Methyl tert-butyl ether	U		0.102	0.500	1	04/13/2018 15:06	WG1097806
Naphthalene	U		0.174	2.50	1	04/13/2018 15:06	WG1097806
n-Propylbenzene	U		0.162	0.500	1	04/13/2018 15:06	WG1097806
Styrene	U	J4	0.117	0.500	1	04/13/2018 15:06	WG1097806
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/13/2018 15:06	WG1097806
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/13/2018 15:06	WG1097806
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/13/2018 15:06	WG1097806
Tetrachloroethene	U		0.199	0.500	1	04/13/2018 15:06	WG1097806
Toluene	U		0.412	0.500	1	04/13/2018 15:06	WG1097806
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/13/2018 15:06	WG1097806
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/13/2018 15:06	WG1097806
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/13/2018 15:06	WG1097806
1,1,2-Trichloroethane	U		0.186	0.500	1	04/13/2018 15:06	WG1097806
Trichloroethene	U		0.153	0.500	1	04/13/2018 15:06	WG1097806
Trichlorofluoromethane	U		0.130	2.50	1	04/13/2018 15:06	WG1097806
1,2,3-Trichloropropane	U		0.247	2.50	1	04/13/2018 15:06	WG1097806
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/13/2018 15:06	WG1097806
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/13/2018 15:06	WG1097806
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/13/2018 15:06	WG1097806
Vinyl acetate	U		0.645	5.00	1	04/13/2018 15:06	WG1097806
Vinyl chloride	U		0.118	0.500	1	04/13/2018 15:06	WG1097806
Xylenes, Total	U		0.316	1.50	1	04/13/2018 15:06	WG1097806
(S) Toluene-d8	93.3			80.0-120		04/13/2018 15:06	WG1097806
(S) Dibromofluoromethane	102			76.0-123		04/13/2018 15:06	WG1097806
(S) 4-Bromofluorobenzene	116			80.0-120		04/13/2018 15:06	WG1097806

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/2018

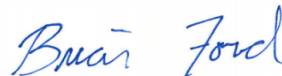
May 07, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L989529
Samples Received: 04/28/2018
Project Number: 1413.001.05.601
Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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1 Cp
2 Tc
3 Ss
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5 Sr
6 Qc
7 Gl
8 Al
9 Sc



MW-142-042718 L989529-01 GW

Collected by Jeff Dobbins
Collected date/time 04/27/18 08:35
Received date/time 04/28/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1105725	1	05/04/18 18:46	05/04/18 18:46	MCG
Wet Chemistry by Method 9056A	WG1104424	1	04/28/18 14:40	04/28/18 14:40	DR
Wet Chemistry by Method 9060A	WG1105152	1	05/01/18 16:13	05/01/18 16:13	SJM
Metals (ICPMS) by Method 6020A	WG1104647	1	05/02/18 17:12	05/02/18 21:26	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1104802	1	04/30/18 14:21	04/30/18 14:21	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107156	1	05/07/18 10:35	05/07/18 10:35	BG
Volatile Organic Compounds (GC) by Method RSK175	WG1107762	10	05/07/18 14:03	05/07/18 14:03	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1104728	1	04/29/18 21:17	04/29/18 21:17	ACG

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

MW-144-042718 L989529-02 GW

Collected by Jeff Dobbins
Collected date/time 04/27/18 09:49
Received date/time 04/28/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1105725	1	05/04/18 19:00	05/04/18 19:00	MCG
Wet Chemistry by Method 9056A	WG1104424	1	04/28/18 14:53	04/28/18 14:53	DR
Wet Chemistry by Method 9056A	WG1104424	5	04/28/18 15:05	04/28/18 15:05	DR
Wet Chemistry by Method 9060A	WG1105152	5	05/01/18 16:30	05/01/18 16:30	SJM
Metals (ICPMS) by Method 6020A	WG1104647	1	05/02/18 17:12	05/02/18 21:31	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1104802	1	04/30/18 14:43	04/30/18 14:43	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107156	1	05/07/18 10:47	05/07/18 10:47	BG
Volatile Organic Compounds (GC) by Method RSK175	WG1107762	20	05/07/18 14:06	05/07/18 14:06	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1104728	1	04/29/18 21:37	04/29/18 21:37	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1104728	50	05/03/18 20:30	05/03/18 20:30	RAS

6 Qc

7 Gl

8 Al

9 Sc

MW-155-042718 L989529-03 GW

Collected by Jeff Dobbins
Collected date/time 04/27/18 10:41
Received date/time 04/28/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1104802	1	04/30/18 15:05	04/30/18 15:05	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1104728	1	04/29/18 21:56	04/29/18 21:56	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1104728	1	05/03/18 20:50	05/03/18 20:50	RAS

MW-145-042718 L989529-04 GW

Collected by Jeff Dobbins
Collected date/time 04/27/18 12:49
Received date/time 04/28/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1105725	1	05/04/18 19:07	05/04/18 19:07	MCG
Wet Chemistry by Method 9056A	WG1104424	1	04/28/18 15:42	04/28/18 15:42	DR
Wet Chemistry by Method 9060A	WG1105152	10	05/01/18 16:48	05/01/18 16:48	SJM
Metals (ICPMS) by Method 6020A	WG1104647	1	05/02/18 17:12	05/02/18 21:35	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1104802	1	04/30/18 15:27	04/30/18 15:27	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107156	1	05/07/18 10:53	05/07/18 10:53	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1104728	1	04/29/18 22:16	04/29/18 22:16	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	794000		2710	20000	1	05/04/2018 18:46	WG1105725

Sample Narrative:

L989529-01 WG1105725: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15600		51.9	1000	1	04/28/2018 14:40	WG1104424
Nitrate	U		22.7	100	1	04/28/2018 14:40	WG1104424
Sulfate	426	J	77.4	5000	1	04/28/2018 14:40	WG1104424

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	33700		102	1000	1	05/01/2018 16:13	WG1105152

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3160		15.0	100	1	05/02/2018 21:26	WG1104647
Manganese	2580		0.250	5.00	1	05/02/2018 21:26	WG1104647

Volatile Organic Compounds (GC) by Method NWTPHGX

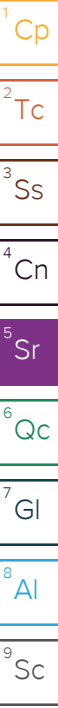
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	49.3	B, J	31.6	100	1	04/30/2018 14:21	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-122		04/30/2018 14:21	WG1104802

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	7980		2.87	6.78	10	05/07/2018 14:03	WG1107762
Ethane	44.6		0.296	1.29	1	05/07/2018 10:35	WG1107156
Ethene	U		0.422	1.27	1	05/07/2018 10:35	WG1107156

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.40	J	1.05	25.0	1	04/29/2018 21:17	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 21:17	WG1104728
Benzene	0.514		0.0896	0.500	1	04/29/2018 21:17	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 21:17	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 21:17	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 21:17	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 21:17	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 21:17	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 21:17	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 21:17	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 21:17	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 21:17	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 21:17	WG1104728





Collected date/time: 04/27/18 08:35

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/29/2018 21:17	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 21:17	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 21:17	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 21:17	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 21:17	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 21:17	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 21:17	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 21:17	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 21:17	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 21:17	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 21:17	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 21:17	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 21:17	WG1104728
1,1-Dichloroethene	0.244	U	0.188	0.500	1	04/29/2018 21:17	WG1104728
cis-1,2-Dichloroethene	46.1		0.0933	0.500	1	04/29/2018 21:17	WG1104728
trans-1,2-Dichloroethene	0.474	U	0.152	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 21:17	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 21:17	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 21:17	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 21:17	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 21:17	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 21:17	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 21:17	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 21:17	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 21:17	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 21:17	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 21:17	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 21:17	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 21:17	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 21:17	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 21:17	WG1104728
2-Butanone (MEK)	U		1.28	5.00	1	04/29/2018 21:17	WG1104728
Methylene Chloride	U		1.07	2.50	1	04/29/2018 21:17	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 21:17	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 21:17	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 21:17	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 21:17	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 21:17	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 21:17	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 21:17	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 21:17	WG1104728
Tetrachloroethene	0.523		0.199	0.500	1	04/29/2018 21:17	WG1104728
Toluene	U		0.412	0.500	1	04/29/2018 21:17	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 21:17	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 21:17	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 21:17	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 21:17	WG1104728
Trichloroethene	1.40		0.153	0.500	1	04/29/2018 21:17	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 21:17	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 21:17	WG1104728
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/29/2018 21:17	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 21:17	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 21:17	WG1104728

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/27/18 08:35

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/29/2018 21:17	WG1104728
Vinyl chloride	17.2	<u>JO</u>	0.118	0.500	1	04/29/2018 21:17	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 21:17	WG1104728
<i>(S) Toluene-d8</i>	101			80.0-120		04/29/2018 21:17	WG1104728
<i>(S) Dibromofluoromethane</i>	98.1			76.0-123		04/29/2018 21:17	WG1104728
<i>(S) 4-Bromofluorobenzene</i>	91.5			80.0-120		04/29/2018 21:17	WG1104728

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	740000		2710	20000	1	05/04/2018 19:00	WG1105725

Sample Narrative:

L989529-02 WG1105725: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	182000		260	5000	5	04/28/2018 15:05	WG1104424
Nitrate	U		22.7	100	1	04/28/2018 14:53	WG1104424
Sulfate	9390		77.4	5000	1	04/28/2018 14:53	WG1104424

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	159000		510	5000	5	05/01/2018 16:30	WG1105152

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1070		15.0	100	1	05/02/2018 21:31	WG1104647
Manganese	1980		0.250	5.00	1	05/02/2018 21:31	WG1104647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	364		31.6	100	1	04/30/2018 14:43	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-122		04/30/2018 14:43	WG1104802

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	17700		5.74	13.6	20	05/07/2018 14:06	WG1107762
Ethane	55.4		0.296	1.29	1	05/07/2018 10:47	WG1107156
Ethene	5480		0.422	1.27	1	05/07/2018 10:47	WG1107156

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.44	J	1.05	25.0	1	04/29/2018 21:37	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 21:37	WG1104728
Benzene	U		0.0896	0.500	1	04/29/2018 21:37	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 21:37	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 21:37	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 21:37	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 21:37	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 21:37	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 21:37	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 21:37	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 21:37	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 21:37	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 21:37	WG1104728

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/27/18 09:49

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/29/2018 21:37	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 21:37	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 21:37	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 21:37	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 21:37	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 21:37	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 21:37	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 21:37	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 21:37	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 21:37	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 21:37	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 21:37	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 21:37	WG1104728
1,1-Dichloroethene	1.15		0.188	0.500	1	04/29/2018 21:37	WG1104728
cis-1,2-Dichloroethene	662		4.66	25.0	50	05/03/2018 20:30	WG1104728
trans-1,2-Dichloroethene	4.65		0.152	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 21:37	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 21:37	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 21:37	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 21:37	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 21:37	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 21:37	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 21:37	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 21:37	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 21:37	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 21:37	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 21:37	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 21:37	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 21:37	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 21:37	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 21:37	WG1104728
2-Butanone (MEK)	3.85	U	1.28	5.00	1	04/29/2018 21:37	WG1104728
Methylene Chloride	U		1.07	2.50	1	04/29/2018 21:37	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 21:37	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 21:37	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 21:37	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 21:37	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 21:37	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 21:37	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 21:37	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 21:37	WG1104728
Tetrachloroethene	1.86		0.199	0.500	1	04/29/2018 21:37	WG1104728
Toluene	1.40		0.412	0.500	1	04/29/2018 21:37	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 21:37	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 21:37	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 21:37	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 21:37	WG1104728
Trichloroethene	3.31		0.153	0.500	1	04/29/2018 21:37	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 21:37	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 21:37	WG1104728
1,2,4-Trimethylbenzene	0.145	U	0.123	0.500	1	04/29/2018 21:37	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 21:37	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 21:37	WG1104728

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/27/18 09:49

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/29/2018 21:37	WG1104728
Vinyl chloride	888		5.90	25.0	50	05/03/2018 20:30	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 21:37	WG1104728
(S) Toluene-d8	107			80.0-120		05/03/2018 20:30	WG1104728
(S) Toluene-d8	103			80.0-120		04/29/2018 21:37	WG1104728
(S) Dibromofluoromethane	105			76.0-123		05/03/2018 20:30	WG1104728
(S) Dibromofluoromethane	98.2			76.0-123		04/29/2018 21:37	WG1104728
(S) 4-Bromofluorobenzene	109			80.0-120		05/03/2018 20:30	WG1104728
(S) 4-Bromofluorobenzene	91.9			80.0-120		04/29/2018 21:37	WG1104728

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/27/18 10:41

L989529

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	60.9	<u>B</u> <u>J</u>	31.6	100	1	04/30/2018 15:05	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-122		04/30/2018 15:05	WG1104802

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/29/2018 21:56	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 21:56	WG1104728
Benzene	U		0.0896	0.500	1	04/29/2018 21:56	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 21:56	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 21:56	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 21:56	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 21:56	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 21:56	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 21:56	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 21:56	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 21:56	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 21:56	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 21:56	WG1104728
Chlorobenzene	U		0.140	0.500	1	04/29/2018 21:56	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 21:56	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 21:56	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 21:56	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 21:56	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 21:56	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 21:56	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 21:56	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 21:56	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 21:56	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 21:56	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 21:56	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 21:56	WG1104728
1,1-Dichloroethene	U		0.188	0.500	1	04/29/2018 21:56	WG1104728
cis-1,2-Dichloroethene	0.466	<u>J</u>	0.0933	0.500	1	05/03/2018 20:50	WG1104728
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 21:56	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 21:56	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 21:56	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 21:56	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 21:56	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 21:56	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 21:56	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 21:56	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 21:56	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 21:56	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 21:56	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 21:56	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 21:56	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 21:56	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 21:56	WG1104728
2-Butanone (MEK)	U		1.28	5.00	1	04/29/2018 21:56	WG1104728

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/27/18 10:41

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/29/2018 21:56	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 21:56	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 21:56	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 21:56	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 21:56	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 21:56	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 21:56	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 21:56	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 21:56	WG1104728
Tetrachloroethene	3.48		0.199	0.500	1	04/29/2018 21:56	WG1104728
Toluene	U		0.412	0.500	1	04/29/2018 21:56	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 21:56	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 21:56	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 21:56	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 21:56	WG1104728
Trichloroethene	0.334	U	0.153	0.500	1	04/29/2018 21:56	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 21:56	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 21:56	WG1104728
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/29/2018 21:56	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 21:56	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 21:56	WG1104728
Vinyl acetate	U		0.645	5.00	1	04/29/2018 21:56	WG1104728
Vinyl chloride	0.447	U	0.118	0.500	1	05/03/2018 20:50	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 21:56	WG1104728
(S) Toluene-d8	107			80.0-120		05/03/2018 20:50	WG1104728
(S) Toluene-d8	105			80.0-120		04/29/2018 21:56	WG1104728
(S) Dibromofluoromethane	101			76.0-123		05/03/2018 20:50	WG1104728
(S) Dibromofluoromethane	96.9			76.0-123		04/29/2018 21:56	WG1104728
(S) 4-Bromofluorobenzene	104			80.0-120		05/03/2018 20:50	WG1104728
(S) 4-Bromofluorobenzene	90.3			80.0-120		04/29/2018 21:56	WG1104728

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	272000		2710	20000	1	05/04/2018 19:07	WG1105725

Sample Narrative:

L989529-04 WG1105725: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	74400		51.9	1000	1	04/28/2018 15:42	WG1104424
Nitrate	238		22.7	100	1	04/28/2018 15:42	WG1104424
Sulfate	71000		77.4	5000	1	04/28/2018 15:42	WG1104424

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8090	J	1020	10000	10	05/01/2018 16:48	WG1105152

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	42900		15.0	100	1	05/02/2018 21:35	WG1104647
Manganese	912		0.250	5.00	1	05/02/2018 21:35	WG1104647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	52.6	B, J	31.6	100	1	04/30/2018 15:27	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	92.7			77.0-122		04/30/2018 15:27	WG1104802

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	2050		0.287	0.678	1	05/07/2018 10:53	WG1107156
Ethane	U		0.296	1.29	1	05/07/2018 10:53	WG1107156
Ethene	18.5		0.422	1.27	1	05/07/2018 10:53	WG1107156

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	6.71	J	1.05	25.0	1	04/29/2018 22:16	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 22:16	WG1104728
Benzene	U		0.0896	0.500	1	04/29/2018 22:16	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 22:16	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 22:16	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 22:16	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 22:16	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 22:16	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 22:16	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 22:16	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 22:16	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 22:16	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 22:16	WG1104728

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/27/18 12:49

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/29/2018 22:16	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 22:16	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 22:16	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 22:16	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 22:16	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 22:16	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 22:16	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 22:16	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 22:16	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 22:16	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 22:16	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 22:16	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 22:16	WG1104728
1,1-Dichloroethene	U		0.188	0.500	1	04/29/2018 22:16	WG1104728
cis-1,2-Dichloroethene	2.29		0.0933	0.500	1	04/29/2018 22:16	WG1104728
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 22:16	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 22:16	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 22:16	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 22:16	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 22:16	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 22:16	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 22:16	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 22:16	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 22:16	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 22:16	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 22:16	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 22:16	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 22:16	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 22:16	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 22:16	WG1104728
2-Butanone (MEK)	U		1.28	5.00	1	04/29/2018 22:16	WG1104728
Methylene Chloride	U		1.07	2.50	1	04/29/2018 22:16	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 22:16	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 22:16	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 22:16	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 22:16	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 22:16	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 22:16	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 22:16	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 22:16	WG1104728
Tetrachloroethene	0.305	U	0.199	0.500	1	04/29/2018 22:16	WG1104728
Toluene	U		0.412	0.500	1	04/29/2018 22:16	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 22:16	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 22:16	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 22:16	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 22:16	WG1104728
Trichloroethene	0.212	U	0.153	0.500	1	04/29/2018 22:16	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 22:16	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 22:16	WG1104728
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/29/2018 22:16	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 22:16	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 22:16	WG1104728

1
Cp

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Tc

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Ss

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Cn

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Sr

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Qc

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Sc



Collected date/time: 04/27/18 12:49

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/29/2018 22:16	WG1104728
Vinyl chloride	3.88	<u>JO</u>	0.118	0.500	1	04/29/2018 22:16	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 22:16	WG1104728
<i>(S) Toluene-d8</i>	102			80.0-120		04/29/2018 22:16	WG1104728
<i>(S) Dibromofluoromethane</i>	97.3			76.0-123		04/29/2018 22:16	WG1104728
<i>(S) 4-Bromofluorobenzene</i>	90.3			80.0-120		04/29/2018 22:16	WG1104728

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L989529-01 Original Sample (OS) • Duplicate (DUP)

(OS) L989529-01 05/04/18 18:46 • (DUP) R3307442-1 05/04/18 18:53

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	794000	819000	1	3.20		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

L990101-02 Original Sample (OS) • Duplicate (DUP)

(OS) L990101-02 05/04/18 21:13 • (DUP) R3307442-4 05/04/18 21:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	259000	264000	1	1.99		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307442-2 05/04/18 19:52 • (LCSD) R3307442-3 05/04/18 21:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Alkalinity	100000	107000	110000	107	110	85.0-115			2.49	20

Sample Narrative:

LCS: Endpoint pH 4.5
LCSD: Endpoint pH 4.5





Method Blank (MB)

(MB) R3305606-1 04/28/18 11:56

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L989539-01 Original Sample (OS) • Duplicate (DUP)

(OS) L989539-01 04/28/18 16:07 • (DUP) R3305606-4 04/28/18 16:20

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	3730	3740	1	0.442			15
Nitrate	U	0.000	1	0.000			15
Sulfate	2390	2420	1	1.15	J		15

L989551-02 Original Sample (OS) • Duplicate (DUP)

(OS) L989551-02 04/28/18 21:42 • (DUP) R3305606-7 04/28/18 21:55

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	32600	32600	1	0.0846			15
Nitrate	ND	0.000	1	0.000			15
Sulfate	37000	36900	1	0.170			15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3305606-2 04/28/18 12:09 • (LCSD) R3305606-3 04/28/18 12:21

Analyte	Spike Amount		LCS Result	LCSD Result	LCS Rec.		LCSD Rec.		Rec. Limits	LCS Qualifier		LCSD Qualifier		RPD Limits
	ug/l	ug/l			%	%	%	%		RPD	RPD			
Chloride	40000	39600	39700	39700	99.1	99.3	99.3	99.3	80.0-120	0.265	0.265	0.320	0.320	15
Nitrate	8000	8740	8710	8710	109	109	109	109	80.0-120	0.320	0.320	0.446	0.446	15
Sulfate	40000	40200	40000	40000	100	100	100	100	80.0-120	0.446	0.446	0.446	0.446	15

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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L989539-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution %	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	3730	54700	54600	102	102	1	80.0-120			0.243	15
Nitrate	5000	U	5230	5320	105	106	1	80.0-120			1.81	15
Sulfate	50000	2390	54400	54000	104	103	1	80.0-120			0.712	15

L989551-02 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution %	Rec. Limits %	MS Qualifier
Chloride	50000	32600	81900	98.7	1	80.0-120	
Nitrate	5000	ND	5110	102	1	80.0-120	
Sulfate	50000	37000	84600	95.3	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3306234-1	05/01/18 10:21	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	U			102	1000

L989525-01 Original Sample (OS) • Duplicate (DUP)

(OS) L989525-01	05/01/18 13:49 • (DUP) R3306234-3	05/01/18 14:05	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l				%		%
TOC (Total Organic Carbon)	2820	2740	1	3.06				20

L989592-01 Original Sample (OS) • Duplicate (DUP)

(OS) L989592-01	05/01/18 22:03 • (DUP) R3306234-7	05/01/18 22:21	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l				%		%
TOC (Total Organic Carbon)	4640	4640	1	0.000				20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3306234-2	05/01/18 12:26 • (LCSD) R3306234-4	05/01/18 15:00	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l				%	%	%	%	%	%	%
TOC (Total Organic Carbon)	75000	70700	71700	94.3	95.6	85.0-115			1.42		20	

L989569-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989569-01	05/01/18 17:06 • (MS) R3306234-5	05/01/18 17:26 • (MSD) R3306234-6	05/01/18 17:45	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l					%	%		%	%	%	%	%
TOC (Total Organic Carbon)	50000	2150	53100	53300	102	102	102	80.0-120		1		0.226		20	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Metals (ICPMS) by Method 6020A

[L989529-01.02.04](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3306582-1 05/02/18 20:54				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.330	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3306582-2 05/02/18 20:59 • (LCSD) R3306582-3 05/02/18 21:03									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	5080	4980	102	99.6	80.0-120			1.98	20
Manganese	50.0	47.0	46.6	93.9	93.2	80.0-120			0.739	20

L989723-18 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L989723-18 05/02/18 21:08 • (MS) R3306582-5 05/02/18 21:17 • (MSD) R3306582-6 05/02/18 21:22											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	ND	4980	4970	98.2	98.1	1	75.0-125			0.0520	20
Manganese	50.0	341	383	383	83.6	83.8	1	75.0-125			0.0285	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L989529-01.02.03.04](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Gasoline Range Organics-NWTPH	35.1	J	316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	93.0			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	
Gasoline Range Organics-NWTPH	5500	4800	4780	87.4	86.9	72.0-134					0.530	20						
^(S) <i>a,a</i> -Trifluorotoluene(FID)				99.4	99.3	77.0-122												

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Volatile Organic Compounds (GC) by Method RSK175

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Method Blank (MB)

(MB) R3307514-1 05/07/18 10:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L989723-03 Original Sample (OS) • Duplicate (DUP)

(OS) L989723-03 05/07/18 11:05 • (DUP) R3307514-2 05/07/18 11:30

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	ND	0.000	1	0.000			20
Ethane	ND	0.000	1	0.000			20
Ethene	ND	0.000	1	0.000			20

L989723-08 Original Sample (OS) • Duplicate (DUP)

(OS) L989723-08 05/07/18 11:35 • (DUP) R3307514-3 05/07/18 13:33

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	ND	0.000	1	0.000			20
Ethane	ND	0.000	1	0.000			20
Ethene	ND	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307514-4 05/07/18 13:36 • (LCSD) R3307514-5 05/07/18 13:40

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%							
Methane	67.8	71.0	73.7	105	109			85.0-115			3.80	20	
Ethane	129	116	115	89.8	89.5			85.0-115			0.357	20	
Ethene	127	118	117	93.0	92.0			85.0-115			1.00	20	

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Volatile Organic Compounds (GC) by Method RSK175

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Method Blank (MB)

(MB) R3307585-1	05/07/18 13:58	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l	U	ug/l	0.287	0.678
Methane					

L989562-05 Original Sample (OS) • Duplicate (DUP)

(OS) L989562-05	05/07/18 14:23	(DUP) R3307585-2	05/07/18 14:37	DUP RPD Limits
Analyte	ug/l	DUP Result	Dilution	DUP RPD Limits
Methane	ND	0.000	1	0.000

L989884-01 Original Sample (OS) • Duplicate (DUP)

(OS) L989884-01	05/07/18 15:17	(DUP) R3307585-3	05/07/18 15:23	DUP RPD Limits
Analyte	ug/l	DUP Result	Dilution	DUP RPD Limits
Methane	ND	0.000	1	0.000

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307585-4	05/07/18 15:29	(LCSD) R3307585-5	05/07/18 15:31	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	%	%
Methane	67.8	68.5	68.9	101	102	85.0-115	0.614	20

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Method Blank (MB)

(MB) R3306749-2 04/29/18 17:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Bromobenzene	U		0.133	0.500
Benzene	U		0.0896	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
1,2-Dibromoethane	U		0.193	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
1,2-Dichloroethane	U		0.108	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3306749-2 04/29/18 17:02

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Ethylbenzene	U		0.158	0.500
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Methyl tert-butyl ether	U		0.102	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
Naphthalene	U		0.174	2.50
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	99.6			76.0-123
(S) 4-Bromofluorobenzene	94.6			80.0-120

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Laboratory Control Sample (LCS)

(LCS) R3306749-1 04/29/18 16:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	91.1	72.9	10.0-160	
Acrylonitrile	125	109	87.6	60.0-142	
Bromobenzene	25.0	23.6	94.5	79.0-120	
Bromodichloromethane	25.0	22.9	91.6	76.0-120	
Bromochloromethane	25.0	25.6	102	76.0-122	
Bromoform	25.0	24.6	98.3	67.0-132	
Bromomethane	25.0	26.9	108	18.0-160	
n-Butylbenzene	25.0	25.4	101	72.0-126	
sec-Butylbenzene	25.0	25.5	102	74.0-121	
tert-Butylbenzene	25.0	24.9	99.5	75.0-122	
Carbon disulfide	25.0	25.7	103	55.0-127	
Carbon tetrachloride	25.0	24.5	98.1	63.0-122	
Chlorobenzene	25.0	25.7	103	79.0-121	
Chlorodibromomethane	25.0	25.2	101	75.0-125	
Chloroethane	25.0	25.0	100	47.0-152	
Chloroform	25.0	24.0	96.1	72.0-121	
Chloromethane	25.0	27.1	108	48.0-139	
2-Chlorotoluene	25.0	24.7	98.6	74.0-122	
4-Chlorotoluene	25.0	25.4	102	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	23.8	95.1	64.0-127	
Dibromomethane	25.0	23.7	94.7	78.0-120	
1,2-Dichlorobenzene	25.0	24.4	97.8	80.0-120	
1,3-Dichlorobenzene	25.0	24.8	99.1	72.0-123	
1,4-Dichlorobenzene	25.0	25.0	100	77.0-120	
Dichlorodifluoromethane	25.0	35.9	144	49.0-155	
1,1-Dichloroethane	25.0	26.0	104	70.0-126	
1,1-Dichloroethene	25.0	25.2	101	64.0-129	
cis-1,2-Dichloroethene	25.0	24.6	98.2	73.0-120	
trans-1,2-Dichloroethene	25.0	25.5	102	71.0-121	
1,2-Dichloropropane	25.0	24.9	99.7	75.0-125	
1,1-Dichloropropene	25.0	27.2	109	71.0-129	
1,3-Dichloropropane	25.0	25.4	102	80.0-121	
cis-1,3-Dichloropropene	25.0	26.0	104	79.0-123	
trans-1,3-Dichloropropene	25.0	25.6	102	74.0-127	
trans-1,4-Dichloro-2-butene	25.0	27.9	111	55.0-134	
2,2-Dichloropropane	25.0	24.9	99.7	60.0-125	
Di-isopropyl ether	25.0	24.0	95.8	59.0-133	
Hexachloro-1,3-butadiene	25.0	24.5	98.1	64.0-131	
2-Hexanone	125	127	101	58.0-147	
n-Hexane	25.0	27.1	108	56.0-124	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L989529-01.02.03.04](#)

Laboratory Control Sample (LCS)

(LCS) R3306749-1 04/29/18 16:22

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Iodomethane	125	129	103	57.0-140	
Isopropylbenzene	25.0	23.3	93.1	75.0-120	
p-Isopropyltoluene	25.0	24.4	97.5	74.0-126	
2-Butanone (MEK)	125	111	88.9	37.0-158	
Methylene Chloride	25.0	23.9	95.5	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	122	97.6	59.0-143	
Benzene	25.0	25.0	100	69.0-123	
n-Propylbenzene	25.0	25.2	101	79.0-120	
Styrene	25.0	24.8	99.2	78.0-124	
1,1,1,2-Tetrachloroethane	25.0	23.2	92.9	75.0-122	
1,1,2,2-Tetrachloroethane	25.0	23.0	92.1	71.0-122	
1,1,2-Trichlorotrifluoroethane	25.0	28.3	113	61.0-136	
Tetrachloroethane	25.0	26.6	106	70.0-127	
1,2,3-Trichlorobenzene	25.0	23.9	95.6	61.0-133	
1,2,4-Trichlorobenzene	25.0	24.4	97.4	69.0-129	
1,1,1-Trichloroethane	25.0	24.0	95.8	68.0-122	
1,1,2-Trichloroethane	25.0	24.1	96.2	78.0-120	
Trichloroethene	25.0	25.5	102	78.0-120	
Trichlorofluoromethane	25.0	29.3	117	56.0-137	
1,2,3-Trichloropropane	25.0	23.9	95.5	72.0-124	
1,2,4-Trimethylbenzene	25.0	24.1	96.4	75.0-120	
1,2,3-Trimethylbenzene	25.0	23.8	95.3	75.0-120	
1,3,5-Trimethylbenzene	25.0	24.8	99.4	75.0-120	
Vinyl acetate	125	139	111	46.0-160	
Vinyl chloride	25.0	29.2	117	64.0-133	
1,2-Dibromoethane	25.0	24.5	98.1	77.0-123	
1,2-Dichloroethane	25.0	25.6	102	67.0-126	
Ethylbenzene	25.0	25.3	101	77.0-120	
Methyl tert-butyl ether	25.0	23.7	94.7	64.0-123	
Naphthalene	25.0	23.8	95.2	62.0-128	
Toluene	25.0	24.4	97.5	77.0-120	
Xylenes, Total	75.0	74.5	99.3	77.0-120	
(S) Toluene-d8			100	80.0-120	
(S) Dibromofluoromethane			97.1	76.0-123	
(S) 4-Bromofluorobenzene			97.3	80.0-120	

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
JO	JO: Calibration verification outside of acceptance limits. Result is estimated.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

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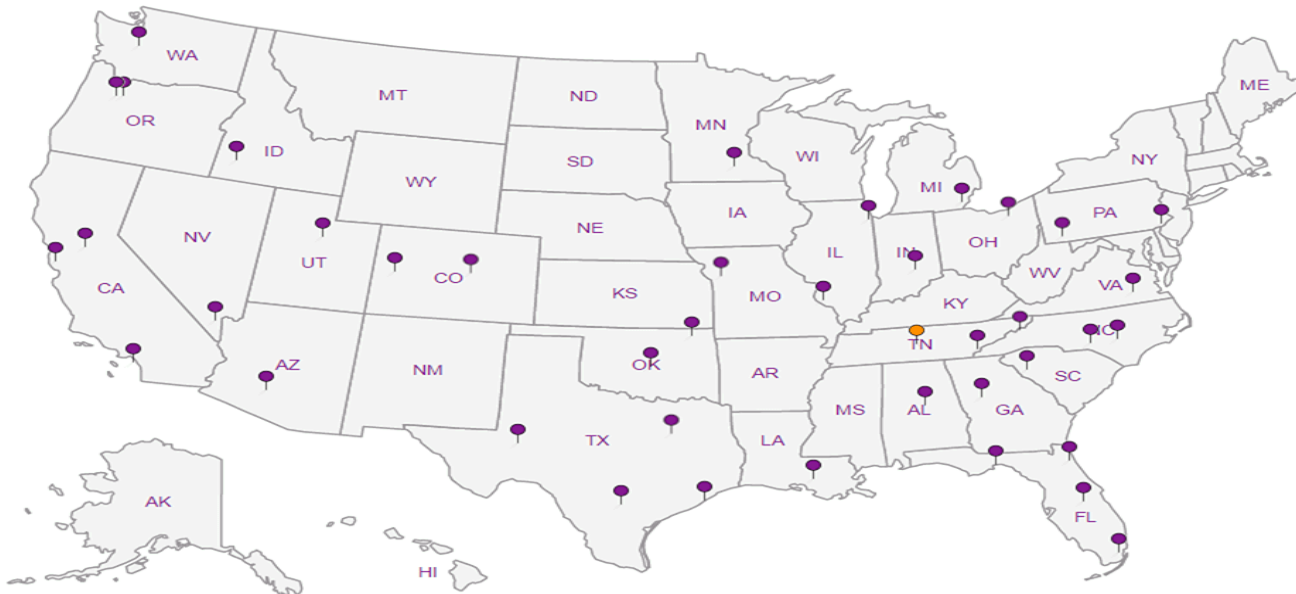
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
bhaldeman@pesenv.com

Project Description: *American Lithem*

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

City/State
Seattle WA

Collected by (print):
Jeff Dobbs

Site/Facility ID #

Collected: *Seattle WA*

Collected by (signature):
Jeff Dobbs

Rush? (Lab MUST be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Immediately Packed on Ice N Y X

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Sints
MW-142-042718	Grab	SS-GW		4/27/18	0835	11
MW-144-042718		SS-GW		4/27/18	0949	11
MW-155-042718		SS-GW		4/27/18	1041	6
MW-145-042718		SS-GW		4/27/18	1249	11
		SS				
		SS				
		SS				
		SS				
		SS				
		SS				

Analysis / Container / Preservative	Pres Chk
V8260C VOCs 40ml/NaHSO4/Syr/MeOH	
dry wt,voc screen 2ozClr-NoPres	
NO3,S04,Cl,AIK 250mlHDPE no pres	
NWTPHGX 40mlAmb HCl	72
TOC 250mlAmb HCl	72
Total Fe,Mn 6020 250mlHDPE/HNO3	
V8260LLC VOCs 40mlAmb HCl	

Remarks:

Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Biosassy
WW - Waste Water
DW - Drinking Water
OT - Other

Samples returned via:
UPS FedEx Courier

pH _____ Temp _____
Flow _____ Other _____

Trip Blank Received: Yes/No
HCL/MeOH TBR

Relinquished by: (Signature)
[Signature]

Relinquished by: (Signature)
[Signature]

Relinquished by: (Signature)

Date: 4/27/18
Time: 181430

Date: _____
Time: _____

Received by: (Signature)
[Signature]

Received for lab by: (Signature)
[Signature]

Temp: 20.9 °C
Date: 4/28/18

Bottles Received: 39
Time: 0845

Tracking # 199 3259 3085

Hold: _____
Condition: NCF / 10

Chain of Custody Page 1 of 1



A.B. S.C.I.E.N.C.E.S.
12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-8888
Phone: 800-767-8899
Fax: 615-758-9899

L# 989519
H124

Acctnum: PESENWSWA
Template: T134174
Prelogin: P645191
TSR: 110 - Brian Ford
PB:

Shipped Via: FedEx Ground

Remarks: _____
Sample # (lab only): _____

Sample Receipt Checklist

COC Goal Present/Intact: NP
COC Signed/Recreated: N
Bottles arrive intact: N
Correct bottles used: N
Sufficient volume sent: N
IC Applicable: N
VQA Zero HeadSpace: N
Preservation Correct/Checked: N



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	794000		2710	20000	1	05/04/2018 18:46	WG1105725

Sample Narrative:

L989529-01 WG1105725: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15600		51.9	1000	1	04/28/2018 14:40	WG1104424
Nitrate	U		22.7	100	1	04/28/2018 14:40	WG1104424
Sulfate	426	J J	77.4	5000	1	04/28/2018 14:40	WG1104424

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	33700		102	1000	1	05/01/2018 16:13	WG1105152

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3160		15.0	100	1	05/02/2018 21:26	WG1104647
Manganese	2580		0.250	5.00	1	05/02/2018 21:26	WG1104647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	49.3	U B J	31.6	100	1	04/30/2018 14:21	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	93.0			77.0-122		04/30/2018 14:21	WG1104802

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	7980		2.87	6.78	10	05/07/2018 14:03	WG1107762
Ethane	44.6		0.296	1.29	1	05/07/2018 10:35	WG1107156
Ethene	U		0.422	1.27	1	05/07/2018 10:35	WG1107156

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.40	J J	1.05	25.0	1	04/29/2018 21:17	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 21:17	WG1104728
Benzene	0.514		0.0896	0.500	1	04/29/2018 21:17	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 21:17	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 21:17	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 21:17	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 21:17	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 21:17	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 21:17	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 21:17	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 21:17	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 21:17	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 21:17	WG1104728

JC 6/11/18

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/27/18 08:35

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/29/2018 21:17	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 21:17	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 21:17	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 21:17	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 21:17	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 21:17	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 21:17	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 21:17	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 21:17	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 21:17	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 21:17	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 21:17	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 21:17	WG1104728
1,1-Dichloroethene	0.244	J U	0.188	0.500	1	04/29/2018 21:17	WG1104728
cis-1,2-Dichloroethene	46.1		0.0933	0.500	1	04/29/2018 21:17	WG1104728
trans-1,2-Dichloroethene	0.474	J U	0.152	0.500	1	04/29/2018 21:17	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 21:17	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 21:17	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 21:17	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 21:17	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 21:17	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 21:17	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 21:17	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 21:17	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 21:17	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 21:17	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 21:17	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 21:17	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 21:17	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 21:17	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 21:17	WG1104728
2-Butanone (MEK)	U		1.28	5.00	1	04/29/2018 21:17	WG1104728
Methylene Chloride	U		1.07	2.50	1	04/29/2018 21:17	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 21:17	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 21:17	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 21:17	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 21:17	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 21:17	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 21:17	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 21:17	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 21:17	WG1104728
Tetrachloroethene	0.523		0.199	0.500	1	04/29/2018 21:17	WG1104728
Toluene	U		0.412	0.500	1	04/29/2018 21:17	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 21:17	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 21:17	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 21:17	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 21:17	WG1104728
Trichloroethene	1.40		0.153	0.500	1	04/29/2018 21:17	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 21:17	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 21:17	WG1104728
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/29/2018 21:17	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 21:17	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 21:17	WG1104728

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 6/11/18



Collected date/time: 04/27/18 08:35

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/29/2018 21:17	WG1104728
Vinyl chloride	17.2	J JO	0.118	0.500	1	04/29/2018 21:17	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 21:17	WG1104728
(S) Toluene-d8	101			80.0-120		04/29/2018 21:17	WG1104728
(S) Dibromofluoromethane	98.1			76.0-123		04/29/2018 21:17	WG1104728
(S) 4-Bromofluorobenzene	91.5			80.0-120		04/29/2018 21:17	WG1104728

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	740000		2710	20000	1	05/04/2018 19:00	WG1105725

Sample Narrative:

L989529-02 WG1105725: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	182000		260	5000	5	04/28/2018 15:05	WG1104424
Nitrate	U		22.7	100	1	04/28/2018 14:53	WG1104424
Sulfate	9390		77.4	5000	1	04/28/2018 14:53	WG1104424

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	159000		510	5000	5	05/01/2018 16:30	WG1105152

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1070		15.0	100	1	05/02/2018 21:31	WG1104647
Manganese	1980		0.250	5.00	1	05/02/2018 21:31	WG1104647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	364		31.6	100	1	04/30/2018 14:43	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	92.9			77.0-122		04/30/2018 14:43	WG1104802

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	17700		5.74	13.6	20	05/07/2018 14:06	WG1107762
Ethane	55.4		0.296	1.29	1	05/07/2018 10:47	WG1107156
Ethene	5480		0.422	1.27	1	05/07/2018 10:47	WG1107156

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.44	J J	1.05	25.0	1	04/29/2018 21:37	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 21:37	WG1104728
Benzene	U		0.0896	0.500	1	04/29/2018 21:37	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 21:37	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 21:37	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 21:37	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 21:37	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 21:37	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 21:37	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 21:37	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 21:37	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 21:37	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 21:37	WG1104728

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 6/11/18



Collected date/time: 04/27/18 09:49

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/29/2018 21:37	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 21:37	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 21:37	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 21:37	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 21:37	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 21:37	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 21:37	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 21:37	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 21:37	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 21:37	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 21:37	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 21:37	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 21:37	WG1104728
1,1-Dichloroethene	1.15		0.188	0.500	1	04/29/2018 21:37	WG1104728
cis-1,2-Dichloroethene	662		4.66	25.0	50	05/03/2018 20:30	WG1104728
trans-1,2-Dichloroethene	4.65		0.152	0.500	1	04/29/2018 21:37	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 21:37	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 21:37	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 21:37	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 21:37	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 21:37	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 21:37	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 21:37	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 21:37	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 21:37	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 21:37	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 21:37	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 21:37	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 21:37	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 21:37	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 21:37	WG1104728
2-Butanone (MEK)	3.85	J	1.28	5.00	1	04/29/2018 21:37	WG1104728
Methylene Chloride	U		1.07	2.50	1	04/29/2018 21:37	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 21:37	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 21:37	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 21:37	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 21:37	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 21:37	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 21:37	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 21:37	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 21:37	WG1104728
Tetrachloroethene	1.86		0.199	0.500	1	04/29/2018 21:37	WG1104728
Toluene	1.40		0.412	0.500	1	04/29/2018 21:37	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 21:37	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 21:37	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 21:37	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 21:37	WG1104728
Trichloroethene	3.31		0.153	0.500	1	04/29/2018 21:37	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 21:37	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 21:37	WG1104728
1,2,4-Trimethylbenzene	0.145	J	0.123	0.500	1	04/29/2018 21:37	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 21:37	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 21:37	WG1104728

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/29/2018 21:37	WG1104728
Vinyl chloride	888		5.90	25.0	50	05/03/2018 20:30	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 21:37	WG1104728
(S) Toluene-d8	107			80.0-120		05/03/2018 20:30	WG1104728
(S) Toluene-d8	103			80.0-120		04/29/2018 21:37	WG1104728
(S) Dibromofluoromethane	105			76.0-123		05/03/2018 20:30	WG1104728
(S) Dibromofluoromethane	98.2			76.0-123		04/29/2018 21:37	WG1104728
(S) 4-Bromofluorobenzene	109			80.0-120		05/03/2018 20:30	WG1104728
(S) 4-Bromofluorobenzene	91.9			80.0-120		04/29/2018 21:37	WG1104728

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 6/11/18



Collected date/time: 04/27/18 10:41

L989529

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	60.9	U B _J	31.6	100	1	04/30/2018 15:05	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	92.8			77.0-122		04/30/2018 15:05	WG1104802

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/29/2018 21:56	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 21:56	WG1104728
Benzene	U		0.0896	0.500	1	04/29/2018 21:56	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 21:56	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 21:56	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 21:56	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 21:56	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 21:56	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 21:56	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 21:56	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 21:56	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 21:56	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 21:56	WG1104728
Chlorobenzene	U		0.140	0.500	1	04/29/2018 21:56	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 21:56	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 21:56	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 21:56	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 21:56	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 21:56	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 21:56	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 21:56	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 21:56	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 21:56	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 21:56	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 21:56	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 21:56	WG1104728
1,1-Dichloroethene	U		0.188	0.500	1	04/29/2018 21:56	WG1104728
cis-1,2-Dichloroethene	0.466	J J _J	0.0933	0.500	1	05/03/2018 20:50	WG1104728
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/29/2018 21:56	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 21:56	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 21:56	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 21:56	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 21:56	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 21:56	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 21:56	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 21:56	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 21:56	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 21:56	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 21:56	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 21:56	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 21:56	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 21:56	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 21:56	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 21:56	WG1104728
2-Butanone (MEK)	U		1.28	5.00	1	04/29/2018 21:56	WG1104728

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 6/11/18



Collected date/time: 04/27/18 10:41

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/29/2018 21:56	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 21:56	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 21:56	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 21:56	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 21:56	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 21:56	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 21:56	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 21:56	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 21:56	WG1104728
Tetrachloroethene	3.48		0.199	0.500	1	04/29/2018 21:56	WG1104728
Toluene	U		0.412	0.500	1	04/29/2018 21:56	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 21:56	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 21:56	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 21:56	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 21:56	WG1104728
Trichloroethene	0.334	J U	0.153	0.500	1	04/29/2018 21:56	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 21:56	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 21:56	WG1104728
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/29/2018 21:56	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 21:56	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 21:56	WG1104728
Vinyl acetate	U		0.645	5.00	1	04/29/2018 21:56	WG1104728
Vinyl chloride	0.447	J U	0.118	0.500	1	05/03/2018 20:50	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 21:56	WG1104728
(S) Toluene-d8	107			80.0-120		05/03/2018 20:50	WG1104728
(S) Toluene-d8	105			80.0-120		04/29/2018 21:56	WG1104728
(S) Dibromofluoromethane	101			76.0-123		05/03/2018 20:50	WG1104728
(S) Dibromofluoromethane	96.9			76.0-123		04/29/2018 21:56	WG1104728
(S) 4-Bromofluorobenzene	104			80.0-120		05/03/2018 20:50	WG1104728
(S) 4-Bromofluorobenzene	90.3			80.0-120		04/29/2018 21:56	WG1104728

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	272000		2710	20000	1	05/04/2018 19:07	WG1105725

Sample Narrative:

L989529-04 WG1105725: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	74400		51.9	1000	1	04/28/2018 15:42	WG1104424
Nitrate	238		22.7	100	1	04/28/2018 15:42	WG1104424
Sulfate	71000		77.4	5000	1	04/28/2018 15:42	WG1104424

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8090	J J	1020	10000	10	05/01/2018 16:48	WG1105152

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	42900		15.0	100	1	05/02/2018 21:35	WG1104647
Manganese	912		0.250	5.00	1	05/02/2018 21:35	WG1104647

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	52.6	U B J	31.6	100	1	04/30/2018 15:27	WG1104802
(S) a,a,a-Trifluorotoluene(FID)	92.7			77.0-122		04/30/2018 15:27	WG1104802

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2050		0.287	0.678	1	05/07/2018 10:53	WG1107156
Ethane	U		0.296	1.29	1	05/07/2018 10:53	WG1107156
Ethene	18.5		0.422	1.27	1	05/07/2018 10:53	WG1107156

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	6.71	J J	1.05	25.0	1	04/29/2018 22:16	WG1104728
Acrylonitrile	U		0.873	5.00	1	04/29/2018 22:16	WG1104728
Benzene	U		0.0896	0.500	1	04/29/2018 22:16	WG1104728
Bromobenzene	U		0.133	0.500	1	04/29/2018 22:16	WG1104728
Bromodichloromethane	U		0.0800	0.500	1	04/29/2018 22:16	WG1104728
Bromochloromethane	U		0.145	0.500	1	04/29/2018 22:16	WG1104728
Bromoform	U		0.186	0.500	1	04/29/2018 22:16	WG1104728
Bromomethane	U		0.157	2.50	1	04/29/2018 22:16	WG1104728
n-Butylbenzene	U		0.143	0.500	1	04/29/2018 22:16	WG1104728
sec-Butylbenzene	U		0.134	0.500	1	04/29/2018 22:16	WG1104728
tert-Butylbenzene	U		0.183	0.500	1	04/29/2018 22:16	WG1104728
Carbon disulfide	U		0.101	0.500	1	04/29/2018 22:16	WG1104728
Carbon tetrachloride	U		0.159	0.500	1	04/29/2018 22:16	WG1104728

JC 6/11/18

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/27/18 12:49

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/29/2018 22:16	WG1104728
Chlorodibromomethane	U		0.128	0.500	1	04/29/2018 22:16	WG1104728
Chloroethane	U		0.141	2.50	1	04/29/2018 22:16	WG1104728
Chloroform	U		0.0860	0.500	1	04/29/2018 22:16	WG1104728
Chloromethane	U		0.153	1.25	1	04/29/2018 22:16	WG1104728
2-Chlorotoluene	U		0.111	0.500	1	04/29/2018 22:16	WG1104728
4-Chlorotoluene	U		0.0972	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/29/2018 22:16	WG1104728
1,2-Dibromoethane	U		0.193	0.500	1	04/29/2018 22:16	WG1104728
Dibromomethane	U		0.117	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dichlorobenzene	U		0.101	0.500	1	04/29/2018 22:16	WG1104728
1,3-Dichlorobenzene	U		0.130	0.500	1	04/29/2018 22:16	WG1104728
1,4-Dichlorobenzene	U		0.121	0.500	1	04/29/2018 22:16	WG1104728
Dichlorodifluoromethane	U		0.127	2.50	1	04/29/2018 22:16	WG1104728
1,1-Dichloroethane	U		0.114	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dichloroethane	U		0.108	0.500	1	04/29/2018 22:16	WG1104728
1,1-Dichloroethene	U		0.188	0.500	1	04/29/2018 22:16	WG1104728
cis-1,2-Dichloroethene	2.29		0.0933	0.500	1	04/29/2018 22:16	WG1104728
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/29/2018 22:16	WG1104728
1,2-Dichloropropane	U		0.190	0.500	1	04/29/2018 22:16	WG1104728
1,1-Dichloropropene	U		0.128	0.500	1	04/29/2018 22:16	WG1104728
1,3-Dichloropropane	U		0.147	1.00	1	04/29/2018 22:16	WG1104728
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/29/2018 22:16	WG1104728
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/29/2018 22:16	WG1104728
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/29/2018 22:16	WG1104728
2,2-Dichloropropane	U		0.0929	0.500	1	04/29/2018 22:16	WG1104728
Di-isopropyl ether	U		0.0924	0.500	1	04/29/2018 22:16	WG1104728
Ethylbenzene	U		0.158	0.500	1	04/29/2018 22:16	WG1104728
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/29/2018 22:16	WG1104728
2-Hexanone	U		0.757	5.00	1	04/29/2018 22:16	WG1104728
n-Hexane	U		0.305	5.00	1	04/29/2018 22:16	WG1104728
Iodomethane	U		0.377	10.0	1	04/29/2018 22:16	WG1104728
Isopropylbenzene	U		0.126	0.500	1	04/29/2018 22:16	WG1104728
p-Isopropyltoluene	U		0.138	0.500	1	04/29/2018 22:16	WG1104728
2-Butanone (MEK)	U		1.28	5.00	1	04/29/2018 22:16	WG1104728
Methylene Chloride	U		1.07	2.50	1	04/29/2018 22:16	WG1104728
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/29/2018 22:16	WG1104728
Methyl tert-butyl ether	U		0.102	0.500	1	04/29/2018 22:16	WG1104728
Naphthalene	U		0.174	2.50	1	04/29/2018 22:16	WG1104728
n-Propylbenzene	U		0.162	0.500	1	04/29/2018 22:16	WG1104728
Styrene	U		0.117	0.500	1	04/29/2018 22:16	WG1104728
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/29/2018 22:16	WG1104728
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/29/2018 22:16	WG1104728
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/29/2018 22:16	WG1104728
Tetrachloroethene	0.305	J U	0.199	0.500	1	04/29/2018 22:16	WG1104728
Toluene	U		0.412	0.500	1	04/29/2018 22:16	WG1104728
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/29/2018 22:16	WG1104728
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/29/2018 22:16	WG1104728
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/29/2018 22:16	WG1104728
1,1,2-Trichloroethane	U		0.186	0.500	1	04/29/2018 22:16	WG1104728
Trichloroethene	0.212	J U	0.153	0.500	1	04/29/2018 22:16	WG1104728
Trichlorofluoromethane	U		0.130	2.50	1	04/29/2018 22:16	WG1104728
1,2,3-Trichloropropane	U		0.247	2.50	1	04/29/2018 22:16	WG1104728
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/29/2018 22:16	WG1104728
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/29/2018 22:16	WG1104728
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/29/2018 22:16	WG1104728

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 6/11/18



Collected date/time: 04/27/18 12:49

L989529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/29/2018 22:16	WG1104728
Vinyl chloride	3.88	J JO	0.118	0.500	1	04/29/2018 22:16	WG1104728
Xylenes, Total	U		0.316	1.50	1	04/29/2018 22:16	WG1104728
(S) Toluene-d8	102			80.0-120		04/29/2018 22:16	WG1104728
(S) Dibromofluoromethane	97.3			76.0-123		04/29/2018 22:16	WG1104728
(S) 4-Bromofluorobenzene	90.3			80.0-120		04/29/2018 22:16	WG1104728

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 6/11/18

May 08, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L989898
Samples Received: 05/01/2018
Project Number:
Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-143-043018 L989898-01 GW

Collected by Jeff Dobbins
Collected date/time 04/30/18 08:58
Received date/time 05/01/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107742	1	05/07/18 18:29	05/07/18 18:29	MCG
Wet Chemistry by Method 9056A	WG1105262	1	05/02/18 01:28	05/02/18 01:28	MAJ
Wet Chemistry by Method 9060A	WG1106165	20	05/02/18 22:38	05/02/18 22:38	SJM
Metals (ICPMS) by Method 6020A	WG1105579	1	05/02/18 17:43	05/02/18 21:23	LD
Metals (ICPMS) by Method 6020A	WG1105579	5	05/02/18 17:43	05/02/18 23:16	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1105159	1	05/01/18 20:33	05/01/18 20:33	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107967	1	05/08/18 10:20	05/08/18 10:20	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105522	1	05/01/18 19:49	05/01/18 19:49	JHH

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr

MW-158-043018 L989898-02 GW

Collected by Jeff Dobbins
Collected date/time 04/30/18 11:14
Received date/time 05/01/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107742	1	05/07/18 18:37	05/07/18 18:37	MCG
Wet Chemistry by Method 9056A	WG1105262	1	05/02/18 01:59	05/02/18 01:59	MAJ
Wet Chemistry by Method 9056A	WG1105262	5	05/02/18 02:14	05/02/18 02:14	MAJ
Wet Chemistry by Method 9060A	WG1106165	20	05/02/18 22:49	05/02/18 22:49	SJM
Metals (ICPMS) by Method 6020A	WG1105579	1	05/02/18 17:43	05/02/18 21:28	LD
Metals (ICPMS) by Method 6020A	WG1105579	50	05/02/18 17:43	05/02/18 22:38	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1105159	1	05/01/18 20:57	05/01/18 20:57	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107967	1	05/08/18 10:25	05/08/18 10:25	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105522	1	05/01/18 20:08	05/01/18 20:08	JHH

6 Qc
7 Gl
8 Al
9 Sc

MW-154-043018 L989898-03 GW

Collected by Jeff Dobbins
Collected date/time 04/30/18 12:46
Received date/time 05/01/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1105159	1	05/02/18 16:27	05/02/18 16:27	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105522	1	05/01/18 20:27	05/01/18 20:27	JHH

MW-146-043018 L989898-04 GW

Collected by Jeff Dobbins
Collected date/time 04/30/18 13:50
Received date/time 05/01/18 09:00

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107742	1	05/07/18 18:44	05/07/18 18:44	MCG
Wet Chemistry by Method 9056A	WG1105262	1	05/02/18 02:30	05/02/18 02:30	MAJ
Wet Chemistry by Method 9060A	WG1106165	1	05/02/18 23:01	05/02/18 23:01	SJM
Metals (ICPMS) by Method 6020A	WG1105579	1	05/02/18 17:43	05/02/18 21:32	LD
Metals (ICPMS) by Method 6020A	WG1105579	20	05/02/18 17:43	05/02/18 22:43	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1105159	1	05/02/18 17:05	05/02/18 17:05	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107967	1	05/08/18 10:27	05/08/18 10:27	BG
Volatile Organic Compounds (GC) by Method RSK175	WG1107969	10	05/08/18 13:22	05/08/18 13:22	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105522	1	05/01/18 20:45	05/01/18 20:45	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105522	100	05/07/18 21:47	05/07/18 21:47	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	448000		2710	20000	1	05/07/2018 18:29	WG1107742

Sample Narrative:

L989898-01 WG1107742: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	66500		51.9	1000	1	05/02/2018 01:28	WG1105262
Nitrate	U		22.7	100	1	05/02/2018 01:28	WG1105262
Sulfate	4960	J	77.4	5000	1	05/02/2018 01:28	WG1105262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	25500		2040	20000	20	05/02/2018 22:38	WG1106165

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2080		75.0	500	5	05/02/2018 23:16	WG1105579
Manganese	390		0.250	5.00	1	05/02/2018 21:23	WG1105579

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	154	B	31.6	100	1	05/01/2018 20:33	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/01/2018 20:33	WG1105159

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	6720		0.287	0.678	1	05/08/2018 10:20	WG1107967
Ethane	92.5		0.296	1.29	1	05/08/2018 10:20	WG1107967
Ethene	360		0.422	1.27	1	05/08/2018 10:20	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	6.00	J	1.05	25.0	1	05/01/2018 19:49	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 19:49	WG1105522
Benzene	0.244	J	0.0896	0.500	1	05/01/2018 19:49	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 19:49	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 19:49	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 19:49	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 19:49	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 19:49	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 19:49	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 19:49	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 19:49	WG1105522
Carbon disulfide	1.45		0.101	0.500	1	05/01/2018 19:49	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 19:49	WG1105522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/30/18 08:58

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/01/2018 19:49	WG105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 19:49	WG105522
Chloroethane	U		0.141	2.50	1	05/01/2018 19:49	WG105522
Chloroform	U		0.0860	0.500	1	05/01/2018 19:49	WG105522
Chloromethane	U		0.153	1.25	1	05/01/2018 19:49	WG105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 19:49	WG105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 19:49	WG105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 19:49	WG105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 19:49	WG105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 19:49	WG105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 19:49	WG105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 19:49	WG105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 19:49	WG105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 19:49	WG105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 19:49	WG105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 19:49	WG105522
1,1-Dichloroethene	0.342	U	0.188	0.500	1	05/01/2018 19:49	WG105522
cis-1,2-Dichloroethene	129		0.0933	0.500	1	05/01/2018 19:49	WG105522
trans-1,2-Dichloroethene	0.512		0.152	0.500	1	05/01/2018 19:49	WG105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 19:49	WG105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 19:49	WG105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 19:49	WG105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 19:49	WG105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 19:49	WG105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 19:49	WG105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 19:49	WG105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 19:49	WG105522
Ethylbenzene	0.212	U	0.158	0.500	1	05/01/2018 19:49	WG105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 19:49	WG105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 19:49	WG105522
n-Hexane	U		0.305	5.00	1	05/01/2018 19:49	WG105522
Iodomethane	U		0.377	10.0	1	05/01/2018 19:49	WG105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 19:49	WG105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 19:49	WG105522
2-Butanone (MEK)	1.81	U	1.28	5.00	1	05/01/2018 19:49	WG105522
Methylene Chloride	U		1.07	2.50	1	05/01/2018 19:49	WG105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 19:49	WG105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 19:49	WG105522
Naphthalene	U		0.174	2.50	1	05/01/2018 19:49	WG105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 19:49	WG105522
Styrene	U		0.117	0.500	1	05/01/2018 19:49	WG105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 19:49	WG105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 19:49	WG105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 19:49	WG105522
Tetrachloroethene	U		0.199	0.500	1	05/01/2018 19:49	WG105522
Toluene	0.797		0.412	0.500	1	05/01/2018 19:49	WG105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 19:49	WG105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 19:49	WG105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 19:49	WG105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 19:49	WG105522
Trichloroethene	U		0.153	0.500	1	05/01/2018 19:49	WG105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 19:49	WG105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 19:49	WG105522
1,2,4-Trimethylbenzene	0.482	U	0.123	0.500	1	05/01/2018 19:49	WG105522
1,2,3-Trimethylbenzene	0.192	U	0.0739	0.500	1	05/01/2018 19:49	WG105522
1,3,5-Trimethylbenzene	0.173	U	0.124	0.500	1	05/01/2018 19:49	WG105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/30/18 08:58

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/01/2018 19:49	WG1105522
Vinyl chloride	193		0.118	0.500	1	05/01/2018 19:49	WG1105522
Xylenes, Total	1.08	J	0.316	1.50	1	05/01/2018 19:49	WG1105522
<i>(S) Toluene-d8</i>	104			80.0-120		05/01/2018 19:49	WG1105522
<i>(S) Dibromofluoromethane</i>	99.7			76.0-123		05/01/2018 19:49	WG1105522
<i>(S) 4-Bromofluorobenzene</i>	94.7			80.0-120		05/01/2018 19:49	WG1105522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	345000		2710	20000	1	05/07/2018 18:37	WG1107742

Sample Narrative:

L989898-02 WG1107742: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	113000		260	5000	5	05/02/2018 02:14	WG1105262
Nitrate	446		22.7	100	1	05/02/2018 01:59	WG1105262
Sulfate	278000		387	25000	5	05/02/2018 02:14	WG1105262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	54800		2040	20000	20	05/02/2018 22:49	WG1106165

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	55400		750	5000	50	05/02/2018 22:38	WG1105579
Manganese	1040		0.250	5.00	1	05/02/2018 21:28	WG1105579

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	101	<u>B</u>	31.6	100	1	05/01/2018 20:57	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/01/2018 20:57	WG1105159

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	352		0.287	0.678	1	05/08/2018 10:25	WG1107967
Ethane	15.7		0.296	1.29	1	05/08/2018 10:25	WG1107967
Ethene	11.0		0.422	1.27	1	05/08/2018 10:25	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	5.00	<u>J</u>	1.05	25.0	1	05/01/2018 20:08	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 20:08	WG1105522
Benzene	U		0.0896	0.500	1	05/01/2018 20:08	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 20:08	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 20:08	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 20:08	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 20:08	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 20:08	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 20:08	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 20:08	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 20:08	WG1105522
Carbon disulfide	0.580		0.101	0.500	1	05/01/2018 20:08	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 20:08	WG1105522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/30/18 11:14

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/01/2018 20:08	WG105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 20:08	WG105522
Chloroethane	U		0.141	2.50	1	05/01/2018 20:08	WG105522
Chloroform	1.29		0.0860	0.500	1	05/01/2018 20:08	WG105522
Chloromethane	U		0.153	1.25	1	05/01/2018 20:08	WG105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 20:08	WG105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 20:08	WG105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 20:08	WG105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 20:08	WG105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 20:08	WG105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 20:08	WG105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 20:08	WG105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 20:08	WG105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 20:08	WG105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 20:08	WG105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 20:08	WG105522
1,1-Dichloroethene	0.189	U	0.188	0.500	1	05/01/2018 20:08	WG105522
cis-1,2-Dichloroethene	59.6		0.0933	0.500	1	05/01/2018 20:08	WG105522
trans-1,2-Dichloroethene	0.205	U	0.152	0.500	1	05/01/2018 20:08	WG105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 20:08	WG105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 20:08	WG105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 20:08	WG105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 20:08	WG105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 20:08	WG105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 20:08	WG105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 20:08	WG105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 20:08	WG105522
Ethylbenzene	U		0.158	0.500	1	05/01/2018 20:08	WG105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 20:08	WG105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 20:08	WG105522
n-Hexane	U		0.305	5.00	1	05/01/2018 20:08	WG105522
Iodomethane	U		0.377	10.0	1	05/01/2018 20:08	WG105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 20:08	WG105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 20:08	WG105522
2-Butanone (MEK)	U		1.28	5.00	1	05/01/2018 20:08	WG105522
Methylene Chloride	U		1.07	2.50	1	05/01/2018 20:08	WG105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 20:08	WG105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 20:08	WG105522
Naphthalene	U		0.174	2.50	1	05/01/2018 20:08	WG105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 20:08	WG105522
Styrene	U		0.117	0.500	1	05/01/2018 20:08	WG105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 20:08	WG105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 20:08	WG105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 20:08	WG105522
Tetrachloroethene	17.7		0.199	0.500	1	05/01/2018 20:08	WG105522
Toluene	2.66		0.412	0.500	1	05/01/2018 20:08	WG105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 20:08	WG105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 20:08	WG105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 20:08	WG105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 20:08	WG105522
Trichloroethene	18.7		0.153	0.500	1	05/01/2018 20:08	WG105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 20:08	WG105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 20:08	WG105522
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/01/2018 20:08	WG105522
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/01/2018 20:08	WG105522
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/01/2018 20:08	WG105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/30/18 11:14

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/01/2018 20:08	WG1105522
Vinyl chloride	8.91		0.118	0.500	1	05/01/2018 20:08	WG1105522
Xylenes, Total	U		0.316	1.50	1	05/01/2018 20:08	WG1105522
<i>(S) Toluene-d8</i>	107			80.0-120		05/01/2018 20:08	WG1105522
<i>(S) Dibromofluoromethane</i>	89.2			76.0-123		05/01/2018 20:08	WG1105522
<i>(S) 4-Bromofluorobenzene</i>	93.7			80.0-120		05/01/2018 20:08	WG1105522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/30/18 12:46

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	32.1	<u>B</u> <u>J</u>	31.6	100	1	05/02/2018 16:27	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	107			77.0-122		05/02/2018 16:27	WG1105159

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	12.9	<u>J</u>	1.05	25.0	1	05/01/2018 20:27	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 20:27	WG1105522
Benzene	U		0.0896	0.500	1	05/01/2018 20:27	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 20:27	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 20:27	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 20:27	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 20:27	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 20:27	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 20:27	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 20:27	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 20:27	WG1105522
Carbon disulfide	U		0.101	0.500	1	05/01/2018 20:27	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 20:27	WG1105522
Chlorobenzene	U		0.140	0.500	1	05/01/2018 20:27	WG1105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 20:27	WG1105522
Chloroethane	U		0.141	2.50	1	05/01/2018 20:27	WG1105522
Chloroform	U		0.0860	0.500	1	05/01/2018 20:27	WG1105522
Chloromethane	U		0.153	1.25	1	05/01/2018 20:27	WG1105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 20:27	WG1105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 20:27	WG1105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 20:27	WG1105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 20:27	WG1105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 20:27	WG1105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 20:27	WG1105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 20:27	WG1105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 20:27	WG1105522
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2018 20:27	WG1105522
cis-1,2-Dichloroethene	1.77		0.0933	0.500	1	05/01/2018 20:27	WG1105522
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 20:27	WG1105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 20:27	WG1105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 20:27	WG1105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 20:27	WG1105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 20:27	WG1105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 20:27	WG1105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 20:27	WG1105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 20:27	WG1105522
Ethylbenzene	U		0.158	0.500	1	05/01/2018 20:27	WG1105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 20:27	WG1105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 20:27	WG1105522
n-Hexane	U		0.305	5.00	1	05/01/2018 20:27	WG1105522
Iodomethane	U		0.377	10.0	1	05/01/2018 20:27	WG1105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 20:27	WG1105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 20:27	WG1105522
2-Butanone (MEK)	U		1.28	5.00	1	05/01/2018 20:27	WG1105522



Collected date/time: 04/30/18 12:46

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/01/2018 20:27	WG1105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 20:27	WG1105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 20:27	WG1105522
Naphthalene	U		0.174	2.50	1	05/01/2018 20:27	WG1105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 20:27	WG1105522
Styrene	U		0.117	0.500	1	05/01/2018 20:27	WG1105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 20:27	WG1105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 20:27	WG1105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 20:27	WG1105522
Tetrachloroethene	4.46		0.199	0.500	1	05/01/2018 20:27	WG1105522
Toluene	U		0.412	0.500	1	05/01/2018 20:27	WG1105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 20:27	WG1105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 20:27	WG1105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 20:27	WG1105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 20:27	WG1105522
Trichloroethene	0.230	U	0.153	0.500	1	05/01/2018 20:27	WG1105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 20:27	WG1105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 20:27	WG1105522
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/01/2018 20:27	WG1105522
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/01/2018 20:27	WG1105522
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/01/2018 20:27	WG1105522
Vinyl acetate	U		0.645	5.00	1	05/01/2018 20:27	WG1105522
Vinyl chloride	7.48		0.118	0.500	1	05/01/2018 20:27	WG1105522
Xylenes, Total	U		0.316	1.50	1	05/01/2018 20:27	WG1105522
(S) Toluene-d8	107			80.0-120		05/01/2018 20:27	WG1105522
(S) Dibromofluoromethane	92.4			76.0-123		05/01/2018 20:27	WG1105522
(S) 4-Bromofluorobenzene	94.0			80.0-120		05/01/2018 20:27	WG1105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	363000		2710	20000	1	05/07/2018 18:44	WG1107742

Sample Narrative:

L989898-04 WG1107742: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	30400		51.9	1000	1	05/02/2018 02:30	WG1105262
Nitrate	U		22.7	100	1	05/02/2018 02:30	WG1105262
Sulfate	22300		77.4	5000	1	05/02/2018 02:30	WG1105262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4470		102	1000	1	05/02/2018 23:01	WG1106165

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	26500		300	2000	20	05/02/2018 22:43	WG1105579
Manganese	1260		0.250	5.00	1	05/02/2018 21:32	WG1105579

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	597		31.6	100	1	05/02/2018 17:05	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 17:05	WG1105159

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	9240		2.87	6.78	10	05/08/2018 13:22	WG1107969
Ethane	11.9		0.296	1.29	1	05/08/2018 10:27	WG1107967
Ethene	489		0.422	1.27	1	05/08/2018 10:27	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	4.54	J	1.05	25.0	1	05/01/2018 20:45	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 20:45	WG1105522
Benzene	U		0.0896	0.500	1	05/01/2018 20:45	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 20:45	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 20:45	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 20:45	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 20:45	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 20:45	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 20:45	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 20:45	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 20:45	WG1105522
Carbon disulfide	U		0.101	0.500	1	05/01/2018 20:45	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 20:45	WG1105522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/30/18 13:50

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/01/2018 20:45	WG105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 20:45	WG105522
Chloroethane	1.05	U	0.141	2.50	1	05/01/2018 20:45	WG105522
Chloroform	U		0.0860	0.500	1	05/01/2018 20:45	WG105522
Chloromethane	U		0.153	1.25	1	05/01/2018 20:45	WG105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 20:45	WG105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 20:45	WG105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 20:45	WG105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 20:45	WG105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 20:45	WG105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 20:45	WG105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 20:45	WG105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 20:45	WG105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 20:45	WG105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 20:45	WG105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 20:45	WG105522
1,1-Dichloroethene	4.02		0.188	0.500	1	05/01/2018 20:45	WG105522
cis-1,2-Dichloroethene	900		9.33	50.0	100	05/07/2018 21:47	WG105522
trans-1,2-Dichloroethene	6.12		0.152	0.500	1	05/01/2018 20:45	WG105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 20:45	WG105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 20:45	WG105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 20:45	WG105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 20:45	WG105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 20:45	WG105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 20:45	WG105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 20:45	WG105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 20:45	WG105522
Ethylbenzene	U		0.158	0.500	1	05/01/2018 20:45	WG105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 20:45	WG105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 20:45	WG105522
n-Hexane	U		0.305	5.00	1	05/01/2018 20:45	WG105522
Iodomethane	U		0.377	10.0	1	05/01/2018 20:45	WG105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 20:45	WG105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 20:45	WG105522
2-Butanone (MEK)	U		1.28	5.00	1	05/01/2018 20:45	WG105522
Methylene Chloride	U		1.07	2.50	1	05/01/2018 20:45	WG105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 20:45	WG105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 20:45	WG105522
Naphthalene	U		0.174	2.50	1	05/01/2018 20:45	WG105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 20:45	WG105522
Styrene	U		0.117	0.500	1	05/01/2018 20:45	WG105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 20:45	WG105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 20:45	WG105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 20:45	WG105522
Tetrachloroethene	3.56		0.199	0.500	1	05/01/2018 20:45	WG105522
Toluene	U		0.412	0.500	1	05/01/2018 20:45	WG105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 20:45	WG105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 20:45	WG105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 20:45	WG105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 20:45	WG105522
Trichloroethene	48.4		0.153	0.500	1	05/01/2018 20:45	WG105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 20:45	WG105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 20:45	WG105522
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/01/2018 20:45	WG105522
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/01/2018 20:45	WG105522
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/01/2018 20:45	WG105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/30/18 13:50

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/01/2018 20:45	WG1105522
Vinyl chloride	2100		11.8	50.0	100	05/07/2018 21:47	WG1105522
Xylenes, Total	U		0.316	1.50	1	05/01/2018 20:45	WG1105522
(S) Toluene-d8	104			80.0-120		05/07/2018 21:47	WG1105522
(S) Toluene-d8	103			80.0-120		05/01/2018 20:45	WG1105522
(S) Dibromofluoromethane	98.7			76.0-123		05/07/2018 21:47	WG1105522
(S) Dibromofluoromethane	96.4			76.0-123		05/01/2018 20:45	WG1105522
(S) 4-Bromofluorobenzene	95.0			80.0-120		05/01/2018 20:45	WG1105522
(S) 4-Bromofluorobenzene	96.7			80.0-120		05/07/2018 21:47	WG1105522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

L990272-03 Original Sample (OS) • Duplicate (DUP)

(OS) L990272-03 05/07/18 16:12 • (DUP) R3307687-1 05/07/18 16:19

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	9430 ug/l	7970 ug/l	1	16.8 %	J	20 %

Sample Narrative:

OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

L990101-07 Original Sample (OS) • Duplicate (DUP)

(OS) L990101-07 05/08/18 09:32 • (DUP) R3307687-9 05/08/18 09:40

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	91400 ug/l	94400 ug/l	1	3.25 %		20 %

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307687-7 05/07/18 18:01 • (LCSD) R3307687-8 05/07/18 19:28

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Alkalinity	100000 ug/l	102000 ug/l	105000 ug/l	102 %	105 %	85.0-115 %			2.96 %	20 %

Sample Narrative:

LCS: Endpoint pH 4.5
LCSD: Endpoint pH 4.5





Method Blank (MB)

(MB) R3307900-1 05/01/18 14:04

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L989895-06 Original Sample (OS) • Duplicate (DUP)

(OS) L989895-06 05/01/18 21:22 • (DUP) R3307900-4 05/01/18 21:37

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	6480	6020	1	7.37	15		15
Nitrate	U	0.000	1	0.000	15		15
Sulfate	3470	3700	1	6.57	15	↓	15

L989895-13 Original Sample (OS) • Duplicate (DUP)

(OS) L989895-13 05/02/18 00:11 • (DUP) R3307900-7 05/02/18 00:27

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	18600	18100	1	2.59	15		15
Nitrate	1140	1230	1	8.00	15		15
Sulfate	4240	4270	1	0.571	15	↓	15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307900-2 05/01/18 14:19 • (LCSD) R3307900-3 05/01/18 14:35

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%							
Chloride	40000	40000	39900	39900	100	99.9	100	99.9	80.0-120	0.116	0.116	15	15
Nitrate	8000	8100	8080	8080	101	101	101	101	80.0-120	0.184	0.184	15	15
Sulfate	40000	39600	39900	39900	99.0	99.7	99.0	99.7	80.0-120	0.672	0.672	15	15

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L989895-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution %	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	6480	56800	56100	101	99.3	1	80.0-120	1		1.20	15
Nitrate	5000	U	4750	4920	95.0	98.3	1	80.0-120	1		3.48	15
Sulfate	50000	3470	52000	52200	97.0	97.5	1	80.0-120	1		0.459	15

L989895-13 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution %	Rec. Limits %	MS Qualifier
Chloride	50000	18600	68300	99.4	1	80.0-120	
Nitrate	5000	1140	6050	98.2	1	80.0-120	
Sulfate	50000	4240	52400	96.3	1	80.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3306614-1	05/02/18 18:59	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	U		102		1000

L989892-04 Original Sample (OS) • Duplicate (DUP)

(OS) L989892-04	05/02/18 22:15 • (DUP) R3306614-3	05/02/18 22:27			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	7410	7650	1	3.27	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3306614-2	05/02/18 19:31 • (LCSD) R3306614-4	05/02/18 23:54			
Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	70500	71900	94.0	95.8
					85.0-115
					1.98
					20

L989921-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L989921-01	05/03/18 00:43 • (MS) R3306614-5	05/03/18 01:04 • (MSD) R3306614-6	05/03/18 01:19			
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution
Analyte	ug/l	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	50000	5520	57600	58100	104	105
						80.0-120
						1
						0.881
						20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 6020A

[L989898-01.02.04](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3306577-1 05/02/18 20:52				
Analyte	ug/l	ug/l	ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3306577-2 05/02/18 20:57 • (LCSD) R3306577-3 05/02/18 21:01										
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Iron	5000	4740	4690	94.9	93.9	80.0-120		1.03	20	
Manganese	50.0	51.7	48.8	103	97.6	80.0-120		5.82	20	

L990034-21 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L990034-21 05/02/18 21:05 • (MS) R3306577-5 05/02/18 21:14 • (MSD) R3306577-6 05/02/18 21:19												
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
Iron	5000	U	4650	4650	93.0	93.1	1	75.0-125			0.0819	20
Manganese	50.0	12.6	60.4	60.7	95.6	96.3	1	75.0-125			0.549	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L989898-01.02.03.04](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	41.2	J	316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	107			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Gasoline Range Organics-NWTPH	5500		4730		4810		86.0		87.4		72.0-134		164		20					
^(S) <i>a,a</i> -Trifluorotoluene(FID)							93.8		93.3		77.0-122									

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1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3307795-1 05/08/18 10:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L989898-02 Original Sample (OS) • Duplicate (DUP)

(OS) L989898-02 05/08/18 10:25 • (DUP) R3307795-2 05/08/18 10:56

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	352	349	1	0.900		20
Ethane	15.7	15.3	1	3.03		20
Ethene	11.0	11.2	1	1.60		20

L989972-09 Original Sample (OS) • Duplicate (DUP)

(OS) L989972-09 05/08/18 11:03 • (DUP) R3307795-3 05/08/18 11:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	1080	1090	1	0.765		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307795-4 05/08/18 11:41 • (LCSD) R3307795-5 05/08/18 11:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	71.2	72.4	105	107	85.0-115		1.68	20	
Ethane	129	115	115	89.1	89.0	85.0-115		0.0186	20	
Ethene	127	116	116	91.6	91.6	85.0-115		0.0834	20	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method RSK175

[L989898-04](#)

Method Blank (MB)

(MB) R3307876-1 05/08/18 13:20			
Analyte	MB Result	MB Qualifier	MB MDL
	ug/l	ug/l	ug/l
Methane	U		0.287
			0.678

L990272-03 Original Sample (OS) • Duplicate (DUP)

(OS) L990272-03 05/08/18 13:35 • (DUP) R3307876-2 05/08/18 13:57			
Analyte	Original Result	DUP Result	Dilution
	ug/l	ug/l	%
Methane	U	0.000	1
			0.000
			20

L990458-06 Original Sample (OS) • Duplicate (DUP)

(OS) L990458-06 05/08/18 14:25 • (DUP) R3307876-3 05/08/18 14:42			
Analyte	Original Result	DUP Result	Dilution
	ug/l	ug/l	%
Methane	U	0.000	1
			0.000
			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307876-4 05/08/18 14:45 • (LCSD) R3307876-5 05/08/18 14:48			
Analyte	Spike Amount	LCS Result	LCSD Result
	ug/l	ug/l	ug/l
Methane	67.8	72.2	71.3
			107
			105
			85.0-115
			1.28
			20

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3307623-2 05/01/18 17:30

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Bromobenzene	U		0.133	0.500
Benzene	U		0.0896	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3307623-2 05/01/18 17:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	0.187	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Ethylbenzene	U		0.158	0.500
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	U		0.199	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
Naphthalene	U		0.174	2.50
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	102			80.0-120
(S) Dibromofluoromethane	96.4			76.0-123
(S) 4-Bromofluorobenzene	96.9			80.0-120

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Laboratory Control Sample (LCS)

(LCS) R3307623-1 05/01/18 16:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	127	102	10.0-160	
Acrylonitrile	125	121	96.6	60.0-142	
Bromobenzene	25.0	23.1	92.2	79.0-120	
Bromodichloromethane	25.0	23.8	95.2	76.0-120	
Bromochloromethane	25.0	23.3	93.2	76.0-122	
Bromoform	25.0	23.1	92.5	67.0-132	
Bromomethane	25.0	26.7	107	18.0-160	
n-Butylbenzene	25.0	25.0	100	72.0-126	
sec-Butylbenzene	25.0	25.2	101	74.0-121	
tert-Butylbenzene	25.0	24.9	99.7	75.0-122	
Carbon disulfide	25.0	25.7	103	55.0-127	
Carbon tetrachloride	25.0	22.6	90.5	63.0-122	
Chlorobenzene	25.0	24.2	96.8	79.0-121	
Chlorodibromomethane	25.0	23.4	93.8	75.0-125	
Chloroethane	25.0	27.0	108	47.0-152	
Chloroform	25.0	24.1	96.5	72.0-121	
Chloromethane	25.0	28.0	112	48.0-139	
2-Chlorotoluene	25.0	23.8	95.0	74.0-122	
4-Chlorotoluene	25.0	23.9	95.5	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	23.3	93.1	64.0-127	
1,2-Dibromoethane	25.0	23.6	94.5	77.0-123	
Dibromomethane	25.0	23.8	95.1	78.0-120	
1,2-Dichlorobenzene	25.0	23.0	91.9	80.0-120	
1,3-Dichlorobenzene	25.0	23.9	95.5	72.0-123	
1,4-Dichlorobenzene	25.0	23.4	93.8	77.0-120	
Dichlorodifluoromethane	25.0	23.6	94.5	49.0-155	
1,1-Dichloroethane	25.0	25.5	102	70.0-126	
1,2-Dichloroethane	25.0	24.3	97.2	67.0-126	
1,1-Dichloroethene	25.0	25.1	100	64.0-129	
cis-1,2-Dichloroethene	25.0	24.1	96.4	73.0-120	
trans-1,2-Dichloroethene	25.0	23.9	95.5	71.0-121	
1,2-Dichloropropane	25.0	24.9	99.5	75.0-125	
1,1-Dichloropropene	25.0	25.4	102	71.0-129	
1,3-Dichloropropene	25.0	24.3	97.2	80.0-121	
cis-1,3-Dichloropropene	25.0	24.7	98.7	79.0-123	
trans-1,3-Dichloropropene	25.0	24.1	96.3	74.0-127	
trans-1,4-Dichloro-2-butene	25.0	25.3	101	55.0-134	
2,2-Dichloropropane	25.0	22.4	89.4	60.0-125	
Diisopropyl ether	25.0	26.6	107	59.0-133	
Hexachloro-1,3-butadiene	25.0	25.4	102	64.0-131	

Public Review Draft

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Volatile Organic Compounds (GC/MS) by Method 8260C
Laboratory Control Sample (LCS)

(LCS) R3307623-1 05/01/18 16:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
2-Hexanone	125	129	103	58.0-147	
n-Hexane	25.0	25.9	104	56.0-124	
Iodomethane	125	122	97.2	57.0-140	
Isopropylbenzene	25.0	24.1	96.5	75.0-120	
p-Isopropyltoluene	25.0	24.8	99.3	74.0-126	
2-Butanone (MEK)	125	130	104	37.0-158	
Methylene Chloride	25.0	23.4	93.7	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	130	104	59.0-143	
Benzene	25.0	24.3	97.3	69.0-123	
Methyl tert-butyl ether	25.0	23.2	92.9	64.0-123	
n-Propylbenzene	25.0	23.9	95.8	79.0-120	
Styrene	25.0	23.7	94.8	78.0-124	
1,1,1,2-Tetrachloroethane	25.0	23.5	94.2	75.0-122	
1,1,2,2-Tetrachloroethane	25.0	21.5	85.8	71.0-122	
1,1,2-Trichlorotrifluoroethane	25.0	24.8	99.0	61.0-136	
Tetrachloroethene	25.0	23.6	94.3	70.0-127	
1,2,3-Trichlorobenzene	25.0	23.1	92.4	61.0-133	
1,2,4-Trichlorobenzene	25.0	23.0	92.1	69.0-129	
1,1,1-Trichloroethane	25.0	24.6	98.2	68.0-122	
1,1,2-Trichloroethane	25.0	22.9	91.7	78.0-120	
Trichloroethene	25.0	25.1	100	78.0-120	
Trichlorofluoromethane	25.0	27.1	109	56.0-137	
1,2,3-Trichloropropane	25.0	22.5	90.1	72.0-124	
1,2,4-Trimethylbenzene	25.0	24.1	96.4	75.0-120	
1,2,3-Trimethylbenzene	25.0	24.0	96.0	75.0-120	
1,3,5-Trimethylbenzene	25.0	23.8	95.4	75.0-120	
Vinyl acetate	125	105	84.2	46.0-160	
Vinyl chloride	25.0	28.8	115	64.0-133	
Ethylbenzene	25.0	24.2	96.6	77.0-120	
Naphthalene	25.0	22.3	89.2	62.0-128	
Toluene	25.0	23.7	94.8	77.0-120	
Xylenes, Total	75.0	72.3	96.4	77.0-120	
(S) Toluene-d8			102	80.0-120	
(S) Dibromofluoromethane			96.7	76.0-123	
(S) 4-Bromofluorobenzene			97.9	80.0-120	

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

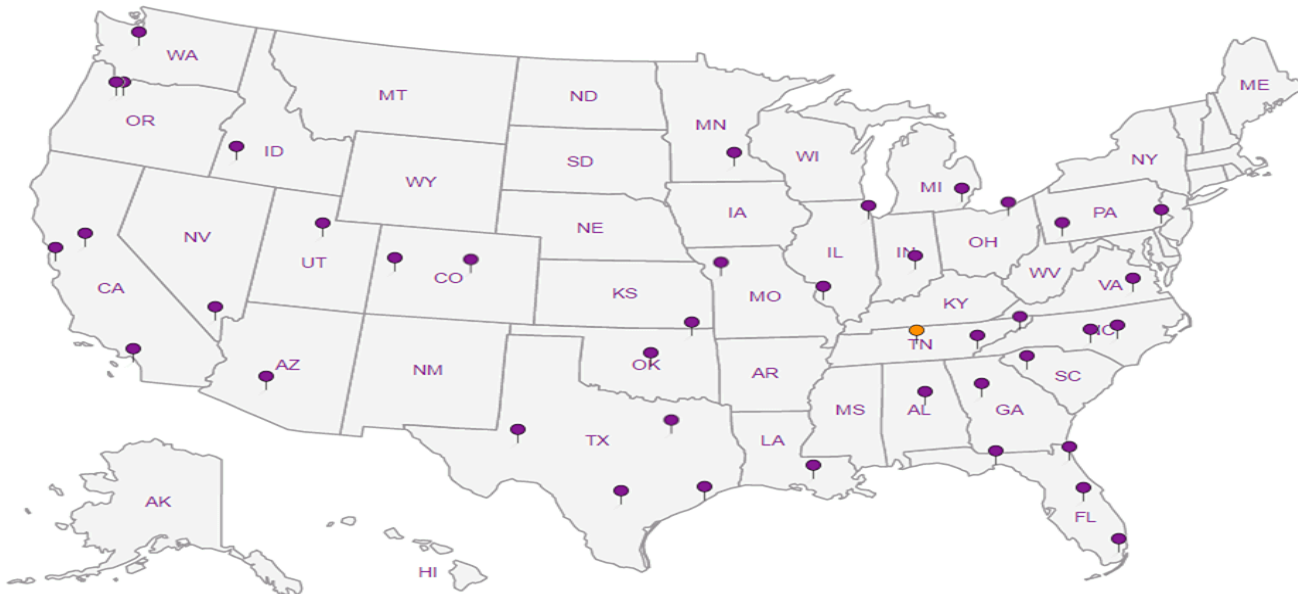
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹Drinking Water ²Underground Storage Tanks ³Aquatic Toxicity ⁴Chemical/Microbiological ⁵Mold ⁶Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

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8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Billing Information:
Email To: boneal@pesenv.com;
bhaldeman@pesenv.com

Project: *American Linen*

Phone: 206-529-3980

Fax: 206-529-3985

Client Project #

City/State Collected: *Seattle, WA*
Lab Project # *PESENVSWA-ALP*

Collected by (print): *Jeff Dobbins*

Site/Facility ID #

P.O. #

Collected by (signature): *[Signature]*

Rush? (Lab MUST be Notified)

Quote #

Immediately Packed on Ice N Y

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

Matrix *

Depth

Date

Time

Crtrs of

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Crtrs of

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Crtrs of
MWD-143-043018	Grab	SS	60	4/30/18	0858	11
MWD-154-043018	Grab	SS	60	4/30/18	1114	11
MWD-154-043018	Grab	SS	60	4/30/18	1246	11
MWD-146-043018	Grab	SS	60	4/30/18	1350	11
		SS				
		SS				
		SS				
		SS				
		SS				
		SS				

V8260C VOCs 40ml/NaHSO4/Syr/MeOH
dry wt, voc screen 2ozClr-NoPres

NOS, SO₄, Cl, Alk 250ml HDPE NoPres

NWTPHX 40ml Amb HCl

RSK175LL (EEH) 40ml Amb-HCl

TOL 250ml Amb-HCl

Total Fe Mn 6020 250ml HDPE HNO₃

V8260LLC VOCs 40ml Amb HCl

PH	Temp	Flow	Other

Sample Receipt Checklist	Y	N
COC Seal Present/Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
COC Signed/Accurate:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Bottles arrive intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Correct bottles used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Sufficient volume sent:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If Applicable		
VQA Zero Readspace:	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Preservation Correct/Checked:	<input checked="" type="checkbox"/>	<input type="checkbox"/>

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Waste Water
DW - Drinking Water
OT - Other

Relinquished by: (Signature) *[Signature]* Date: *4/30/18* Time: *1445*

Relinquished by: (Signature) *[Signature]* Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Tracking # _____

Received by: (Signature) *[Signature]*

Received for lab by: (Signature) *[Signature]*

Trip Blank Received: Yes No

HCL/MeOH TBR

Bottles Received: *39*

Date: *5/1/18* Time: *9:00*

Temp: *27.0* °C

Date: *5/1/18* Time: *9:00*

Hold: _____

If preservation required by Login: Date/Time _____

Condition: NCF / OK

ESC # 12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Acctnum: PESENVSWA
Template: T134663
Prelogin: P647547
TSR: 110 - Brian Ford
PB: *4-18-18*
Shipped Via: **FedEx Ground**

Remarks: _____

Sample # (Lab only) _____

L# *L989898*
D230



Katie Ingram

**ESC Lab Sciences
Non-Conformance Form**

Login #:L989898	Client:PESENVSWA	Date:05/01/18	Evaluated by: Myra "Katie" Ingram
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Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification		
Parameter(s) past holding time	Login Clarification Needed		If Broken Container:
Improper temperature	Chain of custody is incomplete		Insufficient packing material around container
Improper container type	Please specify Metals requested.		Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.	X	Improper handling by carrier (FedEx / UPS / Couri
Insufficient sample volume.	Received additional samples not listed on coc.		Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc		Container lid not intact
Vials received with headspace.	Trip Blank not received.		If no Chain of Custody:
X Broken container	Client did not "X" analysis.		Received by:
Broken container:	Chain of Custody is missing		Date/Time:
Sufficient sample remains			Temp./Cont. Rec./pH:
			Carrier:
			Tracking#

Login Comments:

One vial received broken for ID: MW-143-043018

Client informed by:	Call	Email	Voice Mail	Date:	Time:
TSR Initials:bjf	Client Contact:				

Login Instructions:

Proceed with remaining sample containers.

This E-mail and any attached files are confidential, and may be copyright protected. If you are not the addressee, any dissemination of this communication is strictly prohibited. If you have received this message in error, please contact the sender immediately and delete/destroy all information received.



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	448000		2710	20000	1	05/07/2018 18:29	WG1107742

Sample Narrative:

L989898-01 WG1107742: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	66500		51.9	1000	1	05/02/2018 01:28	WG1105262
Nitrate	U		22.7	100	1	05/02/2018 01:28	WG1105262
Sulfate	4960 J J		77.4	5000	1	05/02/2018 01:28	WG1105262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	25500		2040	20000	20	05/02/2018 22:38	WG1106165

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2080		75.0	500	5	05/02/2018 23:16	WG1105579
Manganese	390		0.250	5.00	1	05/02/2018 21:23	WG1105579

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	154	B	31.6	100	1	05/01/2018 20:33	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/01/2018 20:33	WG1105159

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	6720		0.287	0.678	1	05/08/2018 10:20	WG1107967
Ethane	92.5		0.296	1.29	1	05/08/2018 10:20	WG1107967
Ethene	360		0.422	1.27	1	05/08/2018 10:20	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	6.00 J J		1.05	25.0	1	05/01/2018 19:49	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 19:49	WG1105522
Benzene	0.244 J J		0.0896	0.500	1	05/01/2018 19:49	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 19:49	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 19:49	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 19:49	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 19:49	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 19:49	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 19:49	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 19:49	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 19:49	WG1105522
Carbon disulfide	1.45		0.101	0.500	1	05/01/2018 19:49	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 19:49	WG1105522

JC 6/11/18

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/30/18 08:58

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/01/2018 19:49	WG105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 19:49	WG105522
Chloroethane	U		0.141	2.50	1	05/01/2018 19:49	WG105522
Chloroform	U		0.0860	0.500	1	05/01/2018 19:49	WG105522
Chloromethane	U		0.153	1.25	1	05/01/2018 19:49	WG105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 19:49	WG105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 19:49	WG105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 19:49	WG105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 19:49	WG105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 19:49	WG105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 19:49	WG105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 19:49	WG105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 19:49	WG105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 19:49	WG105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 19:49	WG105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 19:49	WG105522
1,1-Dichloroethene	0.342	J U	0.188	0.500	1	05/01/2018 19:49	WG105522
cis-1,2-Dichloroethene	129		0.0933	0.500	1	05/01/2018 19:49	WG105522
trans-1,2-Dichloroethene	0.512		0.152	0.500	1	05/01/2018 19:49	WG105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 19:49	WG105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 19:49	WG105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 19:49	WG105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 19:49	WG105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 19:49	WG105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 19:49	WG105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 19:49	WG105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 19:49	WG105522
Ethylbenzene	0.212	J U	0.158	0.500	1	05/01/2018 19:49	WG105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 19:49	WG105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 19:49	WG105522
n-Hexane	U		0.305	5.00	1	05/01/2018 19:49	WG105522
Iodomethane	U		0.377	10.0	1	05/01/2018 19:49	WG105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 19:49	WG105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 19:49	WG105522
2-Butanone (MEK)	1.81	J U	1.28	5.00	1	05/01/2018 19:49	WG105522
Methylene Chloride	U		1.07	2.50	1	05/01/2018 19:49	WG105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 19:49	WG105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 19:49	WG105522
Naphthalene	U		0.174	2.50	1	05/01/2018 19:49	WG105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 19:49	WG105522
Styrene	U		0.117	0.500	1	05/01/2018 19:49	WG105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 19:49	WG105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 19:49	WG105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 19:49	WG105522
Tetrachloroethene	U		0.199	0.500	1	05/01/2018 19:49	WG105522
Toluene	0.797		0.412	0.500	1	05/01/2018 19:49	WG105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 19:49	WG105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 19:49	WG105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 19:49	WG105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 19:49	WG105522
Trichloroethene	U		0.153	0.500	1	05/01/2018 19:49	WG105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 19:49	WG105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 19:49	WG105522
1,2,4-Trimethylbenzene	0.482	J U	0.123	0.500	1	05/01/2018 19:49	WG105522
1,2,3-Trimethylbenzene	0.192	J U	0.0739	0.500	1	05/01/2018 19:49	WG105522
1,3,5-Trimethylbenzene	0.173	J U	0.124	0.500	1	05/01/2018 19:49	WG105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Collected date/time: 04/30/18 08:58

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/01/2018 19:49	WG1105522
Vinyl chloride	193		0.118	0.500	1	05/01/2018 19:49	WG1105522
Xylenes, Total	1.08	J ↓	0.316	1.50	1	05/01/2018 19:49	WG1105522
(S) Toluene-d8	104			80.0-120		05/01/2018 19:49	WG1105522
(S) Dibromofluoromethane	99.7			76.0-123		05/01/2018 19:49	WG1105522
(S) 4-Bromofluorobenzene	94.7			80.0-120		05/01/2018 19:49	WG1105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	345000		2710	20000	1	05/07/2018 18:37	WG1107742

Sample Narrative:

L989898-02 WG1107742: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	113000		260	5000	5	05/02/2018 02:14	WG1105262
Nitrate	446		22.7	100	1	05/02/2018 01:59	WG1105262
Sulfate	278000		387	25000	5	05/02/2018 02:14	WG1105262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	54800		2040	20000	20	05/02/2018 22:49	WG1106165

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	55400		750	5000	50	05/02/2018 22:38	WG1105579
Manganese	1040		0.250	5.00	1	05/02/2018 21:28	WG1105579

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	101	<u>B</u>	31.6	100	1	05/01/2018 20:57	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/01/2018 20:57	WG1105159

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	352		0.287	0.678	1	05/08/2018 10:25	WG1107967
Ethane	15.7		0.296	1.29	1	05/08/2018 10:25	WG1107967
Ethene	11.0		0.422	1.27	1	05/08/2018 10:25	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.00	<u>J</u> <u>J</u>	1.05	25.0	1	05/01/2018 20:08	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 20:08	WG1105522
Benzene	U		0.0896	0.500	1	05/01/2018 20:08	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 20:08	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 20:08	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 20:08	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 20:08	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 20:08	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 20:08	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 20:08	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 20:08	WG1105522
Carbon disulfide	0.580		0.101	0.500	1	05/01/2018 20:08	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 20:08	WG1105522

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 6/11/18



Collected date/time: 04/30/18 11:14

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/01/2018 20:08	WG105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 20:08	WG105522
Chloroethane	U		0.141	2.50	1	05/01/2018 20:08	WG105522
Chloroform	1.29		0.0860	0.500	1	05/01/2018 20:08	WG105522
Chloromethane	U		0.153	1.25	1	05/01/2018 20:08	WG105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 20:08	WG105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 20:08	WG105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 20:08	WG105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 20:08	WG105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 20:08	WG105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 20:08	WG105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 20:08	WG105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 20:08	WG105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 20:08	WG105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 20:08	WG105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 20:08	WG105522
1,1-Dichloroethene	0.189	J U	0.188	0.500	1	05/01/2018 20:08	WG105522
cis-1,2-Dichloroethene	59.6		0.0933	0.500	1	05/01/2018 20:08	WG105522
trans-1,2-Dichloroethene	0.205	J U	0.152	0.500	1	05/01/2018 20:08	WG105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 20:08	WG105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 20:08	WG105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 20:08	WG105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 20:08	WG105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 20:08	WG105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 20:08	WG105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 20:08	WG105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 20:08	WG105522
Ethylbenzene	U		0.158	0.500	1	05/01/2018 20:08	WG105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 20:08	WG105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 20:08	WG105522
n-Hexane	U		0.305	5.00	1	05/01/2018 20:08	WG105522
Iodomethane	U		0.377	10.0	1	05/01/2018 20:08	WG105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 20:08	WG105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 20:08	WG105522
2-Butanone (MEK)	U		1.28	5.00	1	05/01/2018 20:08	WG105522
Methylene Chloride	U		1.07	2.50	1	05/01/2018 20:08	WG105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 20:08	WG105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 20:08	WG105522
Naphthalene	U		0.174	2.50	1	05/01/2018 20:08	WG105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 20:08	WG105522
Styrene	U		0.117	0.500	1	05/01/2018 20:08	WG105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 20:08	WG105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 20:08	WG105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 20:08	WG105522
Tetrachloroethene	17.7		0.199	0.500	1	05/01/2018 20:08	WG105522
Toluene	2.66		0.412	0.500	1	05/01/2018 20:08	WG105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 20:08	WG105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 20:08	WG105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 20:08	WG105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 20:08	WG105522
Trichloroethene	18.7		0.153	0.500	1	05/01/2018 20:08	WG105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 20:08	WG105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 20:08	WG105522
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/01/2018 20:08	WG105522
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/01/2018 20:08	WG105522
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/01/2018 20:08	WG105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Collected date/time: 04/30/18 11:14

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/01/2018 20:08	WG1105522
Vinyl chloride	8.91		0.118	0.500	1	05/01/2018 20:08	WG1105522
Xylenes, Total	U		0.316	1.50	1	05/01/2018 20:08	WG1105522
<i>(S) Toluene-d8</i>	107			80.0-120		05/01/2018 20:08	WG1105522
<i>(S) Dibromofluoromethane</i>	89.2			76.0-123		05/01/2018 20:08	WG1105522
<i>(S) 4-Bromofluorobenzene</i>	93.7			80.0-120		05/01/2018 20:08	WG1105522

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 6/11/18



Collected date/time: 04/30/18 12:46

L989898

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	32.1	U B _J	31.6	100	1	05/02/2018 16:27	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	107			77.0-122		05/02/2018 16:27	WG1105159

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	12.9	J J _J	1.05	25.0	1	05/01/2018 20:27	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 20:27	WG1105522
Benzene	U		0.0896	0.500	1	05/01/2018 20:27	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 20:27	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 20:27	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 20:27	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 20:27	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 20:27	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 20:27	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 20:27	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 20:27	WG1105522
Carbon disulfide	U		0.101	0.500	1	05/01/2018 20:27	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 20:27	WG1105522
Chlorobenzene	U		0.140	0.500	1	05/01/2018 20:27	WG1105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 20:27	WG1105522
Chloroethane	U		0.141	2.50	1	05/01/2018 20:27	WG1105522
Chloroform	U		0.0860	0.500	1	05/01/2018 20:27	WG1105522
Chloromethane	U		0.153	1.25	1	05/01/2018 20:27	WG1105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 20:27	WG1105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 20:27	WG1105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 20:27	WG1105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 20:27	WG1105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 20:27	WG1105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 20:27	WG1105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 20:27	WG1105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 20:27	WG1105522
1,1-Dichloroethene	U		0.188	0.500	1	05/01/2018 20:27	WG1105522
cis-1,2-Dichloroethene	1.77		0.0933	0.500	1	05/01/2018 20:27	WG1105522
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/01/2018 20:27	WG1105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 20:27	WG1105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 20:27	WG1105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 20:27	WG1105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 20:27	WG1105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 20:27	WG1105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 20:27	WG1105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 20:27	WG1105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 20:27	WG1105522
Ethylbenzene	U		0.158	0.500	1	05/01/2018 20:27	WG1105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 20:27	WG1105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 20:27	WG1105522
n-Hexane	U		0.305	5.00	1	05/01/2018 20:27	WG1105522
Iodomethane	U		0.377	10.0	1	05/01/2018 20:27	WG1105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 20:27	WG1105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 20:27	WG1105522
2-Butanone (MEK)	U		1.28	5.00	1	05/01/2018 20:27	WG1105522

JC 6/11/18



Collected date/time: 04/30/18 12:46

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/01/2018 20:27	WG1105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 20:27	WG1105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 20:27	WG1105522
Naphthalene	U		0.174	2.50	1	05/01/2018 20:27	WG1105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 20:27	WG1105522
Styrene	U		0.117	0.500	1	05/01/2018 20:27	WG1105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 20:27	WG1105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 20:27	WG1105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 20:27	WG1105522
Tetrachloroethene	4.46		0.199	0.500	1	05/01/2018 20:27	WG1105522
Toluene	U		0.412	0.500	1	05/01/2018 20:27	WG1105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 20:27	WG1105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 20:27	WG1105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 20:27	WG1105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 20:27	WG1105522
Trichloroethene	0.230	J	0.153	0.500	1	05/01/2018 20:27	WG1105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 20:27	WG1105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 20:27	WG1105522
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/01/2018 20:27	WG1105522
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/01/2018 20:27	WG1105522
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/01/2018 20:27	WG1105522
Vinyl acetate	U		0.645	5.00	1	05/01/2018 20:27	WG1105522
Vinyl chloride	7.48		0.118	0.500	1	05/01/2018 20:27	WG1105522
Xylenes, Total	U		0.316	1.50	1	05/01/2018 20:27	WG1105522
(S) Toluene-d8	107			80.0-120		05/01/2018 20:27	WG1105522
(S) Dibromofluoromethane	92.4			76.0-123		05/01/2018 20:27	WG1105522
(S) 4-Bromofluorobenzene	94.0			80.0-120		05/01/2018 20:27	WG1105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	363000		2710	20000	1	05/07/2018 18:44	WG1107742

Sample Narrative:

L989898-04 WG1107742: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	30400		51.9	1000	1	05/02/2018 02:30	WG1105262
Nitrate	U		22.7	100	1	05/02/2018 02:30	WG1105262
Sulfate	22300		77.4	5000	1	05/02/2018 02:30	WG1105262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4470		102	1000	1	05/02/2018 23:01	WG1106165

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	26500		300	2000	20	05/02/2018 22:43	WG1105579
Manganese	1260		0.250	5.00	1	05/02/2018 21:32	WG1105579

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	597		31.6	100	1	05/02/2018 17:05	WG1105159
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 17:05	WG1105159

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	9240		2.87	6.78	10	05/08/2018 13:22	WG1107969
Ethane	11.9		0.296	1.29	1	05/08/2018 10:27	WG1107967
Ethene	489		0.422	1.27	1	05/08/2018 10:27	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	4.54	J	1.05	25.0	1	05/01/2018 20:45	WG1105522
Acrylonitrile	U		0.873	5.00	1	05/01/2018 20:45	WG1105522
Benzene	U		0.0896	0.500	1	05/01/2018 20:45	WG1105522
Bromobenzene	U		0.133	0.500	1	05/01/2018 20:45	WG1105522
Bromodichloromethane	U		0.0800	0.500	1	05/01/2018 20:45	WG1105522
Bromochloromethane	U		0.145	0.500	1	05/01/2018 20:45	WG1105522
Bromoform	U		0.186	0.500	1	05/01/2018 20:45	WG1105522
Bromomethane	U		0.157	2.50	1	05/01/2018 20:45	WG1105522
n-Butylbenzene	U		0.143	0.500	1	05/01/2018 20:45	WG1105522
sec-Butylbenzene	U		0.134	0.500	1	05/01/2018 20:45	WG1105522
tert-Butylbenzene	U		0.183	0.500	1	05/01/2018 20:45	WG1105522
Carbon disulfide	U		0.101	0.500	1	05/01/2018 20:45	WG1105522
Carbon tetrachloride	U		0.159	0.500	1	05/01/2018 20:45	WG1105522

JC 6/11/18

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/30/18 13:50

L989898

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/01/2018 20:45	WG105522
Chlorodibromomethane	U		0.128	0.500	1	05/01/2018 20:45	WG105522
Chloroethane	1.05	J	0.141	2.50	1	05/01/2018 20:45	WG105522
Chloroform	U		0.0860	0.500	1	05/01/2018 20:45	WG105522
Chloromethane	U		0.153	1.25	1	05/01/2018 20:45	WG105522
2-Chlorotoluene	U		0.111	0.500	1	05/01/2018 20:45	WG105522
4-Chlorotoluene	U		0.0972	0.500	1	05/01/2018 20:45	WG105522
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/01/2018 20:45	WG105522
1,2-Dibromoethane	U		0.193	0.500	1	05/01/2018 20:45	WG105522
Dibromomethane	U		0.117	0.500	1	05/01/2018 20:45	WG105522
1,2-Dichlorobenzene	U		0.101	0.500	1	05/01/2018 20:45	WG105522
1,3-Dichlorobenzene	U		0.130	0.500	1	05/01/2018 20:45	WG105522
1,4-Dichlorobenzene	U		0.121	0.500	1	05/01/2018 20:45	WG105522
Dichlorodifluoromethane	U		0.127	2.50	1	05/01/2018 20:45	WG105522
1,1-Dichloroethane	U		0.114	0.500	1	05/01/2018 20:45	WG105522
1,2-Dichloroethane	U		0.108	0.500	1	05/01/2018 20:45	WG105522
1,1-Dichloroethene	4.02		0.188	0.500	1	05/01/2018 20:45	WG105522
cis-1,2-Dichloroethene	900		9.33	50.0	100	05/07/2018 21:47	WG105522
trans-1,2-Dichloroethene	6.12		0.152	0.500	1	05/01/2018 20:45	WG105522
1,2-Dichloropropane	U		0.190	0.500	1	05/01/2018 20:45	WG105522
1,1-Dichloropropene	U		0.128	0.500	1	05/01/2018 20:45	WG105522
1,3-Dichloropropane	U		0.147	1.00	1	05/01/2018 20:45	WG105522
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/01/2018 20:45	WG105522
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/01/2018 20:45	WG105522
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/01/2018 20:45	WG105522
2,2-Dichloropropane	U		0.0929	0.500	1	05/01/2018 20:45	WG105522
Di-isopropyl ether	U		0.0924	0.500	1	05/01/2018 20:45	WG105522
Ethylbenzene	U		0.158	0.500	1	05/01/2018 20:45	WG105522
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/01/2018 20:45	WG105522
2-Hexanone	U		0.757	5.00	1	05/01/2018 20:45	WG105522
n-Hexane	U		0.305	5.00	1	05/01/2018 20:45	WG105522
Iodomethane	U		0.377	10.0	1	05/01/2018 20:45	WG105522
Isopropylbenzene	U		0.126	0.500	1	05/01/2018 20:45	WG105522
p-Isopropyltoluene	U		0.138	0.500	1	05/01/2018 20:45	WG105522
2-Butanone (MEK)	U		1.28	5.00	1	05/01/2018 20:45	WG105522
Methylene Chloride	U		1.07	2.50	1	05/01/2018 20:45	WG105522
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/01/2018 20:45	WG105522
Methyl tert-butyl ether	U		0.102	0.500	1	05/01/2018 20:45	WG105522
Naphthalene	U		0.174	2.50	1	05/01/2018 20:45	WG105522
n-Propylbenzene	U		0.162	0.500	1	05/01/2018 20:45	WG105522
Styrene	U		0.117	0.500	1	05/01/2018 20:45	WG105522
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/01/2018 20:45	WG105522
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/01/2018 20:45	WG105522
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/01/2018 20:45	WG105522
Tetrachloroethene	3.56		0.199	0.500	1	05/01/2018 20:45	WG105522
Toluene	U		0.412	0.500	1	05/01/2018 20:45	WG105522
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/01/2018 20:45	WG105522
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/01/2018 20:45	WG105522
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/01/2018 20:45	WG105522
1,1,2-Trichloroethane	U		0.186	0.500	1	05/01/2018 20:45	WG105522
Trichloroethene	48.4		0.153	0.500	1	05/01/2018 20:45	WG105522
Trichlorofluoromethane	U		0.130	2.50	1	05/01/2018 20:45	WG105522
1,2,3-Trichloropropane	U		0.247	2.50	1	05/01/2018 20:45	WG105522
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/01/2018 20:45	WG105522
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/01/2018 20:45	WG105522
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/01/2018 20:45	WG105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/01/2018 20:45	WG1105522
Vinyl chloride	2100		11.8	50.0	100	05/07/2018 21:47	WG1105522
Xylenes, Total	U		0.316	1.50	1	05/01/2018 20:45	WG1105522
(S) Toluene-d8	104			80.0-120		05/07/2018 21:47	WG1105522
(S) Toluene-d8	103			80.0-120		05/01/2018 20:45	WG1105522
(S) Dibromofluoromethane	98.7			76.0-123		05/07/2018 21:47	WG1105522
(S) Dibromofluoromethane	96.4			76.0-123		05/01/2018 20:45	WG1105522
(S) 4-Bromofluorobenzene	95.0			80.0-120		05/01/2018 20:45	WG1105522
(S) 4-Bromofluorobenzene	96.7			80.0-120		05/07/2018 21:47	WG1105522

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18

May 09, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L990247
Samples Received: 05/02/2018
Project Number:
Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161










Entire Report Reviewed By:



Brian Ford
Technical Service Representative

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by ESC is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-148-050118 L990247-01 GW

Collected by Jeff Dobbins
Collected date/time 05/01/18 08:55
Received date/time 05/02/18 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107743	1	05/07/18 23:35	05/07/18 23:35	MCG
Wet Chemistry by Method 9056A	WG1105796	1	05/02/18 23:14	05/02/18 23:14	MAJ
Wet Chemistry by Method 9060A	WG1106959	1	05/04/18 20:23	05/04/18 20:23	EG
Metals (ICPMS) by Method 6020A	WG1106119	1	05/04/18 12:35	05/04/18 15:32	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1106035	1	05/02/18 18:17	05/02/18 18:17	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107967	1	05/08/18 11:21	05/08/18 11:21	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/02/18 15:22	05/02/18 15:22	BMB

2 Tc

3 Ss

4 Cn

5 Sr

MW-153-050118 L990247-02 GW

Collected by Jeff Dobbins
Collected date/time 05/01/18 11:02
Received date/time 05/02/18 08:45

6 Qc

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107743	1	05/07/18 23:43	05/07/18 23:43	MCG
Wet Chemistry by Method 9056A	WG1105796	1	05/02/18 23:29	05/02/18 23:29	MAJ
Wet Chemistry by Method 9060A	WG1106959	1	05/04/18 20:40	05/04/18 20:40	EG
Metals (ICPMS) by Method 6020A	WG1106119	1	05/04/18 12:35	05/04/18 15:36	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1106035	1	05/02/18 18:41	05/02/18 18:41	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107967	1	05/08/18 11:28	05/08/18 11:28	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/02/18 15:42	05/02/18 15:42	BMB

7 Gl

8 Al

9 Sc

IW-11D-050118 L990247-03 GW

Collected by Jeff Dobbins
Collected date/time 05/01/18 12:43
Received date/time 05/02/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/02/18 16:01	05/02/18 16:01	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	50	05/07/18 19:46	05/07/18 19:46	DWR

MW-905-050118 L990247-04 GW

Collected by Jeff Dobbins
Collected date/time 05/01/18 11:08
Received date/time 05/02/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107743	1	05/07/18 23:51	05/07/18 23:51	MCG
Wet Chemistry by Method 9056A	WG1105796	1	05/02/18 23:45	05/02/18 23:45	MAJ
Wet Chemistry by Method 9060A	WG1106959	1	05/04/18 20:54	05/04/18 20:54	EG
Metals (ICPMS) by Method 6020A	WG1106119	1	05/04/18 12:35	05/04/18 15:55	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1106035	1	05/02/18 19:05	05/02/18 19:05	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107969	1	05/08/18 13:26	05/08/18 13:26	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/02/18 16:21	05/02/18 16:21	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/07/18 20:05	05/07/18 20:05	DWR

MW-147-050118 L990247-05 GW

Collected by Jeff Dobbins
Collected date/time 05/01/18 13:53
Received date/time 05/02/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107743	1	05/07/18 23:58	05/07/18 23:58	MCG
Wet Chemistry by Method 9056A	WG1105796	1	05/03/18 00:00	05/03/18 00:00	MAJ
Wet Chemistry by Method 9056A	WG1105796	5	05/03/18 12:23	05/03/18 12:23	MAJ
Wet Chemistry by Method 9060A	WG1106959	1	05/04/18 21:13	05/04/18 21:13	EG
Metals (ICPMS) by Method 6020A	WG1106119	1	05/04/18 12:35	05/04/18 16:00	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1106035	1	05/02/18 19:28	05/02/18 19:28	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107969	1	05/08/18 13:28	05/08/18 13:28	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/02/18 16:41	05/02/18 16:41	BMB



MW-147-050118 L990247-05 GW

Collected by Jeff Dobbins
 Collected date/time 05/01/18 13:53
 Received date/time 05/02/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	25	05/07/18 20:25	05/07/18 20:25	DWR

1 Cp

2 Tc

3 Ss

EQ-050118 L990247-06 GW

Collected by Jeff Dobbins
 Collected date/time 05/01/18 14:42
 Received date/time 05/02/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1107743	1	05/08/18 08:40	05/08/18 08:40	MCG
Wet Chemistry by Method 9056A	WG1105796	1	05/03/18 00:15	05/03/18 00:15	MAJ
Wet Chemistry by Method 9060A	WG1106959	1	05/04/18 21:25	05/04/18 21:25	EG
Metals (ICPMS) by Method 6020A	WG1106119	1	05/04/18 12:35	05/04/18 16:04	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1106035	1	05/02/18 19:52	05/02/18 19:52	ACG
Volatile Organic Compounds (GC) by Method RSK175	WG1107969	1	05/08/18 13:33	05/08/18 13:33	BG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/02/18 17:01	05/02/18 17:01	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/07/18 20:45	05/07/18 20:45	DWR

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

TRIPBLANK-050118 L990247-07 GW

Collected by Jeff Dobbins
 Collected date/time 05/01/18 00:00
 Received date/time 05/02/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1106035	1	05/02/18 17:53	05/02/18 17:53	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1105852	1	05/02/18 13:44	05/02/18 13:44	BMB

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All radiochemical sample results for solids are reported on a dry weight basis with the exception of tritium, carbon-14 and radon, unless wet weight was requested by the client. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Technical Service Representative

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	170000		2710	20000	1	05/07/2018 23:35	WG1107743

Sample Narrative:

L990247-01 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	22200		51.9	1000	1	05/02/2018 23:14	WG1105796
Nitrate	U		22.7	100	1	05/02/2018 23:14	WG1105796
Sulfate	95500		77.4	5000	1	05/02/2018 23:14	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2460		102	1000	1	05/04/2018 20:23	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	12000		15.0	100	1	05/04/2018 15:32	WG1106119
Manganese	439		0.250	5.00	1	05/04/2018 15:32	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 18:17	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 18:17	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1210		0.287	0.678	1	05/08/2018 11:21	WG1107967
Ethane	U		0.296	1.29	1	05/08/2018 11:21	WG1107967
Ethene	U		0.422	1.27	1	05/08/2018 11:21	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	6.56	J	1.05	25.0	1	05/02/2018 15:22	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 15:22	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 15:22	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 15:22	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 15:22	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 15:22	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 15:22	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 15:22	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 15:22	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 15:22	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 15:22	WG1105852
Carbon disulfide	1.01		0.101	0.500	1	05/02/2018 15:22	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 15:22	WG1105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/01/18 08:55

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 15:22	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 15:22	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 15:22	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 15:22	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 15:22	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 15:22	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 15:22	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 15:22	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 15:22	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 15:22	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 15:22	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 15:22	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 15:22	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 15:22	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 15:22	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 15:22	WG105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 15:22	WG105852
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/02/2018 15:22	WG105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 15:22	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 15:22	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 15:22	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 15:22	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 15:22	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 15:22	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 15:22	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 15:22	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 15:22	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 15:22	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 15:22	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 15:22	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 15:22	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 15:22	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 15:22	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 15:22	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 15:22	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 15:22	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 15:22	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 15:22	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 15:22	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 15:22	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 15:22	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 15:22	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 15:22	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 15:22	WG105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 15:22	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 15:22	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 15:22	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 15:22	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 15:22	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 15:22	WG105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 15:22	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 15:22	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 15:22	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 15:22	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 15:22	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 15:22	WG105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/01/18 08:55

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 15:22	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/02/2018 15:22	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 15:22	WG1105852
<i>(S) Toluene-d8</i>	106			80.0-120		05/02/2018 15:22	WG1105852
<i>(S) Dibromofluoromethane</i>	96.2			76.0-123		05/02/2018 15:22	WG1105852
<i>(S) 4-Bromofluorobenzene</i>	80.9			80.0-120		05/02/2018 15:22	WG1105852

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	148000		2710	20000	1	05/07/2018 23:43	WG1107743

Sample Narrative:

L990247-02 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	23800		51.9	1000	1	05/02/2018 23:29	WG1105796
Nitrate	U		22.7	100	1	05/02/2018 23:29	WG1105796
Sulfate	23700		77.4	5000	1	05/02/2018 23:29	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1260		102	1000	1	05/04/2018 20:40	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1010		15.0	100	1	05/04/2018 15:36	WG1106119
Manganese	187		0.250	5.00	1	05/04/2018 15:36	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 18:41	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 18:41	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	74.3		0.287	0.678	1	05/08/2018 11:28	WG1107967
Ethane	U		0.296	1.29	1	05/08/2018 11:28	WG1107967
Ethene	U		0.422	1.27	1	05/08/2018 11:28	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.65	J	1.05	25.0	1	05/02/2018 15:42	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 15:42	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 15:42	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 15:42	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 15:42	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 15:42	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 15:42	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 15:42	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 15:42	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 15:42	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 15:42	WG1105852
Carbon disulfide	4.54		0.101	0.500	1	05/02/2018 15:42	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 15:42	WG1105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/01/18 11:02

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 15:42	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 15:42	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 15:42	WG105852
Chloroform	0.870		0.0860	0.500	1	05/02/2018 15:42	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 15:42	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 15:42	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 15:42	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 15:42	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 15:42	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 15:42	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 15:42	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 15:42	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 15:42	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 15:42	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 15:42	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 15:42	WG105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 15:42	WG105852
cis-1,2-Dichloroethene	0.612		0.0933	0.500	1	05/02/2018 15:42	WG105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 15:42	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 15:42	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 15:42	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 15:42	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 15:42	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 15:42	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 15:42	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 15:42	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 15:42	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 15:42	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 15:42	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 15:42	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 15:42	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 15:42	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 15:42	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 15:42	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 15:42	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 15:42	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 15:42	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 15:42	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 15:42	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 15:42	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 15:42	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 15:42	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 15:42	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 15:42	WG105852
Tetrachloroethene	0.756		0.199	0.500	1	05/02/2018 15:42	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 15:42	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 15:42	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 15:42	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 15:42	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 15:42	WG105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 15:42	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 15:42	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 15:42	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 15:42	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 15:42	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 15:42	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 15:42	WG1105852
Vinyl chloride	9.56		0.118	0.500	1	05/02/2018 15:42	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 15:42	WG1105852
<i>(S) Toluene-d8</i>	104			80.0-120		05/02/2018 15:42	WG1105852
<i>(S) Dibromofluoromethane</i>	95.3			76.0-123		05/02/2018 15:42	WG1105852
<i>(S) 4-Bromofluorobenzene</i>	82.2			80.0-120		05/02/2018 15:42	WG1105852

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.92	J	1.05	25.0	1	05/02/2018 16:01	WG105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 16:01	WG105852
Benzene	U		0.0896	0.500	1	05/02/2018 16:01	WG105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 16:01	WG105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 16:01	WG105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 16:01	WG105852
Bromoform	U		0.186	0.500	1	05/02/2018 16:01	WG105852
Bromomethane	U		0.157	2.50	1	05/02/2018 16:01	WG105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 16:01	WG105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 16:01	WG105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 16:01	WG105852
Carbon disulfide	0.792		0.101	0.500	1	05/02/2018 16:01	WG105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 16:01	WG105852
Chlorobenzene	U		0.140	0.500	1	05/02/2018 16:01	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 16:01	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 16:01	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 16:01	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 16:01	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 16:01	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 16:01	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 16:01	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 16:01	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 16:01	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 16:01	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 16:01	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 16:01	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 16:01	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 16:01	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 16:01	WG105852
1,1-Dichloroethene	18.0		0.188	0.500	1	05/02/2018 16:01	WG105852
cis-1,2-Dichloroethene	1640		4.66	25.0	50	05/07/2018 19:46	WG105852
trans-1,2-Dichloroethene	2.27		0.152	0.500	1	05/02/2018 16:01	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 16:01	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 16:01	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 16:01	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 16:01	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 16:01	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 16:01	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 16:01	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 16:01	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 16:01	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 16:01	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 16:01	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 16:01	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 16:01	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 16:01	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 16:01	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 16:01	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 16:01	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 16:01	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 16:01	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 16:01	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 16:01	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 16:01	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 16:01	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 16:01	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/18 12:43

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 16:01	WG1105852
Tetrachloroethene	18.9		0.199	0.500	1	05/02/2018 16:01	WG1105852
Toluene	0.643		0.412	0.500	1	05/02/2018 16:01	WG1105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 16:01	WG1105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 16:01	WG1105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 16:01	WG1105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 16:01	WG1105852
Trichloroethene	282		7.65	25.0	50	05/07/2018 19:46	WG1105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 16:01	WG1105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 16:01	WG1105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 16:01	WG1105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 16:01	WG1105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 16:01	WG1105852
Vinyl acetate	U		0.645	5.00	1	05/02/2018 16:01	WG1105852
Vinyl chloride	34.1		0.118	0.500	1	05/02/2018 16:01	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 16:01	WG1105852
(S) Toluene-d8	105			80.0-120		05/02/2018 16:01	WG1105852
(S) Toluene-d8	102			80.0-120		05/07/2018 19:46	WG1105852
(S) Dibromofluoromethane	89.5			76.0-123		05/07/2018 19:46	WG1105852
(S) Dibromofluoromethane	96.2			76.0-123		05/02/2018 16:01	WG1105852
(S) 4-Bromofluorobenzene	82.4			80.0-120		05/02/2018 16:01	WG1105852
(S) 4-Bromofluorobenzene	96.4			80.0-120		05/07/2018 19:46	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	162000		2710	20000	1	05/07/2018 23:51	WG1107743

Sample Narrative:

L990247-04 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	22500		51.9	1000	1	05/02/2018 23:45	WG1105796
Nitrate	U		22.7	100	1	05/02/2018 23:45	WG1105796
Sulfate	96100		77.4	5000	1	05/02/2018 23:45	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2530		102	1000	1	05/04/2018 20:54	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	11200		15.0	100	1	05/04/2018 15:55	WG1106119
Manganese	379		0.250	5.00	1	05/04/2018 15:55	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 19:05	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 19:05	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1140		0.287	0.678	1	05/08/2018 13:26	WG1107969
Ethane	U		0.296	1.29	1	05/08/2018 13:26	WG1107969
Ethene	U		0.422	1.27	1	05/08/2018 13:26	WG1107969

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	5.73	J	1.05	25.0	1	05/02/2018 16:21	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 16:21	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 16:21	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 16:21	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 16:21	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 16:21	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 16:21	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 16:21	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 16:21	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 16:21	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 16:21	WG1105852
Carbon disulfide	1.14		0.101	0.500	1	05/02/2018 16:21	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 16:21	WG1105852

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 05/01/18 11:08

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 16:21	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 16:21	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 16:21	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 16:21	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 16:21	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 16:21	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 16:21	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 16:21	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 16:21	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 16:21	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 16:21	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 16:21	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 16:21	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 16:21	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 16:21	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 16:21	WG105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 16:21	WG105852
cis-1,2-Dichloroethene	0.216	U	0.0933	0.500	1	05/07/2018 20:05	WG105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 16:21	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 16:21	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 16:21	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 16:21	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 16:21	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 16:21	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 16:21	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 16:21	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 16:21	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 16:21	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 16:21	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 16:21	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 16:21	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 16:21	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 16:21	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 16:21	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 16:21	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 16:21	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 16:21	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 16:21	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 16:21	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 16:21	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 16:21	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 16:21	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 16:21	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 16:21	WG105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 16:21	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 16:21	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 16:21	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 16:21	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 16:21	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 16:21	WG105852
Trichloroethene	U		0.153	0.500	1	05/07/2018 20:05	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 16:21	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 16:21	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 16:21	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 16:21	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 16:21	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/18 11:08

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 16:21	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/02/2018 16:21	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 16:21	WG1105852
(S) Toluene-d8	106			80.0-120		05/02/2018 16:21	WG1105852
(S) Toluene-d8	98.5			80.0-120		05/07/2018 20:05	WG1105852
(S) Dibromofluoromethane	92.3			76.0-123		05/07/2018 20:05	WG1105852
(S) Dibromofluoromethane	96.5			76.0-123		05/02/2018 16:21	WG1105852
(S) 4-Bromofluorobenzene	96.3			80.0-120		05/07/2018 20:05	WG1105852
(S) 4-Bromofluorobenzene	80.5			80.0-120		05/02/2018 16:21	WG1105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	302000		2710	20000	1	05/07/2018 23:58	WG1107743

Sample Narrative:

L990247-05 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	40800		51.9	1000	1	05/03/2018 00:00	WG1105796
Nitrate	U		22.7	100	1	05/03/2018 00:00	WG1105796
Sulfate	183000		387	25000	5	05/03/2018 12:23	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	21300		102	1000	1	05/04/2018 21:13	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	17100		15.0	100	1	05/04/2018 16:00	WG1106119
Manganese	564		0.250	5.00	1	05/04/2018 16:00	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	484		31.6	100	1	05/02/2018 19:28	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	107			77.0-122		05/02/2018 19:28	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5060		0.287	0.678	1	05/08/2018 13:28	WG1107969
Ethane	10.7		0.296	1.29	1	05/08/2018 13:28	WG1107969
Ethene	144		0.422	1.27	1	05/08/2018 13:28	WG1107969

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	3.16	J	1.05	25.0	1	05/02/2018 16:41	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 16:41	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 16:41	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 16:41	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 16:41	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 16:41	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 16:41	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 16:41	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 16:41	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 16:41	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 16:41	WG1105852
Carbon disulfide	6.02		0.101	0.500	1	05/02/2018 16:41	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 16:41	WG1105852

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 05/01/18 13:53

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 16:41	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 16:41	WG105852
Chloroethane	2.01	J	0.141	2.50	1	05/02/2018 16:41	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 16:41	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 16:41	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 16:41	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 16:41	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 16:41	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 16:41	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 16:41	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 16:41	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 16:41	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 16:41	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 16:41	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 16:41	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 16:41	WG105852
1,1-Dichloroethene	4.59		0.188	0.500	1	05/02/2018 16:41	WG105852
cis-1,2-Dichloroethene	399		2.33	12.5	25	05/07/2018 20:25	WG105852
trans-1,2-Dichloroethene	2.09		0.152	0.500	1	05/02/2018 16:41	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 16:41	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 16:41	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 16:41	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 16:41	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 16:41	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 16:41	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 16:41	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 16:41	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 16:41	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 16:41	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 16:41	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 16:41	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 16:41	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 16:41	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 16:41	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 16:41	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 16:41	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 16:41	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 16:41	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 16:41	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 16:41	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 16:41	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 16:41	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 16:41	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 16:41	WG105852
Tetrachloroethene	19.8		0.199	0.500	1	05/02/2018 16:41	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 16:41	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 16:41	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 16:41	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 16:41	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 16:41	WG105852
Trichloroethene	83.4		0.153	0.500	1	05/02/2018 16:41	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 16:41	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 16:41	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 16:41	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 16:41	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 16:41	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/18 13:53

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 16:41	WG1105852
Vinyl chloride	1150		2.95	12.5	25	05/07/2018 20:25	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 16:41	WG1105852
<i>(S) Toluene-d8</i>	106			80.0-120		05/02/2018 16:41	WG1105852
<i>(S) Toluene-d8</i>	99.7			80.0-120		05/07/2018 20:25	WG1105852
<i>(S) Dibromofluoromethane</i>	97.1			76.0-123		05/02/2018 16:41	WG1105852
<i>(S) Dibromofluoromethane</i>	95.1			76.0-123		05/07/2018 20:25	WG1105852
<i>(S) 4-Bromofluorobenzene</i>	81.1			80.0-120		05/02/2018 16:41	WG1105852
<i>(S) 4-Bromofluorobenzene</i>	94.1			80.0-120		05/07/2018 20:25	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	6640	J	2710	20000	1	05/08/2018 08:40	WG1107743

Sample Narrative:

L990247-06 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	864	J P1	51.9	1000	1	05/03/2018 00:15	WG1105796
Nitrate	U		22.7	100	1	05/03/2018 00:15	WG1105796
Sulfate	U		77.4	5000	1	05/03/2018 00:15	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	104	J	102	1000	1	05/04/2018 21:25	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	U		15.0	100	1	05/04/2018 16:04	WG1106119
Manganese	1.05	J	0.250	5.00	1	05/04/2018 16:04	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

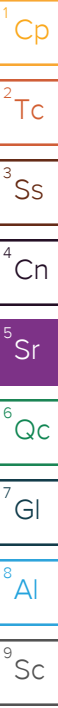
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.4	B J	31.6	100	1	05/02/2018 19:52	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 19:52	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	05/08/2018 13:33	WG1107969
Ethane	U		0.296	1.29	1	05/08/2018 13:33	WG1107969
Ethene	U		0.422	1.27	1	05/08/2018 13:33	WG1107969

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	3.35	J	1.05	25.0	1	05/02/2018 17:01	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 17:01	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 17:01	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 17:01	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 17:01	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 17:01	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 17:01	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 17:01	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 17:01	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 17:01	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 17:01	WG1105852
Carbon disulfide	U		0.101	0.500	1	05/02/2018 17:01	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 17:01	WG1105852





Collected date/time: 05/01/18 14:42

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 17:01	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 17:01	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 17:01	WG105852
Chloroform	0.181	U	0.0860	0.500	1	05/02/2018 17:01	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 17:01	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 17:01	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 17:01	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 17:01	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 17:01	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 17:01	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 17:01	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 17:01	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 17:01	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 17:01	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 17:01	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 17:01	WG105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 17:01	WG105852
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/07/2018 20:45	WG105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 17:01	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 17:01	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 17:01	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 17:01	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 17:01	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 17:01	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 17:01	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 17:01	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 17:01	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 17:01	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 17:01	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 17:01	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 17:01	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 17:01	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 17:01	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 17:01	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 17:01	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 17:01	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 17:01	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 17:01	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 17:01	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 17:01	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 17:01	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 17:01	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 17:01	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 17:01	WG105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 17:01	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 17:01	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 17:01	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 17:01	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 17:01	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 17:01	WG105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 17:01	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 17:01	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 17:01	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 17:01	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 17:01	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 17:01	WG105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 17:01	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/07/2018 20:45	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 17:01	WG1105852
(S) Toluene-d8	102			80.0-120		05/07/2018 20:45	WG1105852
(S) Toluene-d8	104			80.0-120		05/02/2018 17:01	WG1105852
(S) Dibromofluoromethane	91.5			76.0-123		05/07/2018 20:45	WG1105852
(S) Dibromofluoromethane	97.7			76.0-123		05/02/2018 17:01	WG1105852
(S) 4-Bromofluorobenzene	82.9			80.0-120		05/02/2018 17:01	WG1105852
(S) 4-Bromofluorobenzene	96.7			80.0-120		05/07/2018 20:45	WG1105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/01/18 00:00

L990247

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 17:53	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 17:53	WG1106035

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	05/02/2018 13:44	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 13:44	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 13:44	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 13:44	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 13:44	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 13:44	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 13:44	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 13:44	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 13:44	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 13:44	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 13:44	WG1105852
Carbon disulfide	U		0.101	0.500	1	05/02/2018 13:44	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 13:44	WG1105852
Chlorobenzene	U		0.140	0.500	1	05/02/2018 13:44	WG1105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 13:44	WG1105852
Chloroethane	U		0.141	2.50	1	05/02/2018 13:44	WG1105852
Chloroform	U		0.0860	0.500	1	05/02/2018 13:44	WG1105852
Chloromethane	U		0.153	1.25	1	05/02/2018 13:44	WG1105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 13:44	WG1105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 13:44	WG1105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 13:44	WG1105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 13:44	WG1105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 13:44	WG1105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 13:44	WG1105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 13:44	WG1105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 13:44	WG1105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 13:44	WG1105852
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/02/2018 13:44	WG1105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 13:44	WG1105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 13:44	WG1105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 13:44	WG1105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 13:44	WG1105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 13:44	WG1105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 13:44	WG1105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 13:44	WG1105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 13:44	WG1105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 13:44	WG1105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 13:44	WG1105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 13:44	WG1105852
n-Hexane	U		0.305	5.00	1	05/02/2018 13:44	WG1105852
Iodomethane	U		0.377	10.0	1	05/02/2018 13:44	WG1105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 13:44	WG1105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 13:44	WG1105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 13:44	WG1105852



Collected date/time: 05/01/18 00:00

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/02/2018 13:44	WG1105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 13:44	WG1105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 13:44	WG1105852
Naphthalene	U		0.174	2.50	1	05/02/2018 13:44	WG1105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 13:44	WG1105852
Styrene	U		0.117	0.500	1	05/02/2018 13:44	WG1105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 13:44	WG1105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 13:44	WG1105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 13:44	WG1105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 13:44	WG1105852
Toluene	U		0.412	0.500	1	05/02/2018 13:44	WG1105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 13:44	WG1105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 13:44	WG1105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 13:44	WG1105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 13:44	WG1105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 13:44	WG1105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 13:44	WG1105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 13:44	WG1105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 13:44	WG1105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 13:44	WG1105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 13:44	WG1105852
Vinyl acetate	U		0.645	5.00	1	05/02/2018 13:44	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/02/2018 13:44	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 13:44	WG1105852
(S) Toluene-d8	105			80.0-120		05/02/2018 13:44	WG1105852
(S) Dibromofluoromethane	95.2			76.0-123		05/02/2018 13:44	WG1105852
(S) 4-Bromofluorobenzene	82.0			80.0-120		05/02/2018 13:44	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

L990458-02 Original Sample (OS) • Duplicate (DUP)

(OS) L990458-02 05/07/18 21:23 • (DUP) R3307763-1 05/07/18 21:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	549000	567000	1	3.22		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L990272-16 Original Sample (OS) • Duplicate (DUP)

(OS) L990272-16 05/08/18 07:39 • (DUP) R3307763-6 05/08/18 07:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	286000	292000	1	1.96		20

Sample Narrative:

OS: Endpoint pH 4.5 Headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307763-4 05/07/18 23:03 • (LCSD) R3307763-5 05/08/18 00:24

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Alkalinity	100000	101000	97700	101	97.7	85.0-115			2.85	20

Sample Narrative:

LCS: Endpoint pH 4.5
LCSD: Endpoint pH 4.5





Method Blank (MB)

(MB) R3306774-1 05/02/18 13:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	109	J	77.4	5000

L990245-05 Original Sample (OS) • Duplicate (DUP)

(OS) L990245-05 05/02/18 20:40 • (DUP) R3306774-4 05/02/18 20:55

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	%		ug/l	%		
Chloride	9870	9160	1	7.48			15
Nitrate	857	894	1	4.22			15
Sulfate	34300	34400	1	0.326			15

L990247-06 Original Sample (OS) • Duplicate (DUP)

(OS) L990247-06 05/03/18 00:15 • (DUP) R3306774-7 05/03/18 00:31

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	%		ug/l	%		
Chloride	864	0.000	1	200		P1	15
Nitrate	U	0.000	1	0.000			15
Sulfate	U	0.000	1	0.000			15

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3306774-2 05/02/18 13:37 • (LCSD) R3306774-3 05/02/18 13:52

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits	LCS Qualifier		LCSD Qualifier		RPD Limits
	ug/l	%	ug/l	%	ug/l	%	%	%	%	%		%	%	%		
Chloride	40000	39800	39800	99.4	39800	99.5					80.0-120	0.117			15	
Nitrate	8000	8180	8110	102	8110	101					80.0-120	0.854			15	
Sulfate	40000	40000	39800	100	39800	99.6					80.0-120	0.429			15	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L990245-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution %	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	9870	73600	59900	127	100	1	80.0-120	J5	J3	20.6	15
Nitrate	5000	857	5810	5890	99.0	101	1	80.0-120			1.41	15
Sulfate	50000	34300	83800	84100	99.0	99.6	1	80.0-120			0.352	15

L990247-06 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution %	Rec. Limits %	MS Qualifier
Chloride	50000	864	51200	101	1	80.0-120	
Nitrate	5000	U	4840	96.7	1	80.0-120	
Sulfate	50000	U	50400	101	1	80.0-120	

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4 Cn
5 Sr
6 Qc
7 Gl
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Method Blank (MB)

(MB) R3307261-1	05/04/18 11:30	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	U		102		1000

L990207-01 Original Sample (OS) • Duplicate (DUP)

(OS) L990207-01	05/04/18 16:12	(DUP) R3307261-3	05/04/18 16:25		
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	3240	3300	1	1.65	20

L990256-01 Original Sample (OS) • Duplicate (DUP)

(OS) L990256-01	05/04/18 22:50	(DUP) R3307261-7	05/04/18 23:11		
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	1500	1540	1	2.57	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307261-2	05/04/18 12:21	(LCSD) R3307261-4	05/04/18 18:08		
Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits
Analyte	ug/l	ug/l	ug/l	%	%
TOC (Total Organic Carbon)	75000	68600	68300	91.5	85.0-115

L990245-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L990245-09	05/04/18 19:14	(MS) R3307261-5	05/04/18 19:34	(MSD) R3307261-6	05/04/18 19:51
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC (Total Organic Carbon)	50000	522	46600	46800	92.1

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 6020A

[L990247-01.02.04.05.06](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3307226-1 05/04/18 15:00				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3307226-2 05/04/18 15:04 • (LCSD) R3307226-3 05/04/18 15:09										
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	4980	4900	99.6	98.0	80.0-120			1.54	20
Manganese	50.0	48.4	47.8	96.9	95.6	80.0-120			1.30	20

L991047-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L991047-02 05/04/18 15:13 • (MS) R3307226-5 05/04/18 15:23 • (MSD) R3307226-6 05/04/18 15:27												
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	108	4960	4980	97.1	97.4	1	75.0-125			0.297	20
Manganese	50.0	5350	5330	5360	0.000	37.7	1	75.0-125	V	V	0.678	20

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2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L990247-01.02.04.05.06.07](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	35.5	J	316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	107			77.0-122

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3306868-1 05/02/18 10:10 • (LCSD) R3306868-2 05/02/18 11:17

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	5680	4750	103	86.3	72.0-134			17.8	20
^(S) <i>a,a</i> -Trifluorotoluene(FID)				93.5	93.9	77.0-122				

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Method Blank (MB)

(MB) R3307795-1 05/08/18 10:17

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L989898-02 Original Sample (OS) • Duplicate (DUP)

(OS) L989898-02 05/08/18 10:25 • (DUP) R3307795-2 05/08/18 10:56

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	352	349	1	0.900		20
Ethane	15.7	15.3	1	3.03		20
Ethene	11.0	11.2	1	1.60		20

L989972-09 Original Sample (OS) • Duplicate (DUP)

(OS) L989972-09 05/08/18 11:03 • (DUP) R3307795-3 05/08/18 11:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	1080	1090	1	0.765		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307795-4 05/08/18 11:41 • (LCSD) R3307795-5 05/08/18 11:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	71.2	72.4	105	107	85.0-115		1.68	20	
Ethane	129	115	115	89.1	89.0	85.0-115		0.0186	20	
Ethene	127	116	116	91.6	91.6	85.0-115		0.0834	20	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method RSK175

[L990247-04,05,06](#)

Method Blank (MB)

(MB) R3307876-1 05/08/18 13:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L990272-03 Original Sample (OS) • Duplicate (DUP)

(OS) L990272-03 05/08/18 13:35 • (DUP) R3307876-2 05/08/18 13:57

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	U	0.000	1	0.000			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

L990458-06 Original Sample (OS) • Duplicate (DUP)

(OS) L990458-06 05/08/18 14:25 • (DUP) R3307876-3 05/08/18 14:42

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	U	0.000	1	0.000			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3307876-4 05/08/18 14:45 • (LCSD) R3307876-5 05/08/18 14:48

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	
Methane	67.8		72.2	71.3	107	105	85.0-115					1.28						20
Ethane	129		115	116	88.8	90.3	85.0-115					1.70						20
Ethene	127		117	118	91.8	93.2	85.0-115					1.44						20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Method Blank (MB)

(MB) R3307630-2 05/02/18 13:04

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
Carbon disulfide	U		0.101	0.500
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
2-Hexanone	U		0.757	5.00
cis-1,3-Dichloropropene	U		0.0976	0.500
n-Hexane	U		0.305	5.00
trans-1,3-Dichloropropene	U		0.222	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
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7 Gl
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Method Blank (MB)

(MB) R3307630-2 05/02/18 13:04

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
2,2-Dichloropropane	U		0.0929	0.500
Iodomethane	U		0.377	10.0
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
Vinyl acetate	U		0.645	5.00
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	104			80.0-120
(S) Dibromofluoromethane	96.9			76.0-123
(S) 4-Bromofluorobenzene	84.1			80.0-120

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1 Cp
2 Tc
3 Ss
4 Cn
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Laboratory Control Sample (LCS)

(LCS) R3307630-1 05/02/18 12:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromochloromethane	25.0	28.0	112	76.0-122	
Carbon disulfide	25.0	27.7	111	55.0-127	
trans-1,4-Dichloro-2-butene	25.0	27.5	110	55.0-134	
2-Hexanone	125	135	108	58.0-147	
n-Hexane	25.0	28.5	114	56.0-124	
Iodomethane	125	142	113	57.0-140	
Acetone	125	88.3	70.6	10.0-160	
Acrylonitrile	125	118	94.6	60.0-142	
Benzene	25.0	27.0	108	69.0-123	
Bromobenzene	25.0	24.4	97.6	79.0-120	
Bromodichloromethane	25.0	24.1	96.4	76.0-120	
Bromoform	25.0	23.3	93.3	67.0-132	
Bromomethane	25.0	28.1	113	18.0-160	
n-Butylbenzene	25.0	27.9	112	72.0-126	
sec-Butylbenzene	25.0	28.5	114	74.0-121	
tert-Butylbenzene	25.0	27.1	109	75.0-122	
Carbon tetrachloride	25.0	27.4	110	63.0-122	
Chlorobenzene	25.0	28.5	114	79.0-121	
Chlorodibromomethane	25.0	27.3	109	75.0-125	
Chloroethane	25.0	27.4	109	47.0-152	
Chloroform	25.0	25.4	102	72.0-121	
Chloromethane	25.0	25.7	103	48.0-139	
2-Chlorotoluene	25.0	27.1	108	74.0-122	
Vinyl acetate	125	136	109	46.0-160	
4-Chlorotoluene	25.0	27.0	108	79.0-120	
1,2-Dibromo-3-Chloropropane	25.0	24.8	99.1	64.0-127	
1,2-Dibromoethane	25.0	26.6	107	77.0-123	
Dibromomethane	25.0	25.3	101	78.0-120	
1,2-Dichlorobenzene	25.0	27.2	109	80.0-120	
1,3-Dichlorobenzene	25.0	27.4	109	72.0-123	
1,4-Dichlorobenzene	25.0	26.9	108	77.0-120	
Dichlorodifluoromethane	25.0	28.8	115	49.0-155	
1,1-Dichloroethane	25.0	27.6	111	70.0-126	
1,2-Dichloroethane	25.0	27.7	111	67.0-126	
1,1-Dichloroethene	25.0	26.4	105	64.0-129	
cis-1,2-Dichloroethene	25.0	26.2	105	73.0-120	
trans-1,2-Dichloroethene	25.0	27.7	111	71.0-121	
1,2-Dichloropropane	25.0	27.0	108	75.0-125	
1,1-Dichloropropene	25.0	28.6	114	71.0-129	
1,3-Dichloropropane	25.0	27.1	108	80.0-121	

Public Review Draft

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L990247-01.02.03.04.05.06.07](#)

Laboratory Control Sample (LCS)

(LCS) R3307630-1 05/02/18 12:25

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,3-Dichloropropene	25.0	27.3	109	79.0-123	
trans-1,3-Dichloropropene	25.0	27.1	108	74.0-127	
2,2-Dichloropropane	25.0	25.9	104	60.0-125	
Di-isopropyl ether	25.0	25.8	103	59.0-133	
Ethylbenzene	25.0	28.3	113	77.0-120	
Hexachloro-1,3-butadiene	25.0	27.1	109	64.0-131	
Isopropylbenzene	25.0	23.2	93.0	75.0-120	
p-Isopropyltoluene	25.0	27.4	109	74.0-126	
2-Butanone (MEK)	125	119	94.9	37.0-158	
Methylene Chloride	25.0	25.4	102	66.0-121	
4-Methyl-2-pentanone (MIBK)	125	132	106	59.0-143	
Methyl tert-butyl ether	25.0	25.8	103	64.0-123	
Naphthalene	25.0	27.1	108	62.0-128	
n-Propylbenzene	25.0	25.6	102	79.0-120	
Styrene	25.0	23.2	92.9	78.0-124	
1,1,1,2-Tetrachloroethane	25.0	27.3	109	75.0-122	
1,1,2,2-Tetrachloroethane	25.0	23.5	94.0	71.0-122	
Tetrachloroethene	25.0	30.1	120	70.0-127	
Toluene	25.0	27.2	109	77.0-120	
1,1,2-Trichlorotrifluoroethane	25.0	29.5	118	61.0-136	
1,2,3-Trichlorobenzene	25.0	27.9	112	61.0-133	
1,2,4-Trichlorobenzene	25.0	28.9	116	69.0-129	
1,1,1-Trichloroethane	25.0	26.9	108	68.0-122	
1,1,2-Trichloroethane	25.0	26.0	104	78.0-120	
Trichloroethene	25.0	27.9	111	78.0-120	
Trichlorofluoromethane	25.0	28.4	114	56.0-137	
1,2,3-Trichloropropane	25.0	24.9	99.7	72.0-124	
1,2,3-Trimethylbenzene	25.0	26.7	107	75.0-120	
1,2,4-Trimethylbenzene	25.0	27.0	108	75.0-120	
1,3,5-Trimethylbenzene	25.0	27.2	109	75.0-120	
Vinyl chloride	25.0	29.3	117	64.0-133	
Xylenes, Total	75.0	84.8	113	77.0-120	
(S) Toluene-d8			102	80.0-120	
(S) Dibromofluoromethane			97.6	76.0-123	
(S) 4-Bromofluorobenzene			84.5	80.0-120	

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.



ESC Lab Sciences is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by ESC Lab Sciences.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

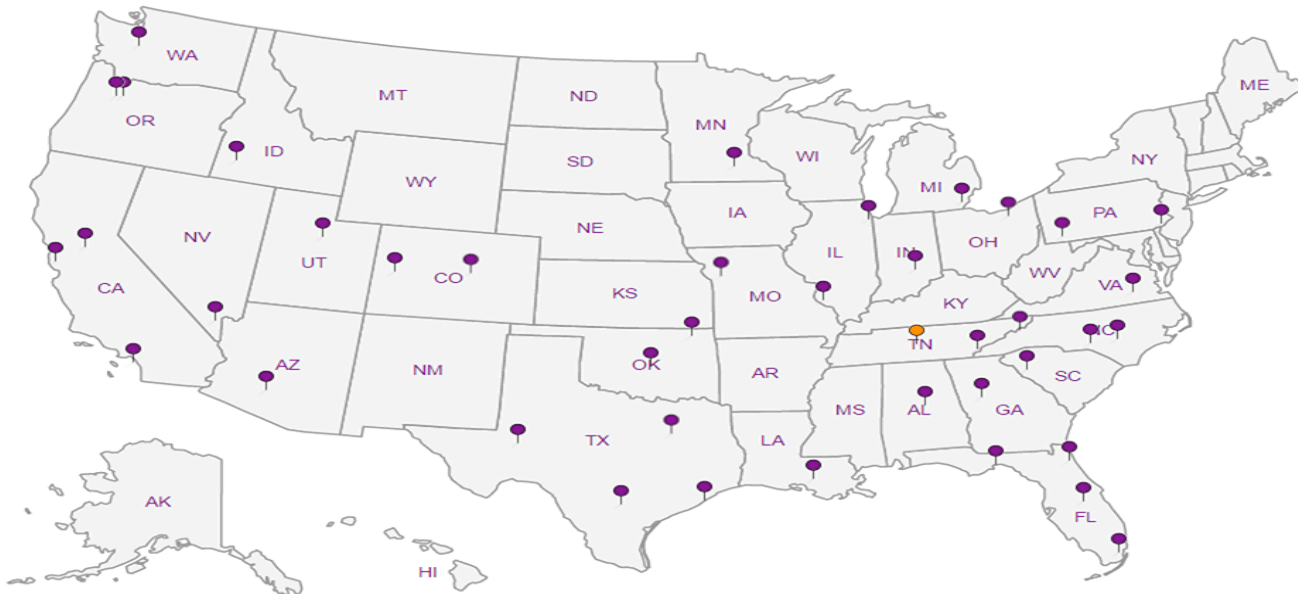
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹Drinking Water ²Underground Storage Tanks ³Aquatic Toxicity ⁴Chemical/Microbiological ⁵Mold ⁶Wastewater n/a Accreditation not applicable

Our Locations

ESC Lab Sciences has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. ESC Lab Sciences performs all testing at our central laboratory.



1 Cp

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3 Ss

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PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to: **Brian O'Neal/Bill Haldeaman**
Email To: boneal@pesenv.com;
bhaldeaman@pesenv.com

Project Description: **American Linera**
Client Project #: **Seattle, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**
City/State Collected: **Seattle, WA**
Lab Project #: **PESENVSWA-ALP**

Collected by (print): **Jeff Dolbaks**
Collected by (signature): *[Signature]*
Immediately Packed on Ice: **N** **Y**

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Sample ID: **MM-148-050118** Comp/Grab: **6** Matrix: **SS** Depth: **6** Date: **5/1/14** Time: **0855** Cmts: **11**

MM-153-050118 **6** **SS** **6** **5/1/14** **1102** **11**

MM-147-050118 **6** **SS** **6** **5/1/14** **1243** **3**

MM-905-050118 **6** **SS** **6** **5/1/14** **1108** **11**

MM-147-050118 **6** **SS** **6** **5/1/14** **1353** **11**

MM-050118 **6** **SS** **6** **5/1/14** **1442** **11**

TRIPBLANK-050118 **6** **SS** **6** **5/1/14** **-** **1**

Remarks: **SS**

Matrix: **SS - Soil** **AIR - Air** **F - Filter**
GW - Groundwater **B - Bioassay**
DW - Drinking Water
OT - Other

Relinquished by: (Signature) *[Signature]* Date: **5/1/14** Time: **1540**

Relinquished by: (Signature) *[Signature]* Date: **5/1/14** Time: **1540**

Pres Chk

V8260C VOCs 40ml/NaHSO4/Syr/MeOH
dry wt,voc screen 2ozClr-NoPres

NOS,SO4,Cl,Alk 250mlHDPE-NoPres

NWTPHX 40mlAmb HCl

RSK(75LLUEEM) 40mlAmb HCl

Total Fe Mn 6020 250mlHDPE HNO3

TOC 250ml Amb HCl

V8260C VOCs 40ml Amb HCl

Analysis / Container Preservation

Chain of Custody Page 1 of 1

L# **C097**
L99D247

Account: **PESENVSWA**
Template: **T134663**
Prelogin: **P647547**
TSR: **110 - Brian Ford**
Pg. **44-18 cm**
Shipped Via: **FedEx Ground**

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles active/Intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA zero Headspace: Y N
Preservation correct/Checked: Y N

Temp: **7.4** °C
Temp: **57** °C
Temp: **57** °C

Received by: (Signature) *[Signature]*
Received for Lab Use (Signature) *[Signature]*
Date: **5/1/14** Time: **0845**

Condition: **NCF / OK**

Katie Ingram

**ESC Lab Sciences
Non-Conformance Form**

Login #:L990247	Client:PESENVSWA	Date:05/02/18	Evaluated by: Myra "Katie" Ingram
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Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	
Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
Improper temperature	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
Improper preservation	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
X Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments:

One of the vials for the ID: EQ-050118 was received broken

Client informed by:	Call	Email	Voice Mail	Date:	Time:
TSR Initials:bjf	Client Contact:				

Login Instructions:

Proceed with remaining sample volume

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	170000		2710	20000	1	05/07/2018 23:35	WG1107743

Sample Narrative:

L990247-01 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	22200		51.9	1000	1	05/02/2018 23:14	WG1105796
Nitrate	U		22.7	100	1	05/02/2018 23:14	WG1105796
Sulfate	95500		77.4	5000	1	05/02/2018 23:14	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2460		102	1000	1	05/04/2018 20:23	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	12000		15.0	100	1	05/04/2018 15:32	WG1106119
Manganese	439		0.250	5.00	1	05/04/2018 15:32	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 18:17	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 18:17	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1210		0.287	0.678	1	05/08/2018 11:21	WG1107967
Ethane	U		0.296	1.29	1	05/08/2018 11:21	WG1107967
Ethene	U		0.422	1.27	1	05/08/2018 11:21	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	6.56 U	J	1.05	25.0	1	05/02/2018 15:22	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 15:22	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 15:22	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 15:22	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 15:22	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 15:22	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 15:22	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 15:22	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 15:22	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 15:22	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 15:22	WG1105852
Carbon disulfide	1.01		0.101	0.500	1	05/02/2018 15:22	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 15:22	WG1105852

JC 6/11/18

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9 Sc



Collected date/time: 05/01/18 08:55

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 15:22	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 15:22	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 15:22	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 15:22	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 15:22	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 15:22	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 15:22	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 15:22	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 15:22	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 15:22	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 15:22	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 15:22	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 15:22	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 15:22	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 15:22	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 15:22	WG105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 15:22	WG105852
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/02/2018 15:22	WG105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 15:22	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 15:22	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 15:22	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 15:22	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 15:22	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 15:22	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 15:22	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 15:22	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 15:22	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 15:22	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 15:22	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 15:22	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 15:22	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 15:22	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 15:22	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 15:22	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 15:22	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 15:22	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 15:22	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 15:22	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 15:22	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 15:22	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 15:22	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 15:22	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 15:22	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 15:22	WG105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 15:22	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 15:22	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 15:22	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 15:22	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 15:22	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 15:22	WG105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 15:22	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 15:22	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 15:22	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 15:22	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 15:22	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 15:22	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 15:22	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/02/2018 15:22	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 15:22	WG1105852
(S) Toluene-d8	106			80.0-120		05/02/2018 15:22	WG1105852
(S) Dibromofluoromethane	96.2			76.0-123		05/02/2018 15:22	WG1105852
(S) 4-Bromofluorobenzene	80.9			80.0-120		05/02/2018 15:22	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	148000		2710	20000	1	05/07/2018 23:43	WG1107743

Sample Narrative:

L990247-02 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	23800		51.9	1000	1	05/02/2018 23:29	WG1105796
Nitrate	U		22.7	100	1	05/02/2018 23:29	WG1105796
Sulfate	23700		77.4	5000	1	05/02/2018 23:29	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1260		102	1000	1	05/04/2018 20:40	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1010		15.0	100	1	05/04/2018 15:36	WG1106119
Manganese	187		0.250	5.00	1	05/04/2018 15:36	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 18:41	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 18:41	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	74.3		0.287	0.678	1	05/08/2018 11:28	WG1107967
Ethane	U		0.296	1.29	1	05/08/2018 11:28	WG1107967
Ethene	U		0.422	1.27	1	05/08/2018 11:28	WG1107967

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.65	U	1.05	25.0	1	05/02/2018 15:42	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 15:42	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 15:42	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 15:42	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 15:42	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 15:42	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 15:42	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 15:42	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 15:42	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 15:42	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 15:42	WG1105852
Carbon disulfide	4.54		0.101	0.500	1	05/02/2018 15:42	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 15:42	WG1105852

JC 6/11/18

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 05/01/18 11:02

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 15:42	WG1105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 15:42	WG1105852
Chloroethane	U		0.141	2.50	1	05/02/2018 15:42	WG1105852
Chloroform	0.870		0.0860	0.500	1	05/02/2018 15:42	WG1105852
Chloromethane	U		0.153	1.25	1	05/02/2018 15:42	WG1105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 15:42	WG1105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 15:42	WG1105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 15:42	WG1105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 15:42	WG1105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 15:42	WG1105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 15:42	WG1105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 15:42	WG1105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 15:42	WG1105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 15:42	WG1105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 15:42	WG1105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 15:42	WG1105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 15:42	WG1105852
cis-1,2-Dichloroethene	0.612		0.0933	0.500	1	05/02/2018 15:42	WG1105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 15:42	WG1105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 15:42	WG1105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 15:42	WG1105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 15:42	WG1105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 15:42	WG1105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 15:42	WG1105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 15:42	WG1105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 15:42	WG1105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 15:42	WG1105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 15:42	WG1105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 15:42	WG1105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 15:42	WG1105852
n-Hexane	U		0.305	5.00	1	05/02/2018 15:42	WG1105852
Iodomethane	U		0.377	10.0	1	05/02/2018 15:42	WG1105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 15:42	WG1105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 15:42	WG1105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 15:42	WG1105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 15:42	WG1105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 15:42	WG1105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 15:42	WG1105852
Naphthalene	U		0.174	2.50	1	05/02/2018 15:42	WG1105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 15:42	WG1105852
Styrene	U		0.117	0.500	1	05/02/2018 15:42	WG1105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 15:42	WG1105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 15:42	WG1105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 15:42	WG1105852
Tetrachloroethene	0.756		0.199	0.500	1	05/02/2018 15:42	WG1105852
Toluene	U		0.412	0.500	1	05/02/2018 15:42	WG1105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 15:42	WG1105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 15:42	WG1105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 15:42	WG1105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 15:42	WG1105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 15:42	WG1105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 15:42	WG1105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 15:42	WG1105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 15:42	WG1105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 15:42	WG1105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 15:42	WG1105852

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 15:42	WG1105852
Vinyl chloride	9.56		0.118	0.500	1	05/02/2018 15:42	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 15:42	WG1105852
<i>(S) Toluene-d8</i>	104			80.0-120		05/02/2018 15:42	WG1105852
<i>(S) Dibromofluoromethane</i>	95.3			76.0-123		05/02/2018 15:42	WG1105852
<i>(S) 4-Bromofluorobenzene</i>	82.2			80.0-120		05/02/2018 15:42	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.92	U J	1.05	25.0	1	05/02/2018 16:01	WG105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 16:01	WG105852
Benzene	U		0.0896	0.500	1	05/02/2018 16:01	WG105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 16:01	WG105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 16:01	WG105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 16:01	WG105852
Bromoform	U		0.186	0.500	1	05/02/2018 16:01	WG105852
Bromomethane	U		0.157	2.50	1	05/02/2018 16:01	WG105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 16:01	WG105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 16:01	WG105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 16:01	WG105852
Carbon disulfide	0.792		0.101	0.500	1	05/02/2018 16:01	WG105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 16:01	WG105852
Chlorobenzene	U		0.140	0.500	1	05/02/2018 16:01	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 16:01	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 16:01	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 16:01	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 16:01	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 16:01	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 16:01	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 16:01	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 16:01	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 16:01	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 16:01	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 16:01	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 16:01	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 16:01	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 16:01	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 16:01	WG105852
1,1-Dichloroethene	18.0		0.188	0.500	1	05/02/2018 16:01	WG105852
cis-1,2-Dichloroethene	1640		4.66	25.0	50	05/07/2018 19:46	WG105852
trans-1,2-Dichloroethene	2.27		0.152	0.500	1	05/02/2018 16:01	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 16:01	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 16:01	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 16:01	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 16:01	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 16:01	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 16:01	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 16:01	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 16:01	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 16:01	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 16:01	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 16:01	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 16:01	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 16:01	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 16:01	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 16:01	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 16:01	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 16:01	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 16:01	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 16:01	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 16:01	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 16:01	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 16:01	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 16:01	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 16:01	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Collected date/time: 05/01/18 12:43

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 16:01	WG1105852
Tetrachloroethene	18.9		0.199	0.500	1	05/02/2018 16:01	WG1105852
Toluene	0.643		0.412	0.500	1	05/02/2018 16:01	WG1105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 16:01	WG1105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 16:01	WG1105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 16:01	WG1105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 16:01	WG1105852
Trichloroethene	282		7.65	25.0	50	05/07/2018 19:46	WG1105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 16:01	WG1105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 16:01	WG1105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 16:01	WG1105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 16:01	WG1105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 16:01	WG1105852
Vinyl acetate	U		0.645	5.00	1	05/02/2018 16:01	WG1105852
Vinyl chloride	34.1		0.118	0.500	1	05/02/2018 16:01	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 16:01	WG1105852
(S) Toluene-d8	105			80.0-120		05/02/2018 16:01	WG1105852
(S) Toluene-d8	102			80.0-120		05/07/2018 19:46	WG1105852
(S) Dibromofluoromethane	89.5			76.0-123		05/07/2018 19:46	WG1105852
(S) Dibromofluoromethane	96.2			76.0-123		05/02/2018 16:01	WG1105852
(S) 4-Bromofluorobenzene	82.4			80.0-120		05/02/2018 16:01	WG1105852
(S) 4-Bromofluorobenzene	96.4			80.0-120		05/07/2018 19:46	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	162000		2710	20000	1	05/07/2018 23:51	WG1107743

Sample Narrative:

L990247-04 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	22500		51.9	1000	1	05/02/2018 23:45	WG1105796
Nitrate	U		22.7	100	1	05/02/2018 23:45	WG1105796
Sulfate	96100		77.4	5000	1	05/02/2018 23:45	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2530		102	1000	1	05/04/2018 20:54	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	11200		15.0	100	1	05/04/2018 15:55	WG1106119
Manganese	379		0.250	5.00	1	05/04/2018 15:55	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 19:05	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 19:05	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1140		0.287	0.678	1	05/08/2018 13:26	WG1107969
Ethane	U		0.296	1.29	1	05/08/2018 13:26	WG1107969
Ethene	U		0.422	1.27	1	05/08/2018 13:26	WG1107969

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	5.73	U	1.05	25.0	1	05/02/2018 16:21	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 16:21	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 16:21	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 16:21	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 16:21	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 16:21	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 16:21	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 16:21	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 16:21	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 16:21	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 16:21	WG1105852
Carbon disulfide	1.14		0.101	0.500	1	05/02/2018 16:21	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 16:21	WG1105852

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 05/01/18 11:08

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 16:21	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 16:21	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 16:21	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 16:21	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 16:21	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 16:21	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 16:21	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 16:21	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 16:21	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 16:21	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 16:21	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 16:21	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 16:21	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 16:21	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 16:21	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 16:21	WG105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 16:21	WG105852
cis-1,2-Dichloroethene	0.216	J U	0.0933	0.500	1	05/07/2018 20:05	WG105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 16:21	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 16:21	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 16:21	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 16:21	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 16:21	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 16:21	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 16:21	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 16:21	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 16:21	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 16:21	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 16:21	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 16:21	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 16:21	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 16:21	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 16:21	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 16:21	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 16:21	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 16:21	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 16:21	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 16:21	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 16:21	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 16:21	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 16:21	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 16:21	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 16:21	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 16:21	WG105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 16:21	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 16:21	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 16:21	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 16:21	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 16:21	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 16:21	WG105852
Trichloroethene	U		0.153	0.500	1	05/07/2018 20:05	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 16:21	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 16:21	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 16:21	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 16:21	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 16:21	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 16:21	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/02/2018 16:21	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 16:21	WG1105852
(S) Toluene-d8	106			80.0-120		05/02/2018 16:21	WG1105852
(S) Toluene-d8	98.5			80.0-120		05/07/2018 20:05	WG1105852
(S) Dibromofluoromethane	92.3			76.0-123		05/07/2018 20:05	WG1105852
(S) Dibromofluoromethane	96.5			76.0-123		05/02/2018 16:21	WG1105852
(S) 4-Bromofluorobenzene	96.3			80.0-120		05/07/2018 20:05	WG1105852
(S) 4-Bromofluorobenzene	80.5			80.0-120		05/02/2018 16:21	WG1105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	302000		2710	20000	1	05/07/2018 23:58	WG1107743

Sample Narrative:

L990247-05 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	40800		51.9	1000	1	05/03/2018 00:00	WG1105796
Nitrate	U		22.7	100	1	05/03/2018 00:00	WG1105796
Sulfate	183000		387	25000	5	05/03/2018 12:23	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	21300		102	1000	1	05/04/2018 21:13	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	17100		15.0	100	1	05/04/2018 16:00	WG1106119
Manganese	564		0.250	5.00	1	05/04/2018 16:00	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	484		31.6	100	1	05/02/2018 19:28	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	107			77.0-122		05/02/2018 19:28	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5060		0.287	0.678	1	05/08/2018 13:28	WG1107969
Ethane	10.7		0.296	1.29	1	05/08/2018 13:28	WG1107969
Ethene	144		0.422	1.27	1	05/08/2018 13:28	WG1107969

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	3.16	U	1.05	25.0	1	05/02/2018 16:41	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 16:41	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 16:41	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 16:41	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 16:41	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 16:41	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 16:41	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 16:41	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 16:41	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 16:41	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 16:41	WG1105852
Carbon disulfide	6.02		0.101	0.500	1	05/02/2018 16:41	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 16:41	WG1105852

JC 6/11/18

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 05/01/18 13:53

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 16:41	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 16:41	WG105852
Chloroethane	2.01	J	0.141	2.50	1	05/02/2018 16:41	WG105852
Chloroform	U		0.0860	0.500	1	05/02/2018 16:41	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 16:41	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 16:41	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 16:41	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 16:41	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 16:41	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 16:41	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 16:41	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 16:41	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 16:41	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 16:41	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 16:41	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 16:41	WG105852
1,1-Dichloroethene	4.59		0.188	0.500	1	05/02/2018 16:41	WG105852
cis-1,2-Dichloroethene	399		2.33	12.5	25	05/07/2018 20:25	WG105852
trans-1,2-Dichloroethene	2.09		0.152	0.500	1	05/02/2018 16:41	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 16:41	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 16:41	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 16:41	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 16:41	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 16:41	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 16:41	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 16:41	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 16:41	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 16:41	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 16:41	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 16:41	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 16:41	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 16:41	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 16:41	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 16:41	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 16:41	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 16:41	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 16:41	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 16:41	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 16:41	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 16:41	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 16:41	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 16:41	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 16:41	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 16:41	WG105852
Tetrachloroethene	19.8		0.199	0.500	1	05/02/2018 16:41	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 16:41	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 16:41	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 16:41	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 16:41	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 16:41	WG105852
Trichloroethene	83.4		0.153	0.500	1	05/02/2018 16:41	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 16:41	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 16:41	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 16:41	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 16:41	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 16:41	WG105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 16:41	WG1105852
Vinyl chloride	1150		2.95	12.5	25	05/07/2018 20:25	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 16:41	WG1105852
<i>(S) Toluene-d8</i>	106			80.0-120		05/02/2018 16:41	WG1105852
<i>(S) Toluene-d8</i>	99.7			80.0-120		05/07/2018 20:25	WG1105852
<i>(S) Dibromofluoromethane</i>	97.1			76.0-123		05/02/2018 16:41	WG1105852
<i>(S) Dibromofluoromethane</i>	95.1			76.0-123		05/07/2018 20:25	WG1105852
<i>(S) 4-Bromofluorobenzene</i>	81.1			80.0-120		05/02/2018 16:41	WG1105852
<i>(S) 4-Bromofluorobenzene</i>	94.1			80.0-120		05/07/2018 20:25	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	6640	J	2710	20000	1	05/08/2018 08:40	WG1107743

Sample Narrative:

L990247-06 WG1107743: Endpoint pH 4.5 Headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	864	J	51.9	1000	1	05/03/2018 00:15	WG1105796
Nitrate	U		22.7	100	1	05/03/2018 00:15	WG1105796
Sulfate	U		77.4	5000	1	05/03/2018 00:15	WG1105796

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	104	J	102	1000	1	05/04/2018 21:25	WG1106959

Metals (ICPMS) by Method 6020A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	U		15.0	100	1	05/04/2018 16:04	WG1106119
Manganese	1.05	J	0.250	5.00	1	05/04/2018 16:04	WG1106119

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.4	U	31.6	100	1	05/02/2018 19:52	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 19:52	WG1106035

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	05/08/2018 13:33	WG1107969
Ethane	U		0.296	1.29	1	05/08/2018 13:33	WG1107969
Ethene	U		0.422	1.27	1	05/08/2018 13:33	WG1107969

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	3.35	J	1.05	25.0	1	05/02/2018 17:01	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 17:01	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 17:01	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 17:01	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 17:01	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 17:01	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 17:01	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 17:01	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 17:01	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 17:01	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 17:01	WG1105852
Carbon disulfide	U		0.101	0.500	1	05/02/2018 17:01	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 17:01	WG1105852

JC 6/11/18



Collected date/time: 05/01/18 14:42

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/02/2018 17:01	WG105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 17:01	WG105852
Chloroethane	U		0.141	2.50	1	05/02/2018 17:01	WG105852
Chloroform	0.181	J	0.0860	0.500	1	05/02/2018 17:01	WG105852
Chloromethane	U		0.153	1.25	1	05/02/2018 17:01	WG105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 17:01	WG105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 17:01	WG105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 17:01	WG105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 17:01	WG105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 17:01	WG105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 17:01	WG105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 17:01	WG105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 17:01	WG105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 17:01	WG105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 17:01	WG105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 17:01	WG105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 17:01	WG105852
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/07/2018 20:45	WG105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 17:01	WG105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 17:01	WG105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 17:01	WG105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 17:01	WG105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 17:01	WG105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 17:01	WG105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 17:01	WG105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 17:01	WG105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 17:01	WG105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 17:01	WG105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 17:01	WG105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 17:01	WG105852
n-Hexane	U		0.305	5.00	1	05/02/2018 17:01	WG105852
Iodomethane	U		0.377	10.0	1	05/02/2018 17:01	WG105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 17:01	WG105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 17:01	WG105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 17:01	WG105852
Methylene Chloride	U		1.07	2.50	1	05/02/2018 17:01	WG105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 17:01	WG105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 17:01	WG105852
Naphthalene	U		0.174	2.50	1	05/02/2018 17:01	WG105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 17:01	WG105852
Styrene	U		0.117	0.500	1	05/02/2018 17:01	WG105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 17:01	WG105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 17:01	WG105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 17:01	WG105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 17:01	WG105852
Toluene	U		0.412	0.500	1	05/02/2018 17:01	WG105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 17:01	WG105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 17:01	WG105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 17:01	WG105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 17:01	WG105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 17:01	WG105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 17:01	WG105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 17:01	WG105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 17:01	WG105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 17:01	WG105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 17:01	WG105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 6/11/18



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	05/02/2018 17:01	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/07/2018 20:45	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 17:01	WG1105852
(S) Toluene-d8	102			80.0-120		05/07/2018 20:45	WG1105852
(S) Toluene-d8	104			80.0-120		05/02/2018 17:01	WG1105852
(S) Dibromofluoromethane	91.5			76.0-123		05/07/2018 20:45	WG1105852
(S) Dibromofluoromethane	97.7			76.0-123		05/02/2018 17:01	WG1105852
(S) 4-Bromofluorobenzene	82.9			80.0-120		05/02/2018 17:01	WG1105852
(S) 4-Bromofluorobenzene	96.7			80.0-120		05/07/2018 20:45	WG1105852

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 6/11/18



Collected date/time: 05/01/18 00:00

L990247

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2018 17:53	WG1106035
(S) a,a,a-Trifluorotoluene(FID)	108			77.0-122		05/02/2018 17:53	WG1106035

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	05/02/2018 13:44	WG1105852
Acrylonitrile	U		0.873	5.00	1	05/02/2018 13:44	WG1105852
Benzene	U		0.0896	0.500	1	05/02/2018 13:44	WG1105852
Bromobenzene	U		0.133	0.500	1	05/02/2018 13:44	WG1105852
Bromodichloromethane	U		0.0800	0.500	1	05/02/2018 13:44	WG1105852
Bromochloromethane	U		0.145	0.500	1	05/02/2018 13:44	WG1105852
Bromoform	U		0.186	0.500	1	05/02/2018 13:44	WG1105852
Bromomethane	U		0.157	2.50	1	05/02/2018 13:44	WG1105852
n-Butylbenzene	U		0.143	0.500	1	05/02/2018 13:44	WG1105852
sec-Butylbenzene	U		0.134	0.500	1	05/02/2018 13:44	WG1105852
tert-Butylbenzene	U		0.183	0.500	1	05/02/2018 13:44	WG1105852
Carbon disulfide	U		0.101	0.500	1	05/02/2018 13:44	WG1105852
Carbon tetrachloride	U		0.159	0.500	1	05/02/2018 13:44	WG1105852
Chlorobenzene	U		0.140	0.500	1	05/02/2018 13:44	WG1105852
Chlorodibromomethane	U		0.128	0.500	1	05/02/2018 13:44	WG1105852
Chloroethane	U		0.141	2.50	1	05/02/2018 13:44	WG1105852
Chloroform	U		0.0860	0.500	1	05/02/2018 13:44	WG1105852
Chloromethane	U		0.153	1.25	1	05/02/2018 13:44	WG1105852
2-Chlorotoluene	U		0.111	0.500	1	05/02/2018 13:44	WG1105852
4-Chlorotoluene	U		0.0972	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/02/2018 13:44	WG1105852
1,2-Dibromoethane	U		0.193	0.500	1	05/02/2018 13:44	WG1105852
Dibromomethane	U		0.117	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dichlorobenzene	U		0.101	0.500	1	05/02/2018 13:44	WG1105852
1,3-Dichlorobenzene	U		0.130	0.500	1	05/02/2018 13:44	WG1105852
1,4-Dichlorobenzene	U		0.121	0.500	1	05/02/2018 13:44	WG1105852
Dichlorodifluoromethane	U		0.127	2.50	1	05/02/2018 13:44	WG1105852
1,1-Dichloroethane	U		0.114	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dichloroethane	U		0.108	0.500	1	05/02/2018 13:44	WG1105852
1,1-Dichloroethene	U		0.188	0.500	1	05/02/2018 13:44	WG1105852
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/02/2018 13:44	WG1105852
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/02/2018 13:44	WG1105852
1,2-Dichloropropane	U		0.190	0.500	1	05/02/2018 13:44	WG1105852
1,1-Dichloropropene	U		0.128	0.500	1	05/02/2018 13:44	WG1105852
1,3-Dichloropropane	U		0.147	1.00	1	05/02/2018 13:44	WG1105852
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/02/2018 13:44	WG1105852
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/02/2018 13:44	WG1105852
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/02/2018 13:44	WG1105852
2,2-Dichloropropane	U		0.0929	0.500	1	05/02/2018 13:44	WG1105852
Di-isopropyl ether	U		0.0924	0.500	1	05/02/2018 13:44	WG1105852
Ethylbenzene	U		0.158	0.500	1	05/02/2018 13:44	WG1105852
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/02/2018 13:44	WG1105852
2-Hexanone	U		0.757	5.00	1	05/02/2018 13:44	WG1105852
n-Hexane	U		0.305	5.00	1	05/02/2018 13:44	WG1105852
Iodomethane	U		0.377	10.0	1	05/02/2018 13:44	WG1105852
Isopropylbenzene	U		0.126	0.500	1	05/02/2018 13:44	WG1105852
p-Isopropyltoluene	U		0.138	0.500	1	05/02/2018 13:44	WG1105852
2-Butanone (MEK)	U		1.28	5.00	1	05/02/2018 13:44	WG1105852

JC 6/11/18



Collected date/time: 05/01/18 00:00

L990247

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/02/2018 13:44	WG1105852
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/02/2018 13:44	WG1105852
Methyl tert-butyl ether	U		0.102	0.500	1	05/02/2018 13:44	WG1105852
Naphthalene	U		0.174	2.50	1	05/02/2018 13:44	WG1105852
n-Propylbenzene	U		0.162	0.500	1	05/02/2018 13:44	WG1105852
Styrene	U		0.117	0.500	1	05/02/2018 13:44	WG1105852
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/02/2018 13:44	WG1105852
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/02/2018 13:44	WG1105852
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/02/2018 13:44	WG1105852
Tetrachloroethene	U		0.199	0.500	1	05/02/2018 13:44	WG1105852
Toluene	U		0.412	0.500	1	05/02/2018 13:44	WG1105852
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/02/2018 13:44	WG1105852
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/02/2018 13:44	WG1105852
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/02/2018 13:44	WG1105852
1,1,2-Trichloroethane	U		0.186	0.500	1	05/02/2018 13:44	WG1105852
Trichloroethene	U		0.153	0.500	1	05/02/2018 13:44	WG1105852
Trichlorofluoromethane	U		0.130	2.50	1	05/02/2018 13:44	WG1105852
1,2,3-Trichloropropane	U		0.247	2.50	1	05/02/2018 13:44	WG1105852
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/02/2018 13:44	WG1105852
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/02/2018 13:44	WG1105852
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/02/2018 13:44	WG1105852
Vinyl acetate	U		0.645	5.00	1	05/02/2018 13:44	WG1105852
Vinyl chloride	U		0.118	0.500	1	05/02/2018 13:44	WG1105852
Xylenes, Total	U		0.316	1.50	1	05/02/2018 13:44	WG1105852
(S) Toluene-d8	105			80.0-120		05/02/2018 13:44	WG1105852
(S) Dibromofluoromethane	95.2			76.0-123		05/02/2018 13:44	WG1105852
(S) 4-Bromofluorobenzene	82.0			80.0-120		05/02/2018 13:44	WG1105852

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 6/11/18



3600 Fremont Ave. N.
Seattle, WA 98103
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F: (206) 352-7178
info@fremontanalytical.com

Shannon & Wilson

Blaine Nesbit
400 N. 34th Street, Suite 100
Seattle, WA 98103

RE: Megablock Phase II
Work Order Number: 1705140

May 26, 2017

Attention Blaine Nesbit:

Fremont Analytical, Inc. received 12 sample(s) on 5/11/2017 for the analyses presented in the following report.

- Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.***
- Dissolved Mercury by EPA Method 245.1***
- Dissolved Metals by EPA Method 200.8***
- Gasoline by NWTPH-Gx***
- Mercury by EPA Method 245.1***
- Mercury by EPA Method 7471***
- Sample Moisture (Percent Moisture)***
- Total Metals by EPA Method 200.8***
- Total Metals by EPA Method 6020***
- Volatile Organic Compounds by EPA Method 8260C***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)



Mike Ridgeway
Laboratory Director

CC:
Agnes Tirao



Date: 05/26/2017

CLIENT: Shannon & Wilson
Project: Megablock Phase II
Work Order: 1705140

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1705140-001	21417-MB10:28	05/11/2017 11:00 AM	05/11/2017 5:10 PM
1705140-002	21417-MB6:9	05/11/2017 3:35 PM	05/11/2017 5:10 PM
1705140-003	21417-MB11:23	05/11/2017 9:45 AM	05/11/2017 5:10 PM
1705140-004	21417-SPW:0.0	05/11/2017 10:35 AM	05/11/2017 5:10 PM
1705140-005	21417-MB9:22	05/11/2017 1:45 PM	05/11/2017 5:10 PM
1705140-006	21417-MB9:13	05/11/2017 1:05 PM	05/11/2017 5:10 PM
1705140-007	21417-MB8:27	05/11/2017 3:15 PM	05/11/2017 5:10 PM
1705140-008	21417-MB7:11	05/11/2017 4:05 PM	05/11/2017 5:10 PM
1705140-009	21417-MB10:GW	05/11/2017 12:00 PM	05/11/2017 5:10 PM
1705140-010	21417-MB9:GW	05/11/2017 1:55 PM	05/11/2017 5:10 PM
1705140-011	21417-MB11:GW	05/11/2017 10:00 AM	05/11/2017 5:10 PM
1705140-012	Trip Blank	05/10/2017 11:07 AM	05/11/2017 5:10 PM



Case Narrative

WO#: 1705140

Date: 5/26/2017

CLIENT: Shannon & Wilson
Project: Megablock Phase II

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



Qualifiers & Acronyms

WO#: 1705140

Date Reported: 5/26/2017

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 11:00:00 AM

Project: Megablock Phase II

Lab ID: 1705140-001

Matrix: Soil

Client Sample ID: 21417-MB10:28

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17044

Analyst: SB

Diesel (Fuel Oil)	ND	22.2		mg/Kg-dry	1	5/16/2017 6:01:12 AM
Heavy Oil	ND	55.4		mg/Kg-dry	1	5/16/2017 6:01:12 AM
Surr: 2-Fluorobiphenyl	120	50-150		%Rec	1	5/16/2017 6:01:12 AM
Surr: o-Terphenyl	121	50-150		%Rec	1	5/16/2017 6:01:12 AM

Gasoline by NWTPH-Gx

Batch ID: 17056

Analyst: NG

Gasoline	ND	4.33		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Surr: Toluene-d8	99.1	65-135		%Rec	1	5/16/2017 1:12:20 PM
Surr: 4-Bromofluorobenzene	98.2	65-135		%Rec	1	5/16/2017 1:12:20 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0519	Q	mg/Kg-dry	1	5/16/2017 1:12:20 PM
Chloromethane	ND	0.0519		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Vinyl chloride	ND	0.00173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Bromomethane	ND	0.0779		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Trichlorofluoromethane (CFC-11)	ND	0.0433		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Chloroethane	ND	0.0519		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,1-Dichloroethene	ND	0.0433		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Methylene chloride	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
trans-1,2-Dichloroethene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Methyl tert-butyl ether (MTBE)	ND	0.0433		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,1-Dichloroethane	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
2,2-Dichloropropane	ND	0.0433	Q	mg/Kg-dry	1	5/16/2017 1:12:20 PM
cis-1,2-Dichloroethene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Chloroform	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,1,1-Trichloroethane (TCA)	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,1-Dichloropropene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Carbon tetrachloride	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2-Dichloroethane (EDC)	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Benzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Trichloroethene (TCE)	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2-Dichloropropane	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Bromodichloromethane	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Dibromomethane	ND	0.0346		mg/Kg-dry	1	5/16/2017 1:12:20 PM
cis-1,3-Dichloropropene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Toluene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
trans-1,3-Dichloropropylene	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 11:00:00 AM

Project: Megablock Phase II

Lab ID: 1705140-001

Matrix: Soil

Client Sample ID: 21417-MB10:28

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,3-Dichloropropane	ND	0.0433		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Tetrachloroethene (PCE)	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Dibromochloromethane	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2-Dibromoethane (EDB)	ND	0.00433		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Chlorobenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,1,1,2-Tetrachloroethane	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Ethylbenzene	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM
m,p-Xylene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
o-Xylene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Styrene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Isopropylbenzene	ND	0.0692		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Bromoform	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,1,2,2-Tetrachloroethane	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
n-Propylbenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Bromobenzene	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,3,5-Trimethylbenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
2-Chlorotoluene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
4-Chlorotoluene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
tert-Butylbenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2,3-Trichloropropane	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2,4-Trichlorobenzene	ND	0.0433		mg/Kg-dry	1	5/16/2017 1:12:20 PM
sec-Butylbenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
4-Isopropyltoluene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,3-Dichlorobenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,4-Dichlorobenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
n-Butylbenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2-Dichlorobenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2-Dibromo-3-chloropropane	ND	0.433		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2,4-Trimethylbenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Hexachlorobutadiene	ND	0.0866		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Naphthalene	ND	0.0260		mg/Kg-dry	1	5/16/2017 1:12:20 PM
1,2,3-Trichlorobenzene	ND	0.0173		mg/Kg-dry	1	5/16/2017 1:12:20 PM
Surr: Dibromofluoromethane	91.0	56.5-129		%Rec	1	5/16/2017 1:12:20 PM
Surr: Toluene-d8	124	64.5-151		%Rec	1	5/16/2017 1:12:20 PM
Surr: 1-Bromo-4-fluorobenzene	94.7	63.1-141		%Rec	1	5/16/2017 1:12:20 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 11:00:00 AM

Project: Megablock Phase II

Lab ID: 1705140-001

Matrix: Soil

Client Sample ID: 21417-MB10:28

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.268		mg/Kg-dry	1	5/17/2017 3:57:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17042 Analyst: TN

Arsenic	7.75	0.0872		mg/Kg-dry	1	5/15/2017 6:05:18 PM
Barium	42.0	0.436		mg/Kg-dry	1	5/15/2017 6:05:18 PM
Cadmium	ND	0.174		mg/Kg-dry	1	5/15/2017 6:05:18 PM
Chromium	43.2	0.0872		mg/Kg-dry	1	5/15/2017 6:05:18 PM
Lead	6.75	0.174		mg/Kg-dry	1	5/15/2017 6:05:18 PM
Selenium	0.990	0.436		mg/Kg-dry	1	5/15/2017 6:05:18 PM
Silver	ND	0.0872	*	mg/Kg-dry	1	5/15/2017 6:05:18 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36134 Analyst: BB

Percent Moisture	13.8			wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 3:35:00 PM

Project: Megablock Phase II

Lab ID: 1705140-002

Matrix: Soil

Client Sample ID: 21417-MB6:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17044

Analyst: SB

Diesel (Fuel Oil)	ND	19.4		mg/Kg-dry	1	5/16/2017 6:32:30 AM
Heavy Oil	ND	48.4		mg/Kg-dry	1	5/16/2017 6:32:30 AM
Surr: 2-Fluorobiphenyl	94.6	50-150		%Rec	1	5/16/2017 6:32:30 AM
Surr: o-Terphenyl	92.6	50-150		%Rec	1	5/16/2017 6:32:30 AM

Gasoline by NWTPH-Gx

Batch ID: 17056

Analyst: NG

Gasoline	ND	3.40		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Surr: Toluene-d8	101	65-135		%Rec	1	5/16/2017 2:09:22 PM
Surr: 4-Bromofluorobenzene	95.7	65-135		%Rec	1	5/16/2017 2:09:22 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0408	Q	mg/Kg-dry	1	5/16/2017 2:09:22 PM
Chloromethane	ND	0.0408		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Vinyl chloride	ND	0.00136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Bromomethane	ND	0.0612		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Trichlorofluoromethane (CFC-11)	ND	0.0340		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Chloroethane	ND	0.0408		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,1-Dichloroethene	ND	0.0340		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Methylene chloride	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
trans-1,2-Dichloroethene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Methyl tert-butyl ether (MTBE)	ND	0.0340		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,1-Dichloroethane	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
2,2-Dichloropropane	ND	0.0340	Q	mg/Kg-dry	1	5/16/2017 2:09:22 PM
cis-1,2-Dichloroethene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Chloroform	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,1,1-Trichloroethane (TCA)	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,1-Dichloropropene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Carbon tetrachloride	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2-Dichloroethane (EDC)	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Benzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Trichloroethene (TCE)	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2-Dichloropropane	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Bromodichloromethane	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Dibromomethane	ND	0.0272		mg/Kg-dry	1	5/16/2017 2:09:22 PM
cis-1,3-Dichloropropene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Toluene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
trans-1,3-Dichloropropylene	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 3:35:00 PM

Project: Megablock Phase II

Lab ID: 1705140-002

Matrix: Soil

Client Sample ID: 21417-MB6:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,3-Dichloropropane	ND	0.0340		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Tetrachloroethene (PCE)	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Dibromochloromethane	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2-Dibromoethane (EDB)	ND	0.00340		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Chlorobenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,1,1,2-Tetrachloroethane	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Ethylbenzene	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM
m,p-Xylene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
o-Xylene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Styrene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Isopropylbenzene	ND	0.0544		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Bromoform	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,1,2,2-Tetrachloroethane	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
n-Propylbenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Bromobenzene	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,3,5-Trimethylbenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
2-Chlorotoluene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
4-Chlorotoluene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
tert-Butylbenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2,3-Trichloropropane	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2,4-Trichlorobenzene	ND	0.0340		mg/Kg-dry	1	5/16/2017 2:09:22 PM
sec-Butylbenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
4-Isopropyltoluene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,3-Dichlorobenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,4-Dichlorobenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
n-Butylbenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2-Dichlorobenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2-Dibromo-3-chloropropane	ND	0.340		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2,4-Trimethylbenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Hexachlorobutadiene	ND	0.0681		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Naphthalene	ND	0.0204		mg/Kg-dry	1	5/16/2017 2:09:22 PM
1,2,3-Trichlorobenzene	ND	0.0136		mg/Kg-dry	1	5/16/2017 2:09:22 PM
Surr: Dibromofluoromethane	89.1	56.5-129		%Rec	1	5/16/2017 2:09:22 PM
Surr: Toluene-d8	97.8	64.5-151		%Rec	1	5/16/2017 2:09:22 PM
Surr: 1-Bromo-4-fluorobenzene	91.8	63.1-141		%Rec	1	5/16/2017 2:09:22 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 3:35:00 PM

Project: Megablock Phase II

Lab ID: 1705140-002

Matrix: Soil

Client Sample ID: 21417-MB6:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.265		mg/Kg-dry	1	5/17/2017 3:58:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17042 Analyst: TN

Arsenic	3.10	0.0839		mg/Kg-dry	1	5/15/2017 6:09:20 PM
Barium	43.3	0.420		mg/Kg-dry	1	5/15/2017 6:09:20 PM
Cadmium	ND	0.168		mg/Kg-dry	1	5/15/2017 6:09:20 PM
Chromium	29.1	0.0839		mg/Kg-dry	1	5/15/2017 6:09:20 PM
Lead	9.18	0.168		mg/Kg-dry	1	5/15/2017 6:09:20 PM
Selenium	1.30	0.420		mg/Kg-dry	1	5/15/2017 6:09:20 PM
Silver	ND	0.0839	*	mg/Kg-dry	1	5/15/2017 6:09:20 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36134 Analyst: BB

Percent Moisture	7.65			wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 9:45:00 AM

Project: Megablock Phase II

Lab ID: 1705140-003

Matrix: Soil

Client Sample ID: 21417-MB11:23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17072

Analyst: SB

Diesel (Fuel Oil)	ND	25.7		mg/Kg-dry	1	5/18/2017 1:11:58 PM
Heavy Oil	ND	64.3		mg/Kg-dry	1	5/18/2017 1:11:58 PM
Surr: 2-Fluorobiphenyl	79.7	50-150		%Rec	1	5/18/2017 1:11:58 PM
Surr: o-Terphenyl	91.9	50-150		%Rec	1	5/18/2017 1:11:58 PM

Gasoline by NWTPH-Gx

Batch ID: 17056

Analyst: NG

Gasoline	ND	6.43		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Surr: Toluene-d8	103	65-135		%Rec	1	5/16/2017 2:37:50 PM
Surr: 4-Bromofluorobenzene	94.7	65-135		%Rec	1	5/16/2017 2:37:50 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0772	Q	mg/Kg-dry	1	5/16/2017 2:37:50 PM
Chloromethane	ND	0.0772		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Vinyl chloride	ND	0.00257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Bromomethane	ND	0.116		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Trichlorofluoromethane (CFC-11)	ND	0.0643		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Chloroethane	ND	0.0772		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,1-Dichloroethene	ND	0.0643		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Methylene chloride	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
trans-1,2-Dichloroethene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Methyl tert-butyl ether (MTBE)	ND	0.0643		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,1-Dichloroethane	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
2,2-Dichloropropane	ND	0.0643	Q	mg/Kg-dry	1	5/16/2017 2:37:50 PM
cis-1,2-Dichloroethene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Chloroform	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,1,1-Trichloroethane (TCA)	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,1-Dichloropropene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Carbon tetrachloride	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2-Dichloroethane (EDC)	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Benzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Trichloroethene (TCE)	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2-Dichloropropane	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Bromodichloromethane	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Dibromomethane	ND	0.0515		mg/Kg-dry	1	5/16/2017 2:37:50 PM
cis-1,3-Dichloropropene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Toluene	0.0348	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
trans-1,3-Dichloropropylene	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 9:45:00 AM

Project: Megablock Phase II

Lab ID: 1705140-003

Matrix: Soil

Client Sample ID: 21417-MB11:23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,3-Dichloropropane	ND	0.0643		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Tetrachloroethene (PCE)	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Dibromochloromethane	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2-Dibromoethane (EDB)	ND	0.00643		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Chlorobenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,1,1,2-Tetrachloroethane	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Ethylbenzene	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM
m,p-Xylene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
o-Xylene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Styrene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Isopropylbenzene	ND	0.103		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Bromoform	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,1,2,2-Tetrachloroethane	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
n-Propylbenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Bromobenzene	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,3,5-Trimethylbenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
2-Chlorotoluene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
4-Chlorotoluene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
tert-Butylbenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2,3-Trichloropropane	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2,4-Trichlorobenzene	ND	0.0643		mg/Kg-dry	1	5/16/2017 2:37:50 PM
sec-Butylbenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
4-Isopropyltoluene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,3-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,4-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
n-Butylbenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2-Dichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2-Dibromo-3-chloropropane	ND	0.643		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2,4-Trimethylbenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Hexachlorobutadiene	ND	0.129		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Naphthalene	ND	0.0386		mg/Kg-dry	1	5/16/2017 2:37:50 PM
1,2,3-Trichlorobenzene	ND	0.0257		mg/Kg-dry	1	5/16/2017 2:37:50 PM
Surr: Dibromofluoromethane	90.2	56.5-129		%Rec	1	5/16/2017 2:37:50 PM
Surr: Toluene-d8	97.7	64.5-151		%Rec	1	5/16/2017 2:37:50 PM
Surr: 1-Bromo-4-fluorobenzene	91.4	63.1-141		%Rec	1	5/16/2017 2:37:50 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 9:45:00 AM

Project: Megablock Phase II

Lab ID: 1705140-003

Matrix: Soil

Client Sample ID: 21417-MB11:23

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.325		mg/Kg-dry	1	5/17/2017 4:00:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17042 Analyst: TN

Arsenic	4.18	0.102		mg/Kg-dry	1	5/15/2017 6:13:21 PM
Barium	101	0.510		mg/Kg-dry	1	5/15/2017 6:13:21 PM
Cadmium	ND	0.204		mg/Kg-dry	1	5/15/2017 6:13:21 PM
Chromium	39.5	0.102		mg/Kg-dry	1	5/15/2017 6:13:21 PM
Lead	7.73	0.204		mg/Kg-dry	1	5/15/2017 6:13:21 PM
Selenium	1.76	0.510		mg/Kg-dry	1	5/15/2017 6:13:21 PM
Silver	ND	0.102	*	mg/Kg-dry	1	5/15/2017 6:13:21 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36134 Analyst: BB

Percent Moisture	27.4			wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 10:35:00 AM

Project: Megablock Phase II

Lab ID: 1705140-004

Matrix: Soil

Client Sample ID: 21417-SPW:0.0

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17044

Analyst: SB

Diesel (Fuel Oil)	ND	28.7		mg/Kg-dry	1	5/16/2017 7:35:03 AM
Heavy Oil	113	71.7		mg/Kg-dry	1	5/16/2017 7:35:03 AM
Surr: 2-Fluorobiphenyl	84.2	50-150		%Rec	1	5/16/2017 7:35:03 AM
Surr: o-Terphenyl	83.6	50-150		%Rec	1	5/16/2017 7:35:03 AM

Gasoline by NWTPH-Gx

Batch ID: 17056

Analyst: NG

Gasoline	ND	5.04		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Surr: Toluene-d8	101	65-135		%Rec	1	5/16/2017 4:08:46 PM
Surr: 4-Bromofluorobenzene	96.0	65-135		%Rec	1	5/16/2017 4:08:46 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0604	Q	mg/Kg-dry	1	5/16/2017 4:08:46 PM
Chloromethane	ND	0.0604		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Vinyl chloride	ND	0.00201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Bromomethane	ND	0.0906		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Trichlorofluoromethane (CFC-11)	ND	0.0504		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Chloroethane	ND	0.0604		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,1-Dichloroethene	ND	0.0504		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Methylene chloride	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
trans-1,2-Dichloroethene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Methyl tert-butyl ether (MTBE)	ND	0.0504		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,1-Dichloroethane	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
2,2-Dichloropropane	ND	0.0504	Q	mg/Kg-dry	1	5/16/2017 4:08:46 PM
cis-1,2-Dichloroethene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Chloroform	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,1,1-Trichloroethane (TCA)	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,1-Dichloropropene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Carbon tetrachloride	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2-Dichloroethane (EDC)	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Benzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Trichloroethene (TCE)	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2-Dichloropropane	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Bromodichloromethane	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Dibromomethane	ND	0.0403		mg/Kg-dry	1	5/16/2017 4:08:46 PM
cis-1,3-Dichloropropene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Toluene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
trans-1,3-Dichloropropylene	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 10:35:00 AM

Project: Megablock Phase II

Lab ID: 1705140-004

Matrix: Soil

Client Sample ID: 21417-SPW:0.0

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,3-Dichloropropane	ND	0.0504		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Tetrachloroethene (PCE)	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Dibromochloromethane	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2-Dibromoethane (EDB)	ND	0.00504		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Chlorobenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,1,1,2-Tetrachloroethane	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Ethylbenzene	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM
m,p-Xylene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
o-Xylene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Styrene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Isopropylbenzene	ND	0.0806		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Bromoform	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,1,2,2-Tetrachloroethane	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
n-Propylbenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Bromobenzene	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,3,5-Trimethylbenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
2-Chlorotoluene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
4-Chlorotoluene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
tert-Butylbenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2,3-Trichloropropane	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2,4-Trichlorobenzene	ND	0.0504		mg/Kg-dry	1	5/16/2017 4:08:46 PM
sec-Butylbenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
4-Isopropyltoluene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,3-Dichlorobenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,4-Dichlorobenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
n-Butylbenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2-Dichlorobenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2-Dibromo-3-chloropropane	ND	0.504		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2,4-Trimethylbenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Hexachlorobutadiene	ND	0.101		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Naphthalene	ND	0.0302		mg/Kg-dry	1	5/16/2017 4:08:46 PM
1,2,3-Trichlorobenzene	ND	0.0201		mg/Kg-dry	1	5/16/2017 4:08:46 PM
Surr: Dibromofluoromethane	89.4	56.5-129		%Rec	1	5/16/2017 4:08:46 PM
Surr: Toluene-d8	97.6	64.5-151		%Rec	1	5/16/2017 4:08:46 PM
Surr: 1-Bromo-4-fluorobenzene	92.4	63.1-141		%Rec	1	5/16/2017 4:08:46 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 10:35:00 AM

Project: Megablock Phase II

Lab ID: 1705140-004

Matrix: Soil

Client Sample ID: 21417-SPW:0.0

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.339		mg/Kg-dry	1	5/17/2017 4:02:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17042 Analyst: TN

Arsenic	5.11	0.104		mg/Kg-dry	1	5/15/2017 6:17:22 PM
Barium	78.4	0.521		mg/Kg-dry	1	5/15/2017 6:17:22 PM
Cadmium	ND	0.209		mg/Kg-dry	1	5/15/2017 6:17:22 PM
Chromium	33.1	0.104		mg/Kg-dry	1	5/15/2017 6:17:22 PM
Lead	11.2	0.209		mg/Kg-dry	1	5/15/2017 6:17:22 PM
Selenium	1.53	0.521		mg/Kg-dry	1	5/15/2017 6:17:22 PM
Silver	ND	0.104	*	mg/Kg-dry	1	5/15/2017 6:17:22 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36134 Analyst: BB

Percent Moisture	30.5			wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson
Project: Megablock Phase II
Lab ID: 1705140-005
Client Sample ID: 21417-MB9:22

Collection Date: 5/11/2017 1:45:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>					Batch ID: 17044	Analyst: SB
Diesel (Fuel Oil)	ND	21.3		mg/Kg-dry	1	5/16/2017 8:06:02 AM
Heavy Oil	ND	53.3		mg/Kg-dry	1	5/16/2017 8:06:02 AM
Heavy Oil Range Organics (C24-37)	74.3	53.3		mg/Kg-dry	1	5/16/2017 8:06:02 AM
Surr: 2-Fluorobiphenyl	91.5	50-150		%Rec	1	5/16/2017 8:06:02 AM
Surr: o-Terphenyl	90.3	50-150		%Rec	1	5/16/2017 8:06:02 AM

NOTES:

Heavy Oil Range Organics - Indicates the presence of unresolved compounds in the Lube+ Oil ranges.

<u>Gasoline by NWTPH-Gx</u>					Batch ID: 17056	Analyst: NG
Gasoline	ND	4.64		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Surr: Toluene-d8	102	65-135		%Rec	1	5/16/2017 4:37:15 PM
Surr: 4-Bromofluorobenzene	94.7	65-135		%Rec	1	5/16/2017 4:37:15 PM

<u>Volatile Organic Compounds by EPA Method 8260C</u>					Batch ID: 17056	Analyst: NG
Dichlorodifluoromethane (CFC-12)	ND	0.0557	Q	mg/Kg-dry	1	5/16/2017 4:37:15 PM
Chloromethane	ND	0.0557		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Vinyl chloride	ND	0.00186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Bromomethane	ND	0.0836		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Trichlorofluoromethane (CFC-11)	ND	0.0464		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Chloroethane	ND	0.0557		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,1-Dichloroethene	ND	0.0464		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Methylene chloride	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
trans-1,2-Dichloroethene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Methyl tert-butyl ether (MTBE)	ND	0.0464		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,1-Dichloroethane	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
2,2-Dichloropropane	ND	0.0464	Q	mg/Kg-dry	1	5/16/2017 4:37:15 PM
cis-1,2-Dichloroethene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Chloroform	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,1,1-Trichloroethane (TCA)	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,1-Dichloropropene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Carbon tetrachloride	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2-Dichloroethane (EDC)	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Benzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Trichloroethene (TCE)	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2-Dichloropropane	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Bromodichloromethane	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Dibromomethane	ND	0.0371		mg/Kg-dry	1	5/16/2017 4:37:15 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 1:45:00 PM

Project: Megablock Phase II

Lab ID: 1705140-005

Matrix: Soil

Client Sample ID: 21417-MB9:22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

cis-1,3-Dichloropropene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Toluene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
trans-1,3-Dichloropropylene	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,1,2-Trichloroethane	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,3-Dichloropropane	ND	0.0464		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Tetrachloroethene (PCE)	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Dibromochloromethane	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2-Dibromoethane (EDB)	ND	0.00464		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Chlorobenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,1,1,2-Tetrachloroethane	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Ethylbenzene	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
m,p-Xylene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
o-Xylene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Styrene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Isopropylbenzene	ND	0.0743		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Bromoform	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,1,2,2-Tetrachloroethane	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
n-Propylbenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Bromobenzene	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,3,5-Trimethylbenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
2-Chlorotoluene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
4-Chlorotoluene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
tert-Butylbenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2,3-Trichloropropane	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2,4-Trichlorobenzene	ND	0.0464		mg/Kg-dry	1	5/16/2017 4:37:15 PM
sec-Butylbenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
4-Isopropyltoluene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,3-Dichlorobenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,4-Dichlorobenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
n-Butylbenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2-Dichlorobenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2-Dibromo-3-chloropropane	ND	0.464		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2,4-Trimethylbenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Hexachlorobutadiene	ND	0.0928		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Naphthalene	ND	0.0279		mg/Kg-dry	1	5/16/2017 4:37:15 PM
1,2,3-Trichlorobenzene	ND	0.0186		mg/Kg-dry	1	5/16/2017 4:37:15 PM
Surr: Dibromofluoromethane	87.9	56.5-129		%Rec	1	5/16/2017 4:37:15 PM
Surr: Toluene-d8	96.6	64.5-151		%Rec	1	5/16/2017 4:37:15 PM
Surr: 1-Bromo-4-fluorobenzene	91.0	63.1-141		%Rec	1	5/16/2017 4:37:15 PM



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 1:45:00 PM

Project: Megablock Phase II

Lab ID: 1705140-005

Matrix: Soil

Client Sample ID: 21417-MB9:22

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Mercury by EPA Method 7471

Batch ID: 17075

Analyst: WF

Mercury	0.453	0.285		mg/Kg-dry	1	5/17/2017 4:03:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17042

Analyst: TN

Arsenic	5.01	0.0996		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Barium	105	0.498		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Cadmium	ND	0.199		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Chromium	39.1	0.0996		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Copper	26.3	0.199		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Lead	279	0.199		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Nickel	37.3	0.0996		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Selenium	1.26	0.498		mg/Kg-dry	1	5/15/2017 6:21:24 PM
Silver	ND	0.0996	*	mg/Kg-dry	1	5/15/2017 6:21:24 PM
Zinc	62.2	0.399		mg/Kg-dry	1	5/15/2017 6:21:24 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36134

Analyst: BB

Percent Moisture	20.4			wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 1:05:00 PM

Project: Megablock Phase II

Lab ID: 1705140-006

Matrix: Soil

Client Sample ID: 21417-MB9:13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>						
					Batch ID: 17044	Analyst: SB
Diesel (Fuel Oil)	ND	25.3		mg/Kg-dry	1	5/16/2017 10:10:25 AM
Heavy Oil	206	63.2		mg/Kg-dry	1	5/16/2017 10:10:25 AM
Surr: 2-Fluorobiphenyl	84.7	50-150		%Rec	1	5/16/2017 10:10:25 AM
Surr: o-Terphenyl	86.3	50-150		%Rec	1	5/16/2017 10:10:25 AM

Gasoline by NWTPH-Gx

Batch ID: 17056 Analyst: NG

Gasoline	ND	5.91		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Surr: Toluene-d8	101	65-135		%Rec	1	5/16/2017 5:05:47 PM
Surr: 4-Bromofluorobenzene	96.9	65-135		%Rec	1	5/16/2017 5:05:47 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056 Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0710	Q	mg/Kg-dry	1	5/16/2017 5:05:47 PM
Chloromethane	ND	0.0710		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Vinyl chloride	ND	0.00237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Bromomethane	ND	0.106		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Trichlorofluoromethane (CFC-11)	ND	0.0591		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Chloroethane	ND	0.0710		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,1-Dichloroethene	ND	0.0591		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Methylene chloride	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
trans-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Methyl tert-butyl ether (MTBE)	ND	0.0591		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,1-Dichloroethane	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
2,2-Dichloropropane	ND	0.0591	Q	mg/Kg-dry	1	5/16/2017 5:05:47 PM
cis-1,2-Dichloroethene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Chloroform	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,1,1-Trichloroethane (TCA)	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,1-Dichloropropene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Carbon tetrachloride	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2-Dichloroethane (EDC)	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Benzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Trichloroethene (TCE)	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2-Dichloropropane	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Bromodichloromethane	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Dibromomethane	ND	0.0473		mg/Kg-dry	1	5/16/2017 5:05:47 PM
cis-1,3-Dichloropropene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Toluene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
trans-1,3-Dichloropropylene	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 1:05:00 PM

Project: Megablock Phase II

Lab ID: 1705140-006

Matrix: Soil

Client Sample ID: 21417-MB9:13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,3-Dichloropropane	ND	0.0591		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Tetrachloroethene (PCE)	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Dibromochloromethane	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2-Dibromoethane (EDB)	ND	0.00591		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Chlorobenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,1,1,2-Tetrachloroethane	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Ethylbenzene	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM
m,p-Xylene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
o-Xylene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Styrene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Isopropylbenzene	ND	0.0946		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Bromoform	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,1,2,2-Tetrachloroethane	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
n-Propylbenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Bromobenzene	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,3,5-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
2-Chlorotoluene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
4-Chlorotoluene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
tert-Butylbenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2,3-Trichloropropane	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2,4-Trichlorobenzene	ND	0.0591		mg/Kg-dry	1	5/16/2017 5:05:47 PM
sec-Butylbenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
4-Isopropyltoluene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,3-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,4-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
n-Butylbenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2-Dichlorobenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2-Dibromo-3-chloropropane	ND	0.591		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2,4-Trimethylbenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Hexachlorobutadiene	ND	0.118		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Naphthalene	ND	0.0355		mg/Kg-dry	1	5/16/2017 5:05:47 PM
1,2,3-Trichlorobenzene	ND	0.0237		mg/Kg-dry	1	5/16/2017 5:05:47 PM
Surr: Dibromofluoromethane	89.3	56.5-129		%Rec	1	5/16/2017 5:05:47 PM
Surr: Toluene-d8	96.4	64.5-151		%Rec	1	5/16/2017 5:05:47 PM
Surr: 1-Bromo-4-fluorobenzene	93.5	63.1-141		%Rec	1	5/16/2017 5:05:47 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 1:05:00 PM

Project: Megablock Phase II

Lab ID: 1705140-006

Matrix: Soil

Client Sample ID: 21417-MB9:13

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.291		mg/Kg-dry	1	5/17/2017 4:05:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17042 Analyst: TN

Arsenic	4.24	0.0979		mg/Kg-dry	1	5/15/2017 6:25:25 PM
Barium	45.5	0.489		mg/Kg-dry	1	5/15/2017 6:25:25 PM
Cadmium	0.428	0.196		mg/Kg-dry	1	5/15/2017 6:25:25 PM
Chromium	31.4	0.0979		mg/Kg-dry	1	5/15/2017 6:25:25 PM
Lead	19.3	0.196		mg/Kg-dry	1	5/15/2017 6:25:25 PM
Selenium	1.39	0.489		mg/Kg-dry	1	5/15/2017 6:25:25 PM
Silver	ND	0.0979	*	mg/Kg-dry	1	5/15/2017 6:25:25 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36134 Analyst: BB

Percent Moisture	22.0			wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson
Project: Megablock Phase II
Lab ID: 1705140-007
Client Sample ID: 21417-MB8:27

Collection Date: 5/11/2017 3:15:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>				Batch ID: 17044		Analyst: SB
Diesel (Fuel Oil)	ND	20.9		mg/Kg-dry	1	5/17/2017 12:21:06 AM
Heavy Oil	ND	52.3		mg/Kg-dry	1	5/17/2017 12:21:06 AM
Surr: 2-Fluorobiphenyl	97.3	50-150		%Rec	1	5/17/2017 12:21:06 AM
Surr: o-Terphenyl	98.5	50-150		%Rec	1	5/17/2017 12:21:06 AM
<u>Gasoline by NWTPH-Gx</u>				Batch ID: 17056		Analyst: NG
Gasoline	ND	3.81		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Surr: Toluene-d8	102	65-135		%Rec	1	5/16/2017 9:22:05 PM
Surr: 4-Bromofluorobenzene	95.1	65-135		%Rec	1	5/16/2017 9:22:05 PM
<u>Volatile Organic Compounds by EPA Method 8260C</u>				Batch ID: 17056		Analyst: NG
Dichlorodifluoromethane (CFC-12)	ND	0.0457	Q	mg/Kg-dry	1	5/16/2017 9:22:05 PM
Chloromethane	ND	0.0457		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Vinyl chloride	ND	0.00152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Bromomethane	ND	0.0686		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Trichlorofluoromethane (CFC-11)	ND	0.0381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Chloroethane	ND	0.0457		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,1-Dichloroethene	ND	0.0381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Methylene chloride	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
trans-1,2-Dichloroethene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Methyl tert-butyl ether (MTBE)	ND	0.0381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,1-Dichloroethane	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
2,2-Dichloropropane	ND	0.0381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
cis-1,2-Dichloroethene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Chloroform	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,1,1-Trichloroethane (TCA)	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,1-Dichloropropene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Carbon tetrachloride	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2-Dichloroethane (EDC)	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Benzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Trichloroethene (TCE)	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2-Dichloropropane	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Bromodichloromethane	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Dibromomethane	ND	0.0305		mg/Kg-dry	1	5/16/2017 9:22:05 PM
cis-1,3-Dichloropropene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Toluene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
trans-1,3-Dichloropropylene	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 3:15:00 PM

Project: Megablock Phase II

Lab ID: 1705140-007

Matrix: Soil

Client Sample ID: 21417-MB8:27

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,3-Dichloropropane	ND	0.0381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Tetrachloroethene (PCE)	0.0238	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Dibromochloromethane	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2-Dibromoethane (EDB)	ND	0.00381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Chlorobenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,1,1,2-Tetrachloroethane	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Ethylbenzene	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM
m,p-Xylene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
o-Xylene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Styrene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Isopropylbenzene	ND	0.0610		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Bromoform	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,1,2,2-Tetrachloroethane	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
n-Propylbenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Bromobenzene	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,3,5-Trimethylbenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
2-Chlorotoluene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
4-Chlorotoluene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
tert-Butylbenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2,3-Trichloropropane	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2,4-Trichlorobenzene	ND	0.0381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
sec-Butylbenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
4-Isopropyltoluene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,3-Dichlorobenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,4-Dichlorobenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
n-Butylbenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2-Dichlorobenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2-Dibromo-3-chloropropane	ND	0.381		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2,4-Trimethylbenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Hexachlorobutadiene	ND	0.0762		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Naphthalene	ND	0.0229		mg/Kg-dry	1	5/16/2017 9:22:05 PM
1,2,3-Trichlorobenzene	ND	0.0152		mg/Kg-dry	1	5/16/2017 9:22:05 PM
Surr: Dibromofluoromethane	89.7	56.5-129		%Rec	1	5/16/2017 9:22:05 PM
Surr: Toluene-d8	96.2	64.5-151		%Rec	1	5/16/2017 9:22:05 PM
Surr: 1-Bromo-4-fluorobenzene	91.6	63.1-141		%Rec	1	5/16/2017 9:22:05 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 3:15:00 PM

Project: Megablock Phase II

Lab ID: 1705140-007

Matrix: Soil

Client Sample ID: 21417-MB8:27

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.276		mg/Kg-dry	1	5/17/2017 4:06:00 PM
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Total Metals by EPA Method 6020

Batch ID: 17042 Analyst: TN

Arsenic	2.69	0.0842		mg/Kg-dry	1	5/15/2017 6:29:27 PM
Barium	31.8	0.421		mg/Kg-dry	1	5/15/2017 6:29:27 PM
Cadmium	ND	0.168		mg/Kg-dry	1	5/15/2017 6:29:27 PM
Chromium	29.3	0.0842		mg/Kg-dry	1	5/15/2017 6:29:27 PM
Lead	2.38	0.168		mg/Kg-dry	1	5/15/2017 6:29:27 PM
Selenium	0.988	0.421		mg/Kg-dry	1	5/15/2017 6:29:27 PM
Silver	ND	0.0842	*	mg/Kg-dry	1	5/15/2017 6:29:27 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36134 Analyst: BB

Percent Moisture	14.6			wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson
Project: Megablock Phase II
Lab ID: 1705140-008
Client Sample ID: 21417-MB7:11

Collection Date: 5/11/2017 4:05:00 PM

Matrix: Soil

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17044 Analyst: SB

Diesel (Fuel Oil)	ND	18.7		mg/Kg-dry	1	5/17/2017 1:23:38 AM
Heavy Oil	ND	46.8		mg/Kg-dry	1	5/17/2017 1:23:38 AM
Surr: 2-Fluorobiphenyl	89.2	50-150		%Rec	1	5/17/2017 1:23:38 AM
Surr: o-Terphenyl	86.8	50-150		%Rec	1	5/17/2017 1:23:38 AM

Gasoline by NWTPH-Gx

Batch ID: 17056 Analyst: NG

Gasoline	ND	4.09		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Surr: Toluene-d8	101	65-135		%Rec	1	5/16/2017 9:50:30 PM
Surr: 4-Bromofluorobenzene	95.8	65-135		%Rec	1	5/16/2017 9:50:30 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056 Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0490	Q	mg/Kg-dry	1	5/16/2017 9:50:30 PM
Chloromethane	ND	0.0490		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Vinyl chloride	ND	0.00163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Bromomethane	ND	0.0735		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Trichlorofluoromethane (CFC-11)	ND	0.0409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Chloroethane	ND	0.0490		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,1-Dichloroethene	ND	0.0409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Methylene chloride	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
trans-1,2-Dichloroethene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Methyl tert-butyl ether (MTBE)	ND	0.0409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,1-Dichloroethane	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
2,2-Dichloropropane	ND	0.0409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
cis-1,2-Dichloroethene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Chloroform	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,1,1-Trichloroethane (TCA)	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,1-Dichloropropene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Carbon tetrachloride	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2-Dichloroethane (EDC)	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Benzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Trichloroethene (TCE)	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2-Dichloropropane	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Bromodichloromethane	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Dibromomethane	ND	0.0327		mg/Kg-dry	1	5/16/2017 9:50:30 PM
cis-1,3-Dichloropropene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Toluene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
trans-1,3-Dichloropropylene	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 4:05:00 PM

Project: Megablock Phase II

Lab ID: 1705140-008

Matrix: Soil

Client Sample ID: 21417-MB7:11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,3-Dichloropropane	ND	0.0409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Tetrachloroethene (PCE)	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Dibromochloromethane	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2-Dibromoethane (EDB)	ND	0.00409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Chlorobenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,1,1,2-Tetrachloroethane	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Ethylbenzene	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM
m,p-Xylene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
o-Xylene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Styrene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Isopropylbenzene	ND	0.0654		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Bromoform	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,1,2,2-Tetrachloroethane	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
n-Propylbenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Bromobenzene	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,3,5-Trimethylbenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
2-Chlorotoluene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
4-Chlorotoluene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
tert-Butylbenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2,3-Trichloropropane	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2,4-Trichlorobenzene	ND	0.0409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
sec-Butylbenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
4-Isopropyltoluene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,3-Dichlorobenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,4-Dichlorobenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
n-Butylbenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2-Dichlorobenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2-Dibromo-3-chloropropane	ND	0.409		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2,4-Trimethylbenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Hexachlorobutadiene	ND	0.0817		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Naphthalene	ND	0.0245		mg/Kg-dry	1	5/16/2017 9:50:30 PM
1,2,3-Trichlorobenzene	ND	0.0163		mg/Kg-dry	1	5/16/2017 9:50:30 PM
Surr: Dibromofluoromethane	89.3	56.5-129		%Rec	1	5/16/2017 9:50:30 PM
Surr: Toluene-d8	97.2	64.5-151		%Rec	1	5/16/2017 9:50:30 PM
Surr: 1-Bromo-4-fluorobenzene	92.5	63.1-141		%Rec	1	5/16/2017 9:50:30 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 4:05:00 PM

Project: Megablock Phase II

Lab ID: 1705140-008

Matrix: Soil

Client Sample ID: 21417-MB7:11

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Sample Moisture (Percent Moisture)

Batch ID: R36134 Analyst: BB

Percent Moisture	7.14	0.500		wt%	1	5/15/2017 12:03:59 PM
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Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 12:00:00 PM

Project: Megablock Phase II

Lab ID: 1705140-009

Matrix: Groundwater

Client Sample ID: 21417-MB10:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17035

Analyst: SB

Diesel (Fuel Oil)	ND	50.2		µg/L	1	5/15/2017 4:54:15 PM
Heavy Oil	970	100		µg/L	1	5/15/2017 4:54:15 PM
Surr: 2-Fluorobiphenyl	50.9	50-150		%Rec	1	5/15/2017 4:54:15 PM
Surr: o-Terphenyl	21.3	50-150	S	%Rec	1	5/15/2017 4:54:15 PM

NOTES:

S - Outlying surrogate recovery observed.

Gasoline by NWTPH-Gx

Batch ID: 17040

Analyst: NG

Gasoline	ND	50.0		µg/L	1	5/13/2017 6:13:42 AM
Surr: Toluene-d8	103	65-135		%Rec	1	5/13/2017 6:13:42 AM
Surr: 4-Bromofluorobenzene	106	65-135		%Rec	1	5/13/2017 6:13:42 AM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/13/2017 6:13:42 AM
Chloromethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Vinyl chloride	ND	0.200		µg/L	1	5/13/2017 6:13:42 AM
Bromomethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Chloroethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Methylene chloride	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	5/13/2017 6:13:42 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Chloroform	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Carbon tetrachloride	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Benzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/13/2017 6:13:42 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Bromodichloromethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Dibromomethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 12:00:00 PM

Project: Megablock Phase II

Lab ID: 1705140-009

Matrix: Groundwater

Client Sample ID: 21417-MB10:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

Toluene	1.85	1.00		µg/L	1	5/13/2017 6:13:42 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Dibromochloromethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2-Dibromoethane (EDB)	ND	0.0600		µg/L	1	5/13/2017 6:13:42 AM
Chlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Ethylbenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
m,p-Xylene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
o-Xylene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Styrene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Isopropylbenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Bromoform	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
n-Propylbenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
Bromobenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
2-Chlorotoluene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
4-Chlorotoluene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
tert-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/13/2017 6:13:42 AM
sec-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
n-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2,4-Trimethylbenzene	1.28	1.00		µg/L	1	5/13/2017 6:13:42 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/13/2017 6:13:42 AM
Naphthalene	5.23	1.00		µg/L	1	5/13/2017 6:13:42 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/13/2017 6:13:42 AM
Surr: Dibromofluoromethane	86.3	45.4-152		%Rec	1	5/13/2017 6:13:42 AM
Surr: Toluene-d8	91.3	40.1-139		%Rec	1	5/13/2017 6:13:42 AM
Surr: 1-Bromo-4-fluorobenzene	89.9	64.2-128		%Rec	1	5/13/2017 6:13:42 AM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 12:00:00 PM

Project: Megablock Phase II

Lab ID: 1705140-009

Matrix: Groundwater

Client Sample ID: 21417-MB10:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 245.1

Batch ID: 17045

Analyst: WF

Mercury	ND	0.100		µg/L	1	5/15/2017 5:31:00 PM
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Dissolved Mercury by EPA Method 245.1

Batch ID: 17098

Analyst: WF

Mercury	ND	0.100		µg/L	1	5/18/2017 3:56:31 PM
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Dissolved Metals by EPA Method 200.8

Batch ID: 17069

Analyst: TN

Antimony	0.206	0.200		µg/L	1	5/17/2017 4:12:37 PM
Arsenic	1.87	1.00		µg/L	1	5/17/2017 4:12:37 PM
Beryllium	ND	0.200		µg/L	1	5/17/2017 4:12:37 PM
Cadmium	ND	0.200		µg/L	1	5/17/2017 4:12:37 PM
Chromium	ND	0.500		µg/L	1	5/17/2017 4:12:37 PM
Copper	1.01	0.500		µg/L	1	5/17/2017 4:12:37 PM
Lead	ND	0.500		µg/L	1	5/17/2017 4:12:37 PM
Nickel	3.72	0.500		µg/L	1	5/17/2017 4:12:37 PM
Selenium	ND	1.00		µg/L	1	5/17/2017 4:12:37 PM
Silver	ND	0.200		µg/L	1	5/17/2017 4:12:37 PM
Thallium	ND	0.200		µg/L	1	5/17/2017 4:12:37 PM
Zinc	1.56	1.50		µg/L	1	5/17/2017 4:12:37 PM

Total Metals by EPA Method 200.8

Batch ID: 17070

Analyst: TN

Antimony	ND	0.200		µg/L	1	5/17/2017 5:41:12 PM
Arsenic	13.5	1.00		µg/L	1	5/17/2017 5:41:12 PM
Beryllium	0.264	0.200		µg/L	1	5/17/2017 5:41:12 PM
Cadmium	ND	0.200		µg/L	1	5/17/2017 5:41:12 PM
Chromium	27.7	0.500		µg/L	1	5/17/2017 5:41:12 PM
Copper	17.2	0.500		µg/L	1	5/17/2017 5:41:12 PM
Lead	24.1	2.50	D	µg/L	5	5/18/2017 1:17:41 PM
Nickel	11.2	0.500		µg/L	1	5/17/2017 5:41:12 PM
Selenium	1.92	1.00		µg/L	1	5/17/2017 5:41:12 PM
Silver	ND	0.200		µg/L	1	5/17/2017 5:41:12 PM
Thallium	ND	1.00	D	µg/L	5	5/18/2017 1:17:41 PM
Zinc	20.8	1.50		µg/L	1	5/17/2017 5:41:12 PM

NOTES:

Diluted due to matrix.



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson
Project: Megablock Phase II
Lab ID: 1705140-010
Client Sample ID: 21417-MB9:GW

Collection Date: 5/11/2017 1:55:00 PM

Matrix: Groundwater

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17035

Analyst: SB

Diesel (Fuel Oil)	ND	50.0		µg/L	1	5/15/2017 5:25:50 PM
Heavy Oil	146	99.9		µg/L	1	5/15/2017 5:25:50 PM
Surr: 2-Fluorobiphenyl	74.0	50-150		%Rec	1	5/15/2017 5:25:50 PM
Surr: o-Terphenyl	48.2	50-150	S	%Rec	1	5/15/2017 5:25:50 PM

NOTES:

S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Gasoline by NWTPH-Gx

Batch ID: 17040

Analyst: NG

Gasoline	ND	50.0		µg/L	1	5/13/2017 6:43:45 AM
Surr: Toluene-d8	100	65-135		%Rec	1	5/13/2017 6:43:45 AM
Surr: 4-Bromofluorobenzene	110	65-135		%Rec	1	5/13/2017 6:43:45 AM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/13/2017 6:43:45 AM
Chloromethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Vinyl chloride	ND	0.200		µg/L	1	5/13/2017 6:43:45 AM
Bromomethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Chloroethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Methylene chloride	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	5/13/2017 6:43:45 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Chloroform	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Carbon tetrachloride	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Benzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/13/2017 6:43:45 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Bromodichloromethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Dibromomethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 1:55:00 PM

Project: Megablock Phase II

Lab ID: 1705140-010

Matrix: Groundwater

Client Sample ID: 21417-MB9:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Toluene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Dibromochloromethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2-Dibromoethane (EDB)	ND	0.0600		µg/L	1	5/13/2017 6:43:45 AM
Chlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Ethylbenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
m,p-Xylene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
o-Xylene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Styrene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Isopropylbenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Bromoform	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
n-Propylbenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
Bromobenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
2-Chlorotoluene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
4-Chlorotoluene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
tert-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/13/2017 6:43:45 AM
sec-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
4-Isopropyltoluene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
n-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2,4-Trimethylbenzene	1.10	1.00		µg/L	1	5/13/2017 6:43:45 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/13/2017 6:43:45 AM
Naphthalene	2.06	1.00		µg/L	1	5/13/2017 6:43:45 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/13/2017 6:43:45 AM
Surr: Dibromofluoromethane	93.8	45.4-152		%Rec	1	5/13/2017 6:43:45 AM
Surr: Toluene-d8	88.5	40.1-139		%Rec	1	5/13/2017 6:43:45 AM
Surr: 1-Bromo-4-fluorobenzene	84.4	64.2-128		%Rec	1	5/13/2017 6:43:45 AM



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 1:55:00 PM

Project: Megablock Phase II

Lab ID: 1705140-010

Matrix: Groundwater

Client Sample ID: 21417-MB9:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Mercury by EPA Method 245.1</u>				Batch ID: 17045		Analyst: WF
Mercury	ND	0.100		µg/L	1	5/15/2017 5:33:00 PM
<u>Dissolved Mercury by EPA Method 245.1</u>				Batch ID: 17098		Analyst: WF
Mercury	ND	0.100		µg/L	1	5/18/2017 3:58:11 PM
<u>Dissolved Metals by EPA Method 200.8</u>				Batch ID: 17069		Analyst: TN
Antimony	0.646	0.200		µg/L	1	5/17/2017 4:16:39 PM
Arsenic	ND	1.00		µg/L	1	5/17/2017 4:16:39 PM
Beryllium	ND	0.200		µg/L	1	5/17/2017 4:16:39 PM
Cadmium	ND	0.200		µg/L	1	5/17/2017 4:16:39 PM
Chromium	ND	0.500		µg/L	1	5/17/2017 4:16:39 PM
Copper	0.733	0.500		µg/L	1	5/17/2017 4:16:39 PM
Lead	ND	0.500		µg/L	1	5/17/2017 4:16:39 PM
Nickel	3.11	0.500		µg/L	1	5/17/2017 4:16:39 PM
Selenium	ND	1.00		µg/L	1	5/17/2017 4:16:39 PM
Silver	ND	0.200		µg/L	1	5/17/2017 4:16:39 PM
Thallium	ND	0.200		µg/L	1	5/17/2017 4:16:39 PM
Zinc	4.48	1.50		µg/L	1	5/17/2017 4:16:39 PM
<u>Total Metals by EPA Method 200.8</u>				Batch ID: 17070		Analyst: TN
Antimony	0.694	0.200		µg/L	1	5/17/2017 5:45:14 PM
Arsenic	2.88	1.00		µg/L	1	5/17/2017 5:45:14 PM
Beryllium	ND	0.200		µg/L	1	5/17/2017 5:45:14 PM
Cadmium	ND	0.200		µg/L	1	5/17/2017 5:45:14 PM
Chromium	6.59	0.500		µg/L	1	5/17/2017 5:45:14 PM
Copper	23.7	0.500		µg/L	1	5/17/2017 5:45:14 PM
Lead	123	2.50	D	µg/L	5	5/18/2017 1:21:43 PM
Nickel	7.56	0.500		µg/L	1	5/17/2017 5:45:14 PM
Selenium	1.06	1.00		µg/L	1	5/17/2017 5:45:14 PM
Silver	ND	0.200		µg/L	1	5/17/2017 5:45:14 PM
Thallium	ND	1.00	D	µg/L	5	5/18/2017 1:21:43 PM
Zinc	49.2	1.50		µg/L	1	5/17/2017 5:45:14 PM

NOTES:

Diluted due to matrix.



Analytical Report

Work Order: 1705140
Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 10:00:00 AM

Project: Megablock Phase II

Lab ID: 1705140-011

Matrix: Groundwater

Client Sample ID: 21417-MB11:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17035

Analyst: SB

Diesel (Fuel Oil)	ND	50.1		µg/L	1	5/15/2017 6:29:14 PM
Heavy Oil	238	100		µg/L	1	5/15/2017 6:29:14 PM
Surr: 2-Fluorobiphenyl	57.5	50-150		%Rec	1	5/15/2017 6:29:14 PM
Surr: o-Terphenyl	29.8	50-150	S	%Rec	1	5/15/2017 6:29:14 PM

NOTES:

S - Outlying surrogate recovery observed.

Gasoline by NWTPH-Gx

Batch ID: 17040

Analyst: NG

Gasoline	ND	50.0		µg/L	1	5/13/2017 7:13:46 AM
Surr: Toluene-d8	93.3	65-135		%Rec	1	5/13/2017 7:13:46 AM
Surr: 4-Bromofluorobenzene	106	65-135		%Rec	1	5/13/2017 7:13:46 AM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/13/2017 7:13:46 AM
Chloromethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Vinyl chloride	ND	0.200		µg/L	1	5/13/2017 7:13:46 AM
Bromomethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Chloroethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,1-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Methylene chloride	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
2,2-Dichloropropane	ND	2.00		µg/L	1	5/13/2017 7:13:46 AM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Chloroform	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Carbon tetrachloride	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Benzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/13/2017 7:13:46 AM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Bromodichloromethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Dibromomethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 10:00:00 AM

Project: Megablock Phase II

Lab ID: 1705140-011

Matrix: Groundwater

Client Sample ID: 21417-MB11:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

Toluene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Dibromochloromethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2-Dibromoethane (EDB)	ND	0.0600		µg/L	1	5/13/2017 7:13:46 AM
Chlorobenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Ethylbenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
m,p-Xylene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
o-Xylene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Styrene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Isopropylbenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Bromoform	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
n-Propylbenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
Bromobenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
2-Chlorotoluene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
4-Chlorotoluene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
tert-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/13/2017 7:13:46 AM
sec-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
4-Isopropyltoluene	1.46	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
n-Butylbenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2,4-Trimethylbenzene	1.04	1.00		µg/L	1	5/13/2017 7:13:46 AM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/13/2017 7:13:46 AM
Naphthalene	1.01	1.00		µg/L	1	5/13/2017 7:13:46 AM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/13/2017 7:13:46 AM
Surr: Dibromofluoromethane	100	45.4-152		%Rec	1	5/13/2017 7:13:46 AM
Surr: Toluene-d8	106	40.1-139		%Rec	1	5/13/2017 7:13:46 AM
Surr: 1-Bromo-4-fluorobenzene	120	64.2-128		%Rec	1	5/13/2017 7:13:46 AM



Analytical Report

Work Order: 1705140

Date Reported: 5/26/2017

Client: Shannon & Wilson

Collection Date: 5/11/2017 10:00:00 AM

Project: Megablock Phase II

Lab ID: 1705140-011

Matrix: Groundwater

Client Sample ID: 21417-MB11:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 245.1

Batch ID: 17045

Analyst: WF

Mercury	ND	0.100		µg/L	1	5/15/2017 5:34:00 PM
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Dissolved Mercury by EPA Method 245.1

Batch ID: 17098

Analyst: WF

Mercury	ND	0.100		µg/L	1	5/18/2017 3:59:52 PM
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Dissolved Metals by EPA Method 200.8

Batch ID: 17069

Analyst: TN

Antimony	0.214	0.200		µg/L	1	5/17/2017 4:20:40 PM
Arsenic	ND	1.00		µg/L	1	5/17/2017 4:20:40 PM
Beryllium	ND	0.200		µg/L	1	5/17/2017 4:20:40 PM
Cadmium	ND	0.200		µg/L	1	5/17/2017 4:20:40 PM
Chromium	0.852	0.500		µg/L	1	5/17/2017 4:20:40 PM
Copper	ND	0.500		µg/L	1	5/17/2017 4:20:40 PM
Lead	ND	0.500		µg/L	1	5/17/2017 4:20:40 PM
Nickel	5.12	0.500		µg/L	1	5/17/2017 4:20:40 PM
Selenium	ND	1.00		µg/L	1	5/17/2017 4:20:40 PM
Silver	ND	0.200		µg/L	1	5/17/2017 4:20:40 PM
Thallium	ND	0.200		µg/L	1	5/17/2017 4:20:40 PM
Zinc	1.91	1.50		µg/L	1	5/17/2017 4:20:40 PM

Total Metals by EPA Method 200.8

Batch ID: 17070

Analyst: TN

Antimony	ND	0.200		µg/L	1	5/17/2017 5:49:15 PM
Arsenic	6.34	1.00		µg/L	1	5/17/2017 5:49:15 PM
Beryllium	0.248	0.200		µg/L	1	5/17/2017 5:49:15 PM
Cadmium	0.353	0.200		µg/L	1	5/17/2017 5:49:15 PM
Chromium	9.77	0.500		µg/L	1	5/17/2017 5:49:15 PM
Copper	13.2	0.500		µg/L	1	5/17/2017 5:49:15 PM
Lead	19.0	0.500		µg/L	1	5/18/2017 12:23:40 PM
Nickel	14.3	0.500		µg/L	1	5/17/2017 5:49:15 PM
Selenium	1.02	1.00		µg/L	1	5/17/2017 5:49:15 PM
Silver	ND	0.200		µg/L	1	5/17/2017 5:49:15 PM
Thallium	ND	0.200		µg/L	1	5/18/2017 12:23:40 PM
Zinc	44.2	1.50		µg/L	1	5/17/2017 5:49:15 PM



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Dissolved Metals by EPA Method 200.8

Sample ID	MB-17069	SamprType:	MBLK	Units:	µg/L	Prep Date:	5/17/2017	RunNo:	36208				
Client ID:	MBLKW	Batch ID:	17069			Analysis Date:	5/17/2017	SeqNo:	693552				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	ND	0.200											
Arsenic	ND	1.00											
Beryllium	ND	0.200											
Cadmium	ND	0.200											
Chromium	ND	0.500											
Copper	ND	0.500											
Lead	ND	1.00											
Nickel	ND	0.500											
Selenium	ND	1.00											
Silver	ND	0.200											
Thallium	ND	0.200											
Zinc	ND	1.50											

Sample ID	MB-17061FB	SamprType:	MBLK	Units:	µg/L	Prep Date:	5/17/2017	RunNo:	36208				
Client ID:	MBLKW	Batch ID:	17069			Analysis Date:	5/17/2017	SeqNo:	693553				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	ND	0.200											
Arsenic	ND	1.00											
Beryllium	ND	0.200											
Cadmium	ND	0.200											
Chromium	ND	0.500											
Copper	ND	0.500											
Lead	ND	1.00											
Nickel	ND	0.500											
Selenium	ND	1.00											
Silver	ND	0.200											
Thallium	ND	0.200											
Zinc	ND	1.50											



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Dissolved Metals by EPA Method 200.8

Sample ID	MB-17061FB	SamptType: MBLK	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36208						
Client ID:	MBLKW	Batch ID: 17069		Analysis Date: 5/17/2017	SeqNo: 693553						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
 Filter Blank

Sample ID	LCS-17069	SamptType: LCS	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36208						
Client ID:	LCSW	Batch ID: 17069		Analysis Date: 5/17/2017	SeqNo: 693554						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	5.10	0.200	5.000	0	102	85	115				
Arsenic	104	1.00	100.0	0	104	85	115				
Beryllium	5.18	0.200	5.000	0	104	85	115				
Cadmium	5.08	0.200	5.000	0	102	85	115				
Chromium	102	0.500	100.0	0	102	85	115				
Copper	105	0.500	100.0	0	105	85	115				
Lead	55.2	1.00	50.00	0	110	85	115				
Nickel	103	0.500	100.0	0	103	85	115				
Selenium	10.2	1.00	10.00	0	102	85	115				
Silver	5.13	0.200	5.000	0	103	85	115				
Thallium	2.76	0.200	2.500	0	110	85	115				
Zinc	108	1.50	100.0	0	108	85	115				

Sample ID	1705165-005FDUP	SamptType: DUP	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36208						
Client ID:	BATCH	Batch ID: 17069		Analysis Date: 5/17/2017	SeqNo: 693556						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	0.220	0.200						0.2985	30.3	30	
Arsenic	2.22	1.00						2.359	6.16	30	
Beryllium	ND	0.200						0		30	
Cadmium	ND	0.200						0		30	
Chromium	9.89	0.500						9.488	4.10	30	
Copper	8.01	0.500						8.122	1.39	30	
Lead	6.53	1.00						6.677	2.20	30	



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Dissolved Metals by EPA Method 200.8

Sample ID	1705165-005FDUP	SamplType: DUP	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36208						
Client ID:	BATCH	Batch ID: 17069	Analysis Date: 5/17/2017	SeqNo: 693556							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Nickel	4.49	0.500			108	70	130	4.456	0.660	30	
Selenium	2.27	1.00			120	70	130	2.508	10.1	30	
Silver	ND	0.200			87.2	70	130	0		30	
Thallium	ND	0.200			101	70	130	0		30	
Zinc	25.1	1.50			120	70	130	23.38	7.30	30	

Sample ID	1705165-005FMS	SamplType: MS	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36208						
Client ID:	BATCH	Batch ID: 17069	Analysis Date: 5/17/2017	SeqNo: 693562							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	27.2	0.200	25.00	0.2985	108	70	130				
Arsenic	601	1.00	500.0	2.359	120	70	130				
Beryllium	21.8	0.200	25.00	0.02200	87.2	70	130				
Cadmium	25.4	0.200	25.00	0.06750	101	70	130				
Chromium	611	0.500	500.0	9.488	120	70	130				
Copper	502	0.500	500.0	8.122	98.9	70	130				
Lead	244	1.00	250.0	6.677	94.8	70	130				
Nickel	526	0.500	500.0	4.456	104	70	130				
Selenium	53.7	1.00	50.00	2.508	102	70	130				
Silver	16.4	0.200	25.00	0	65.4	70	130				S
Thallium	12.4	0.200	12.50	0.009000	98.9	70	130				
Zinc	544	1.50	500.0	23.38	104	70	130				

NOTES: S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.

Sample ID	1705165-005FMSD	SamplType: MSD	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36208						
Client ID:	BATCH	Batch ID: 17069	Analysis Date: 5/17/2017	SeqNo: 693563							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	27.6	0.200	25.00	0.2985	109	70	130	27.18	1.39	30	
Arsenic	610	1.00	500.0	2.359	121	70	130	601.2	1.42	30	



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Dissolved Metals by EPA Method 200.8

Sample ID: 1705165-005FMSD	SamptType: MSD	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36208							
Client ID: BATCH	Batch ID: 17069		Analysis Date: 5/17/2017	SeqNo: 693563							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Beryllium	21.9	0.200	25.00	0.02200	87.6	70	130	21.81	0.551	30	
Cadmium	26.0	0.200	25.00	0.06750	104	70	130	25.41	2.24	30	
Chromium	608	0.500	500.0	9.488	120	70	130	610.8	0.536	30	
Copper	495	0.500	500.0	8.122	97.4	70	130	502.4	1.50	30	
Lead	238	1.00	250.0	6.677	92.3	70	130	243.6	2.52	30	
Nickel	529	0.500	500.0	4.456	105	70	130	526.3	0.474	30	
Selenium	57.3	1.00	50.00	2.508	109	70	130	53.75	6.31	30	
Silver	17.0	0.200	25.00	0	68.0	70	130	16.36	3.87	30	S
Thallium	12.0	0.200	12.50	0.009000	95.8	70	130	12.37	3.15	30	
Zinc	563	1.50	500.0	23.38	108	70	130	543.7	3.44	30	

NOTES:
 S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.



Work Order: 1705140
CLIENT: Shannon & Wilson
Project: Megablock Phase II

QC SUMMARY REPORT
Total Metals by EPA Method 200.8

Sample ID	MB-17070	SamprType:	MBLK	Units:	µg/L	Prep Date:	5/17/2017	RunNo:	36209				
Client ID:	MBLKW	Batch ID:	17070	Analysis Date:	5/17/2017	SeqNo:	693597						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	ND	0.200											
Arsenic	ND	1.00											
Beryllium	ND	0.200											
Cadmium	ND	0.200											
Chromium	ND	0.500											
Copper	ND	0.500											
Lead	ND	1.00											
Nickel	ND	0.500											
Selenium	ND	1.00											
Silver	ND	0.200											
Thallium	ND	0.200											
Zinc	ND	1.50											

Sample ID	LCS-17070	SamprType:	LCS	Units:	µg/L	Prep Date:	5/17/2017	RunNo:	36209				
Client ID:	LCSW	Batch ID:	17070	Analysis Date:	5/17/2017	SeqNo:	693598						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Antimony	5.05	0.200			5.000	0	101	85	115				
Arsenic	108	1.00			100.0	0	108	85	115				
Beryllium	5.08	0.200			5.000	0	102	85	115				
Cadmium	5.03	0.200			5.000	0	101	85	115				
Chromium	102	0.500			100.0	0	102	85	115				
Copper	102	0.500			100.0	0	102	85	115				
Lead	54.2	1.00			50.00	0	108	85	115				
Nickel	105	0.500			100.0	0	105	85	115				
Selenium	10.2	1.00			10.00	0	102	85	115				
Silver	5.48	0.200			5.000	0	110	85	115				
Thallium	2.69	0.200			2.500	0	108	85	115				
Zinc	107	1.50			100.0	0	107	85	115				



Work Order: 1705140
CLIENT: Shannon & Wilson
Project: Megablock Phase II

QC SUMMARY REPORT
Total Metals by EPA Method 200.8

Sample ID	1705165-005EDUP	SamptType:	DUP	Units:	µg/L	Prep Date:	5/17/2017	RunNo:	36209		
Client ID:	BATCH	Batch ID:	17070	Analysis Date:	5/17/2017	SeqNo:	693600				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	ND	0.200						0.3030	41.4	30	
Arsenic	2.30	1.00						2.792	19.4	30	
Beryllium	ND	0.200						0		30	
Cadmium	ND	0.200						0		30	
Chromium	17.8	0.500						22.73	24.2	30	
Copper	12.5	0.500						12.98	3.93	30	
Lead	9.25	1.00						9.703	4.83	30	
Nickel	6.73	0.500						7.326	8.42	30	
Selenium	2.47	1.00						2.158	13.6	30	
Silver	ND	0.200						0		30	
Thallium	ND	0.200						0		30	
Zinc	44.4	1.50						44.92	1.14	30	

Sample ID	1705165-005EMS	SamptType:	MS	Units:	µg/L	Prep Date:	5/17/2017	RunNo:	36209		
Client ID:	BATCH	Batch ID:	17070	Analysis Date:	5/17/2017	SeqNo:	693601				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Antimony	28.4	0.200	25.00	0.3030	112	70	130				
Arsenic	598	1.00	500.0	2.792	119	70	130				
Beryllium	22.5	0.200	25.00	0.04850	90.0	70	130				
Cadmium	24.6	0.200	25.00	0.02700	98.1	70	130				
Chromium	629	0.500	500.0	22.73	121	70	130				
Copper	507	0.500	500.0	12.98	98.8	70	130				
Lead	236	1.00	250.0	9.703	90.4	70	130				
Nickel	537	0.500	500.0	7.326	106	70	130				
Selenium	55.4	1.00	50.00	2.158	106	70	130				
Silver	16.9	0.200	25.00	0	67.4	70	130				
Thallium	11.8	0.200	12.50	0.008500	94.0	70	130				
Zinc	562	1.50	500.0	44.92	103	70	130				

S



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
Total Metals by EPA Method 200.8

Sample ID: 1705165-005EMS	Batch ID: 17070	SamptType: MS	Units: µg/L	Prep Date: 5/17/2017	RunNo: 36209
Client ID: BATCH	Batch ID: 17070	Result	SPK value	SPK Ref Val	%REC
LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:
 S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results.

Sample ID	Batch ID	SamptType	Units	Prep Date	RunNo						
1705165-005EMS	BATCH	MSD	µg/L	5/17/2017	36209						
Client ID: BATCH	Batch ID: 17070	Result	SPK value	SPK Ref Val	%REC						
LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual						
Antimony		27.9	0.200	25.00	0.3030	111	70	130	28.38	1.56	30
Arsenic		600	1.00	500.0	2.792	120	70	130	598.4	0.320	30
Beryllium		22.1	0.200	25.00	0.04850	88.4	70	130	22.54	1.75	30
Cadmium		24.1	0.200	25.00	0.02700	96.2	70	130	24.56	1.96	30
Chromium		626	0.500	500.0	22.73	121	70	130	628.9	0.476	30
Copper		498	0.500	500.0	12.98	97.1	70	130	507.0	1.69	30
Lead		237	1.00	250.0	9.703	90.8	70	130	235.8	0.344	30
Nickel		529	0.500	500.0	7.326	104	70	130	537.0	1.55	30
Selenium		55.1	1.00	50.00	2.158	106	70	130	55.38	0.514	30
Silver		16.6	0.200	25.00	0	66.4	70	130	16.86	1.51	30
Thallium		11.7	0.200	12.50	0.008500	93.2	70	130	11.76	0.837	30
Zinc		551	1.50	500.0	44.92	101	70	130	561.8	1.98	30

NOTES:
 S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results.



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Mercury by EPA Method 245.1

Sample ID	MB-17045	SamptType:	MBLK	Units:	µg/L	Prep Date:	5/15/2017	RunNo:	36138			
Client ID:	MBLKW	Batch ID:	17045	Analysis Date:	5/15/2017	SeqNo:	692130					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		ND		0.100								

Sample ID	LCS-17045	SamptType:	LCS	Units:	µg/L	Prep Date:	5/15/2017	RunNo:	36138			
Client ID:	LCSW	Batch ID:	17045	Analysis Date:	5/15/2017	SeqNo:	692131					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		2.63		0.100	2.500	105	85	115				

Sample ID	1705125-001ADUP	SamptType:	DUP	Units:	µg/L	Prep Date:	5/15/2017	RunNo:	36138			
Client ID:	BATCH	Batch ID:	17045	Analysis Date:	5/15/2017	SeqNo:	692133					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		ND		0.100					0		20	

Sample ID	1705125-001AMS	SamptType:	MS	Units:	µg/L	Prep Date:	5/15/2017	RunNo:	36138			
Client ID:	BATCH	Batch ID:	17045	Analysis Date:	5/15/2017	SeqNo:	692134					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		2.42		0.100	2.500	96.8	70	130				

Sample ID	1705125-001AMSD	SamptType:	MSD	Units:	µg/L	Prep Date:	5/15/2017	RunNo:	36138			
Client ID:	BATCH	Batch ID:	17045	Analysis Date:	5/15/2017	SeqNo:	692135					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		2.39		0.100	2.500	95.6	70	130	2.420	1.25	20	



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Dissolved Mercury by EPA Method 245.1

Sample ID	MB-17098	SamptType: MBLK	Units: µg/L	Prep Date: 5/18/2017	RunNo: 36231
Client ID:	MBLKW	Batch ID: 17098		Analysis Date: 5/18/2017	SeqNo: 694394
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	ND		0.100		

Sample ID	LCS-17098	SamptType: LCS	Units: µg/L	Prep Date: 5/18/2017	RunNo: 36231
Client ID:	LCSW	Batch ID: 17098		Analysis Date: 5/18/2017	SeqNo: 694395
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	2.77		0.100	2.500	0 111 85 115

Sample ID	1705165-005FDUP	SamptType: DUP	Units: µg/L	Prep Date: 5/18/2017	RunNo: 36231
Client ID:	BATCH	Batch ID: 17098		Analysis Date: 5/18/2017	SeqNo: 694397
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	ND		0.100		0 20

Sample ID	1705165-005FMS	SamptType: MS	Units: µg/L	Prep Date: 5/18/2017	RunNo: 36231
Client ID:	BATCH	Batch ID: 17098		Analysis Date: 5/18/2017	SeqNo: 694398
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	2.55		0.100	2.500	102 70 130

Sample ID	1705165-005FMSD	SamptType: MSD	Units: µg/L	Prep Date: 5/18/2017	RunNo: 36231
Client ID:	BATCH	Batch ID: 17098		Analysis Date: 5/18/2017	SeqNo: 694399
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	2.53		0.100	2.500	101 70 130 2.550 0.787 20



Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Dissolved Mercury by EPA Method 245.1

Sample ID	MB-17061FB	SamptType:	MBLK	Units:	µg/L	Prep Date:	5/18/2017	RunNo:	36231			
Client ID:	MBLKW	Batch ID:	17098			Analysis Date:	5/18/2017	SeqNo:	694411			
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury		ND		0.100								

NOTES:
Filter Blank



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Total Metals by EPA Method 6020

Sample ID	MB-17042	SamplType:	MBLK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36147
Client ID:	MBLKS	Batch ID:	17042	Analysis Date:	5/15/2017	SeqNo:	692364		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Arsenic	ND	0.0752							
Barium	ND	0.376							
Cadmium	ND	0.150							
Chromium	ND	0.0752							
Copper	ND	0.150							
Lead	ND	0.150							
Nickel	ND	0.0752							
Selenium	ND	0.376							
Silver	ND	0.0752							
Zinc	ND	0.301							

Sample ID	LCS-17042	SamplType:	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36147
Client ID:	LCSS	Batch ID:	17042	Analysis Date:	5/15/2017	SeqNo:	692365		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Arsenic	36.6	0.0752	37.59	0	97.5	80	120		
Barium	41.7	0.376	37.59	0	111	80	120		
Cadmium	1.98	0.150	1.880	0	106	80	120		
Chromium	35.2	0.0752	37.59	0	93.6	80	120		
Copper	37.5	0.150	37.59	0	99.8	80	120		
Lead	19.0	0.150	18.80	0	101	80	120		
Nickel	36.5	0.0752	37.59	0	97.0	80	120		
Selenium	3.47	0.376	3.759	0	92.3	80	120		
Silver	1.16	0.0752	1.880	0	61.6	80	120		S
Zinc	38.3	0.301	37.59	0	102	80	120		

NOTES:
 S - Outlying spike recovery observed (low bias). Samples will be qualified with a *.



Work Order: 1705140
CLIENT: Shannon & Wilson
Project: Megablock Phase II

QC SUMMARY REPORT
Total Metals by EPA Method 6020

Sample ID	1705117-001ADUP	SamprType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36147		
Client ID:	BATCH	Batch ID:	17042	Analysis Date:	5/15/2017	SeqNo:	692367				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	4.92	0.0858	43.22	4.498	114	75	125	4.498	9.02	20	
Barium	59.5	0.429	43.22	62.31	81.9	75	125	62.31	4.60	20	
Cadmium	0.188	0.172	2.161	0.1532	115	75	125	0.1532	20.6	20	
Chromium	37.4	0.0858	43.22	32.48	101	75	125	32.48	14.0	20	
Copper	20.1	0.172	43.22	19.65	105	75	125	19.65	2.49	20	
Lead	14.1	0.172	43.22	13.91	90.8	75	125	13.91	1.59	20	
Nickel	40.4	0.0858	43.22	37.82	103	75	125	37.82	6.71	20	
Selenium	1.21	0.429	4.322	1.165	109	75	125	1.165	3.53	20	
Silver	ND	0.0858	2.161	0	52.7	75	125	0		20	*
Zinc	48.7	0.343	43.22	47.52	117	75	125	47.52	2.42	20	

NOTES:
 * - Flagged value is not within established control limits.

Sample ID	1705117-001AMS	SamprType:	MS	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36147		
Client ID:	BATCH	Batch ID:	17042	Analysis Date:	5/15/2017	SeqNo:	692369				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	53.6	0.0864	43.22	4.498	114	75	125	4.498	9.02	20	
Barium	97.7	0.432	43.22	62.31	81.9	75	125	62.31	4.60	20	
Cadmium	2.65	0.173	2.161	0.1532	115	75	125	0.1532	20.6	20	
Chromium	76.3	0.0864	43.22	32.48	101	75	125	32.48	14.0	20	
Copper	65.1	0.173	43.22	19.65	105	75	125	19.65	2.49	20	
Lead	33.5	0.173	43.22	13.91	90.8	75	125	13.91	1.59	20	
Nickel	82.3	0.0864	43.22	37.82	103	75	125	37.82	6.71	20	
Selenium	5.88	0.432	4.322	1.165	109	75	125	1.165	3.53	20	
Silver	1.19	0.0864	2.161	0.04927	52.7	75	125	0		20	S
Zinc	98.1	0.346	43.22	47.52	117	75	125	47.52	2.42	20	

NOTES:
 S - Outlying spike recovery(ies) observed. Please refer to the LCS.



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Total Metals by EPA Method 6020

Sample ID: 1705117-001AMS	Batch ID: 17042	SamplType: MSD	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36147
Client ID: BATCH	Batch ID: 17042			Analysis Date: 5/15/2017	SeqNo: 692370

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	52.7	0.0864	43.22	4.498	112	75	125	53.59	1.65	20	
Barium	95.9	0.432	43.22	62.31	77.6	75	125	97.71	1.92	20	
Cadmium	2.69	0.173	2.161	0.1532	117	75	125	2.648	1.46	20	
Chromium	78.2	0.0864	43.22	32.48	106	75	125	76.31	2.45	20	
Copper	62.8	0.173	43.22	19.65	99.8	75	125	65.14	3.67	20	
Lead	34.9	0.173	21.61	13.91	97.2	75	125	33.54	4.00	20	
Nickel	86.7	0.0864	43.22	37.82	113	75	125	82.26	5.30	20	
Selenium	6.09	0.432	4.322	1.165	114	75	125	5.879	3.45	20	
Silver	1.30	0.0864	2.161	0.04927	58.0	75	125	1.189	9.13	20	S
Zinc	96.0	0.346	43.22	47.52	112	75	125	98.14	2.16	20	

NOTES:
 S - Outlying spike recovery(ies) observed. Please refer to the LCS.

Sample ID: 1705117-001APDS	Batch ID: 17042	SamplType: PDS	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36147
Client ID: BATCH	Batch ID: 17042			Analysis Date: 5/15/2017	SeqNo: 692371

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Silver	1.44	0.0864	2.16	0.0493	64.6	80	120				S

NOTES:
 S - Outlying spike recovery(ies) observed. Please refer to the LCS.



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Mercury by EPA Method 7471

Sample ID	MB-17075	SamptType:	MBLK	Units:	mg/Kg	Prep Date:	5/17/2017	RunNo:	36198			
Client ID:	MBLKS	Batch ID:	17075	Analysis Date:	5/17/2017	SeqNo:	693390					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			ND	0.250								

Sample ID	LCS-17075	SamptType:	LCS	Units:	mg/Kg	Prep Date:	5/17/2017	RunNo:	36198			
Client ID:	LCSS	Batch ID:	17075	Analysis Date:	5/17/2017	SeqNo:	693391					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			0.549	0.250	0.5000	0	110	80	120			

Sample ID	1705197-001ADUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/17/2017	RunNo:	36198			
Client ID:	BATCH	Batch ID:	17075	Analysis Date:	5/17/2017	SeqNo:	693393					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			ND	0.265					0		20	

Sample ID	1705197-001AMS	SamptType:	MS	Units:	mg/Kg-dry	Prep Date:	5/17/2017	RunNo:	36198			
Client ID:	BATCH	Batch ID:	17075	Analysis Date:	5/17/2017	SeqNo:	693394					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			0.617	0.265	0.5309	0.02911	111	70	130			

Sample ID	1705197-001AMSD	SamptType:	MSD	Units:	mg/Kg-dry	Prep Date:	5/17/2017	RunNo:	36198			
Client ID:	BATCH	Batch ID:	17075	Analysis Date:	5/17/2017	SeqNo:	693395					
Analyte		Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Mercury			0.627	0.271	0.5413	0.02911	110	70	130	0.6169	1.60	20



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTTPH-DX/DX Ext.

Sample ID	MBLKS	MBLKS	SampleType: MBLK	Batch ID: 17044	Units: mg/Kg	Prep Date: 5/15/2017	RunNo: 36145	Analysis Date: 5/15/2017	SeqNo: 692326		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									
Surr: 2-Fluorobiphenyl	18.2		20.00		91.0	50	150				
Surr: o-Terphenyl	17.4		20.00		87.0	50	150				

Sample ID	LCS-17044	LCS	SampleType: LCS	Batch ID: 17044	Units: mg/Kg	Prep Date: 5/15/2017	RunNo: 36145	Analysis Date: 5/15/2017	SeqNo: 692325		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	502	20.0	500.0	0	100	65	135				
Surr: 2-Fluorobiphenyl	19.4		20.00		97.1	50	150				
Surr: o-Terphenyl	21.8		20.00		109	50	150				

Sample ID	1705119-004ADUP	DUP	SampleType: DUP	Batch ID: 17044	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36145	Analysis Date: 5/16/2017	SeqNo: 692313		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	34.0						0		30	
Diesel Range Organics (C12-C24)	ND	34.0						97.38	101	30	R
Heavy Oil	141	85.0						219.4	43.4	30	
Surr: 2-Fluorobiphenyl	37.5		34.00		110	50	150		0		
Surr: o-Terphenyl	38.8		34.00		114	50	150		0		

NOTES:
 R - High RPD observed. The method is in control as indicated by the LCS.
 DRO - Indicates the presence of unresolved compounds eluting from dodecane through tetracosane (C12-C24).



Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT Diesel and Heavy Oil by NWTTPH-DX/Dx Ext.

Sample ID	1705119-004AMS	SamptType:	MS	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36145
Client ID:	BATCH	Batch ID:	17044	Analysis Date:	5/16/2017	SeqNo:	692314		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil)	1,220	33.9	846.6	97.38	133	65	135		
Surr: 2-Fluorobiphenyl	47.9		33.87		141	50	150		
Surr: o-Terphenyl	53.0		33.87		156	50	150		S

NOTES:
S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID	1705119-004AMSD	SamptType:	MSD	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36145
Client ID:	BATCH	Batch ID:	17044	Analysis Date:	5/16/2017	SeqNo:	692315		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil)	1,270	33.9	848.3	97.38	139	65	135	1,224	3.91	30	S
Surr: 2-Fluorobiphenyl	42.7		33.93		126	50	150		0		
Surr: o-Terphenyl	46.4		33.93		137	50	150		0		

NOTES:
S - Outlying spike recovery(ies) observed. A duplicate analysis was performed and recovered within range.

Sample ID	1705140-007ADUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36145
Client ID:	21417-MB8:27	Batch ID:	17044	Analysis Date:	5/17/2017	SeqNo:	692963		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil)	ND	21.7						0		30	
Heavy Oil	ND	54.3						0		30	
Surr: 2-Fluorobiphenyl	21.1		21.70		97.3	50	150		0		
Surr: o-Terphenyl	21.4		21.70		98.4	50	150		0		

Sample ID	MB-17072	SamptType:	MBLK	Units:	mg/Kg	Prep Date:	5/17/2017	RunNo:	36202
Client ID:	MBLKS	Batch ID:	17072	Analysis Date:	5/17/2017	SeqNo:	693346		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil)	ND	20.0									
Heavy Oil	ND	50.0									



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTTPH-DX/DX Ext.

Sample ID	MB-17072	SamptType:	MBLK	Units:	mg/Kg	Prep Date:	5/17/2017	RunNo:	36202
Client ID:	MBLKS	Batch ID:	17072	Analysis Date:	5/17/2017	SeqNo:	693346		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Surr: 2-Fluorobiphenyl	18.0		20.00		89.8	50	150		
Surr: o-Terphenyl	18.0		20.00		89.8	50	150		

Sample ID	LCS-17072	SamptType:	LCS	Units:	mg/Kg	Prep Date:	5/17/2017	RunNo:	36202
Client ID:	LCSS	Batch ID:	17072	Analysis Date:	5/17/2017	SeqNo:	693345		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Diesel (Fuel Oil)	509	20.0	500.0	0	102	65	135		
Surr: 2-Fluorobiphenyl	18.9		20.00		94.6	50	150		
Surr: o-Terphenyl	20.8		20.00		104	50	150		

Sample ID	1705199-005ADUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/17/2017	RunNo:	36202
Client ID:	BATCH	Batch ID:	17072	Analysis Date:	5/18/2017	SeqNo:	696074		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Diesel (Fuel Oil)	ND		40.0					0	30
Heavy Oil	ND		100					0	30
Heavy Oil Range Organics (C24-37)	319	100						367.2	14.0 30
Surr: 2-Fluorobiphenyl	13.8		40.03		34.5	50	150		0 S
Surr: o-Terphenyl	16.9		40.03		42.3	50	150		0 S

NOTES:
 S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
 Heavy Oil Range Organics - Indicates the presence of unresolved compounds in the Lube+ Oil ranges.

Sample ID	1705173-013ADUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/17/2017	RunNo:	36202
Client ID:	BATCH	Batch ID:	17072	Analysis Date:	5/18/2017	SeqNo:	695118		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Diesel (Fuel Oil)	ND		21.3					0	30
Heavy Oil	80.5		53.3					63.39	23.7 30



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTTPH-DX/Dx Ext.

Sample ID	1705173-013ADUP	SamptType: DUP	Units: mg/Kg-dry	Prep Date: 5/17/2017	RunNo: 36202						
Client ID:	BATCH	Batch ID: 17072	Analysis Date: 5/18/2017	SeqNo: 695118							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Surr: 2-Fluorobiphenyl	21.4		21.34	13.17	100	50	150	548.9	0.222	30	
Surr: o-Terphenyl	22.2		21.34	13.17	104	50	150		0		

Sample ID	1705173-013AMS	SamptType: MS	Units: mg/Kg-dry	Prep Date: 5/17/2017	RunNo: 36202						
Client ID:	BATCH	Batch ID: 17072	Analysis Date: 5/18/2017	SeqNo: 695119							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	549	21.2	529.5	13.17	101	65	135				
Surr: 2-Fluorobiphenyl	20.2		21.18	13.17	95.5	50	150				
Surr: o-Terphenyl	23.3		21.18	13.17	110	50	150				

Sample ID	1705173-013AMSD	SamptType: MSD	Units: mg/Kg-dry	Prep Date: 5/17/2017	RunNo: 36202						
Client ID:	BATCH	Batch ID: 17072	Analysis Date: 5/18/2017	SeqNo: 695132							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	548	21.4	534.5	13.17	100	65	135	548.9	0.222	30	
Surr: 2-Fluorobiphenyl	26.6		21.38	13.17	124	50	150		0		
Surr: o-Terphenyl	28.4		21.38	13.17	133	50	150		0		



Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTTPH-DX/Dx Ext.

Sample ID	MB-17035	SamptType:	MBLK	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36159
Client ID:	MBLKW	Batch ID:	17035	Analysis Date:	5/15/2017	SeqNo:	692611		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil) ND 49.9
 Heavy Oil ND 99.8
 Surr: 2-Fluorobiphenyl 59.5 79.83 74.6 50 150
 Surr: o-Terphenyl 60.7 79.83 76.1 50 150

Sample ID	LCS-17035	SamptType:	LCS	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36159
Client ID:	LCSW	Batch ID:	17035	Analysis Date:	5/15/2017	SeqNo:	692609		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil) 797 49.9 998.8 0 79.8 65 135
 Surr: 2-Fluorobiphenyl 57.7 79.91 72.2 50 150
 Surr: o-Terphenyl 62.1 79.91 77.8 50 150

Sample ID	LCSD-17035	SamptType:	LCSD	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36159
Client ID:	LCSSW02	Batch ID:	17035	Analysis Date:	5/15/2017	SeqNo:	692610		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil) 699 49.9 998.6 0 69.9 65 135 796.9 13.2 30
 Surr: 2-Fluorobiphenyl 52.9 79.89 66.2 50 150
 Surr: o-Terphenyl 58.0 79.89 72.6 50 150

Sample ID	1705140-010ADUP	SamptType:	DUP	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36159
Client ID:	21417-MB9:GW	Batch ID:	17035	Analysis Date:	5/15/2017	SeqNo:	692601		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Diesel (Fuel Oil) ND 50.2
 Heavy Oil 142 100
 Surr: 2-Fluorobiphenyl 58.4 80.32 72.7 50 150 145.7 2.89 30
 Surr: o-Terphenyl 38.8 80.32 48.3 50 150



Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTTPH-Dx/Dx Ext.

Sample ID	1705140-010ADUP	SamptType:	DUP	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36159				
Client ID:	21417-MB9:GW	Batch ID:	17035			Analysis Date:	5/15/2017	SeqNo:	692601				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Gasoline by NWTPH-GX

Sample ID	LCS-17056	SamptType:	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36205
Client ID:	LCSS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693478		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Gasoline
 Surr: Toluene-d8 29.6 5.00 25.00 0 118 65 135
 Surr: 4-Bromofluorobenzene 1.27 1.250 1.250 101 65 135
 1.23 1.250 1.250 98.6 65 135

Sample ID	MB-17056	SamptType:	MBLK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36205
Client ID:	MBLKS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693479		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Gasoline
 Surr: Toluene-d8 ND 5.00
 Surr: 4-Bromofluorobenzene 1.25 1.250 1.250 100 65 135
 1.26 1.250 1.250 101 65 135

Sample ID	1705143-001BDUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36205
Client ID:	BATCH	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693492		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Gasoline
 Surr: Toluene-d8 ND 5.11
 Surr: 4-Bromofluorobenzene 1.28 1.278 1.278 100 65 135
 1.29 1.278 1.278 101 65 135

Sample ID	1705140-001BDUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36205
Client ID:	21417-MB10:28	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693481		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Gasoline
 Surr: Toluene-d8 ND 4.33
 Surr: 4-Bromofluorobenzene 1.10 1.082 1.082 101 65 135
 1.05 1.082 1.082 96.8 65 135



Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT

Gasoline by NWTPH-GX

Sample ID: 1705140-007BMS	Batch ID: 17056	SamptType: MS	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36205
Client ID: 21417-MB8:27	Batch ID: 17056	Result	SPK value	SPK Ref Val	%REC
Analysis Date: 5/17/2017	SeqNo: 693488	LowLimit	HighLimit	RPD Ref Val	%RPD
RPDLimit	Qual				

Gasoline	13.7	3.81	19.06	0	71.9	65	135	13.71	32.7	30	R
Surr: Toluene-d8	0.968		0.9529		102	65	135		0		
Surr: 4-Bromofluorobenzene	0.937		0.9529		98.3	65	135		0		

Sample ID: 1705140-007BMSD	Batch ID: 17056	SamptType: MSD	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36205
Client ID: 21417-MB8:27	Batch ID: 17056	Result	SPK value	SPK Ref Val	%REC
Analysis Date: 5/17/2017	SeqNo: 693489	LowLimit	HighLimit	RPD Ref Val	%RPD
RPDLimit	Qual				

Gasoline	19.1	3.81	19.06	0	100	65	135	13.71	32.7	30	R
Surr: Toluene-d8	0.983		0.9529		103	65	135		0		
Surr: 4-Bromofluorobenzene	0.950		0.9529		99.7	65	135		0		

NOTES:

R - High RPD observed, spike recoveries are within range.



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QCC SUMMARY REPORT
 Gasoline by NWTPH-GX

Sample ID	LCS-17040	SamptType: LCS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	LCSW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692161						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	496	50.0	500.0	0	99.3	65	135				
Surr: Toluene-d8	25.3		25.00		101	65	135				
Surr: 4-Bromofluorobenzene	25.6		25.00		103	65	135				

Sample ID	MB-17040	SamptType: MBLK	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	MBLKW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692162						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: Toluene-d8	25.4		25.00		102	65	135				
Surr: 4-Bromofluorobenzene	24.6		25.00		98.4	65	135				

Sample ID	1705106-002DDUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692143						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: Toluene-d8	24.1		25.00		96.3	65	135			0	
Surr: 4-Bromofluorobenzene	24.3		25.00		97.0	65	135			0	

Sample ID	1705106-003DMS	SamptType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692145						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	500	50.0	500.0	0	100	65	135				
Surr: Toluene-d8	25.2		25.00		101	65	135				
Surr: 4-Bromofluorobenzene	25.3		25.00		101	65	135				



Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT Gasoline by NWTPH-GX

Sample ID: 1705106-003DMSD	Batch ID: BATCH	SamptType: MSD	Result: 17040	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139
					Analysis Date: 5/13/2017	SeqNo: 692146

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	458	50.0	500.0	0	91.6	65	135	500.1	8.82	30	
Surr: Toluene-d8	25.2		25.00		101	65	135		0		
Surr: 4-Bromofluorobenzene	25.4		25.00		102	65	135		0		

Sample ID: 1705151-022ADUP	Batch ID: BATCH	SamptType: DUP	Result: 17040	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139
					Analysis Date: 5/13/2017	SeqNo: 692153

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0	25.00	25.00	97.8	65	135	0	0	30	
Surr: Toluene-d8	24.4		25.00		94.7	65	135		0		
Surr: 4-Bromofluorobenzene	23.7		25.00								



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT

Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17056	SamplType	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204			
Client ID:	LCSS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693450					
Analyte		Result		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	0.859	0.0600	1.000	0	85.9	14.3	167		
Chloromethane	1.06	0.0600	1.000	0	106	46	144		
Vinyl chloride	0.960	0.00200	1.000	0	96.0	44	142		
Bromomethane	0.833	0.0900	1.000	0	83.3	40.9	157		
Trichlorofluoromethane (CFC-11)	0.940	0.0500	1.000	0	94.0	36.9	156		
Chloroethane	0.995	0.0600	1.000	0	99.5	33.4	155		
1,1-Dichloroethene	1.04	0.0500	1.000	0	104	49.7	142		
Methylene chloride	1.05	0.0200	1.000	0	105	46.3	140		
trans-1,2-Dichloroethene	0.999	0.0200	1.000	0	99.9	68	130		
Methyl tert-butyl ether (MTBE)	0.986	0.0500	1.000	0	98.6	66.3	145		
1,1-Dichloroethane	0.855	0.0200	1.000	0	85.5	61.9	137		
2,2-Dichloropropane	0.789	0.0500	1.000	0	78.9	35.5	186		
cis-1,2-Dichloroethene	1.05	0.0200	1.000	0	105	71.3	135		
Chloroform	0.953	0.0200	1.000	0	95.3	69	145		
1,1,1-Trichloroethane (TCA)	0.935	0.0200	1.000	0	93.5	69	132		
1,1-Dichloropropene	1.10	0.0200	1.000	0	110	72.7	131		
Carbon tetrachloride	0.999	0.0200	1.000	0	99.9	63.4	137		
1,2-Dichloroethane (EDC)	1.04	0.0300	1.000	0	104	50.9	162		
Benzene	1.03	0.0200	1.000	0	103	64.3	133		
Trichloroethene (TCE)	0.958	0.0200	1.000	0	95.8	65.5	137		
1,2-Dichloropropane	0.986	0.0200	1.000	0	98.6	63.2	142		
Bromodichloromethane	0.813	0.0200	1.000	0	81.3	73.2	131		
Dibromomethane	0.897	0.0400	1.000	0	89.7	60.1	146		
cis-1,3-Dichloropropene	0.933	0.0200	1.000	0	93.3	59.1	143		
Toluene	1.01	0.0200	1.000	0	101	67.3	138		
trans-1,3-Dichloropropylene	0.924	0.0300	1.000	0	92.4	49.2	149		
1,1,2-Trichloroethane	0.954	0.0300	1.000	0	95.4	56.9	147		
1,3-Dichloropropane	0.996	0.0500	1.000	0	99.6	56.1	153		
Tetrachloroethene (PCE)	1.03	0.0200	1.000	0	103	52.7	150		
Dibromochloromethane	0.861	0.0300	1.000	0	86.1	70.6	144		
1,2-Dibromoethane (EDB)	0.962	0.00500	1.000	0	96.2	50.5	154		



Work Order: 1705140

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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17056	SamplType	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204					
Client ID:	LCSS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693450							
Analyte		Result		RL		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chlorobenzene	1.03	0.0200	1.000	0	103	76.1	123							
1,1,1,2-Tetrachloroethane	0.920	0.0300	1.000	0	92.0	65.9	141							
Ethylbenzene	1.05	0.0300	1.000	0	105	74	129							
m,p-Xylene	2.11	0.0200	2.000	0	106	70	124							
o-Xylene	1.04	0.0200	1.000	0	104	68.1	139							
Styrene	1.03	0.0200	1.000	0	103	73.3	146							
Isopropylbenzene	1.05	0.0800	1.000	0	105	70	130							
Bromoforn	0.710	0.0200	1.000	0	71.0	67	154							
1,1,2,2-Tetrachloroethane	0.906	0.0200	1.000	0	90.6	44.8	165							
n-Propylbenzene	1.06	0.0200	1.000	0	106	74.8	125							
Bromobenzene	1.00	0.0300	1.000	0	100	49.2	144							
1,3,5-Trimethylbenzene	1.03	0.0200	1.000	0	103	74.6	123							
2-Chlorotoluene	1.03	0.0200	1.000	0	103	76.7	129							
4-Chlorotoluene	1.03	0.0200	1.000	0	103	77.5	125							
tert-Butylbenzene	1.06	0.0200	1.000	0	106	66.2	130							
1,2,3-Trichloropropane	0.993	0.0200	1.000	0	99.3	67.9	136							
1,2,4-Trichlorobenzene	1.14	0.0500	1.000	0	114	62.6	143							
sec-Butylbenzene	1.10	0.0200	1.000	0	110	75.6	133							
4-Isopropyltoluene	1.05	0.0200	1.000	0	105	76.8	131							
1,3-Dichlorobenzene	1.04	0.0200	1.000	0	104	72.8	128							
1,4-Dichlorobenzene	1.05	0.0200	1.000	0	105	72.6	126							
n-Butylbenzene	1.08	0.0200	1.000	0	108	65.3	136							
1,2-Dichlorobenzene	1.02	0.0200	1.000	0	102	72.8	126							
1,2-Dibromo-3-chloropropane	0.743	0.500	1.000	0	74.3	40.2	155							
1,2,4-Trimethylbenzene	0.998	0.0200	1.000	0	99.8	77.5	129							
Hexachlorobutadiene	1.12	0.100	1.000	0	112	42	151							
Naphthalene	1.17	0.0300	1.000	0	117	58.4	160							
1,2,3-Trichlorobenzene	1.15	0.0200	1.000	0	115	54.8	143							
Surr: Dibromofluoromethane	0.932		1.250		74.6	56.5	129							
Surr: Toluene-d8	1.26		1.250		101	64.5	151							
Surr: 1-Bromo-4-fluorobenzene	1.32		1.250		106	63.1	141							



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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCs-17056	SamptType:	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204				
Client ID:	LCSS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693450						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	MB-17056	SamptType:	MLBK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204				
Client ID:	MBLKS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693451						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600											Q
Chloromethane	ND	0.0600											
Vinyl chloride	ND	0.00200											
Bromomethane	ND	0.0900											
Trichlorofluoromethane (CFC-11)	ND	0.0500											
Chloroethane	ND	0.0600											
1,1-Dichloroethene	ND	0.0500											
Methylene chloride	ND	0.0200											
trans-1,2-Dichloroethene	ND	0.0200											
Methyl tert-butyl ether (MTBE)	ND	0.0500											
1,1-Dichloroethane	ND	0.0200											
2,2-Dichloropropane	ND	0.0500											
cis-1,2-Dichloroethene	ND	0.0200											
Chloroform	ND	0.0200											
1,1,1-Trichloroethane (TCA)	ND	0.0200											
1,1-Dichloropropene	ND	0.0200											
Carbon tetrachloride	ND	0.0200											
1,2-Dichloroethane (EDC)	ND	0.0300											
Benzene	ND	0.0200											
Trichloroethene (TCE)	ND	0.0200											
1,2-Dichloropropane	ND	0.0200											
Bromodichloromethane	ND	0.0200											
Dibromomethane	ND	0.0400											
cis-1,3-Dichloropropene	ND	0.0200											
Toluene	ND	0.0200											



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Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17056	SamptType	MBLK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204	
Client ID:	MBLKS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693451			
Analyte		Result		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									



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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17056	SamptType:	MBLK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204		
Client ID:	MBLKS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693451				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Hexachlorobutadiene	ND	0.100									
Naphthalene	ND	0.0300									
1,2,3-Trichlorobenzene	ND	0.0200									
Surr: Dibromofluoromethane	1.15		1.250		91.9	56.5	129				
Surr: Toluene-d8	1.38		1.250		110	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.20		1.250		95.7	63.1	141				

NOTES:
 Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	1705143-001BDUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36204		
Client ID:	BATCH	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693440				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0613								30	Q
Chloromethane	ND	0.0613								30	
Vinyl chloride	ND	0.00204								30	
Bromomethane	ND	0.0920								30	
Trichlorofluoromethane (CFC-11)	ND	0.0511								30	
Chloroethane	ND	0.0613								30	
1,1-Dichloroethene	ND	0.0511								30	
Methylene chloride	ND	0.0204								30	
trans-1,2-Dichloroethene	ND	0.0204								30	
Methyl tert-butyl ether (MTBE)	ND	0.0511								30	
1,1-Dichloroethane	ND	0.0204								30	
2,2-Dichloropropane	ND	0.0511								30	Q
cis-1,2-Dichloroethene	ND	0.0204								30	
Chloroform	ND	0.0204								30	
1,1,1-Trichloroethane (TCA)	ND	0.0204								30	
1,1-Dichloropropene	ND	0.0204								30	
Carbon tetrachloride	ND	0.0204								30	
1,2-Dichloroethane (EDC)	ND	0.0307								30	



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QC SUMMARY REPORT
 Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705143-001BDUP	SamptType: DUP	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204							
Client ID: BATCH	Batch ID: 17056		Analysis Date: 5/16/2017	SeqNo: 693440							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	ND	0.0204						0		30	
Trichloroethene (TCE)	ND	0.0204						0		30	
1,2-Dichloropropane	ND	0.0204						0		30	
Bromodichloromethane	ND	0.0204						0		30	
Dibromomethane	ND	0.0409						0		30	
cis-1,3-Dichloropropene	ND	0.0204						0		30	
Toluene	ND	0.0204						0.02925	39.1	30	
trans-1,3-Dichloropropylene	ND	0.0307						0		30	
1,1,2-Trichloroethane	ND	0.0307						0		30	
1,3-Dichloropropane	ND	0.0511						0		30	
Tetrachloroethene (PCE)	ND	0.0204						0		30	
Dibromochloromethane	ND	0.0307						0		30	
1,2-Dibromoethane (EDB)	ND	0.00511						0		30	
Chlorobenzene	ND	0.0204						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0307						0		30	
Ethylbenzene	ND	0.0307						0		30	
m,p-Xylene	0.0271	0.0204						0.03362	21.7	30	
o-Xylene	ND	0.0204						0		30	
Styrene	ND	0.0204						0		30	
Isopropylbenzene	ND	0.0818						0		30	
Bromoform	ND	0.0204						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0204						0		30	
n-Propylbenzene	ND	0.0204						0		30	
Bromobenzene	ND	0.0307						0		30	
1,3,5-Trimethylbenzene	ND	0.0204						0		30	
2-Chlorotoluene	ND	0.0204						0		30	
4-Chlorotoluene	ND	0.0204						0		30	
tert-Butylbenzene	ND	0.0204						0		30	
1,2,3-Trichloropropane	ND	0.0204						0		30	
1,2,4-Trichlorobenzene	ND	0.0511						0		30	
sec-Butylbenzene	ND	0.0204						0		30	



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QC SUMMARY REPORT
 Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705143-001BDUP	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693440	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	ND	0.0204								30	
1,3-Dichlorobenzene	ND	0.0204								30	
1,4-Dichlorobenzene	ND	0.0204								30	
n-Butylbenzene	ND	0.0204								30	
1,2-Dichlorobenzene	ND	0.0204								30	
1,2-Dibromo-3-chloropropane	ND	0.511								30	
1,2,4-Trimethylbenzene	0.0444	0.0204						0.04638	4.41	30	
Hexachlorobutadiene	ND	0.102								30	
Naphthalene	ND	0.0307								30	
1,2,3-Trichlorobenzene	ND	0.0204								30	
Surr: Dibromofluoromethane	1.17		1.278		91.4	56.5	129		0		
Surr: Toluene-d8	1.70		1.278		133	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.24		1.278		96.9	63.1	141		0		

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID: 1705140-001BDUP	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: 21417-MB10:28	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693429	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0519								30	Q
Chloromethane	ND	0.0519								30	
Vinyl chloride	ND	0.00173								30	
Bromomethane	ND	0.0779								30	
Trichlorofluoromethane (CFC-11)	ND	0.0433								30	
Chloroethane	ND	0.0519								30	
1,1-Dichloroethene	ND	0.0433								30	
Methylene chloride	ND	0.0173								30	
trans-1,2-Dichloroethene	ND	0.0173								30	
Methyl tert-butyl ether (MTBE)	ND	0.0433								30	
1,1-Dichloroethane	ND	0.0173								30	



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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-001BDUP	SamptType: DUP	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204							
Client ID: 21417-MB10-28	Batch ID: 17056		Analysis Date: 5/16/2017	SeqNo: 693429							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

2,2-Dichloropropane	ND	0.0433						0		30	Q
cis-1,2-Dichloroethene	ND	0.0173						0		30	
Chloroform	ND	0.0173						0		30	
1,1,1-Trichloroethane (TCA)	ND	0.0173						0		30	
1,1-Dichloropropene	ND	0.0173						0		30	
Carbon tetrachloride	ND	0.0173						0		30	
1,2-Dichloroethane (EDC)	ND	0.0260						0		30	
Benzene	ND	0.0173						0		30	
Trichloroethene (TCE)	ND	0.0173						0		30	
1,2-Dichloropropane	ND	0.0173						0		30	
Bromodichloromethane	ND	0.0173						0		30	
Dibromomethane	ND	0.0346						0		30	
cis-1,3-Dichloropropene	ND	0.0173						0		30	
Toluene	ND	0.0173						0		30	
trans-1,3-Dichloropropylene	ND	0.0260						0		30	
1,1,2-Trichloroethane	ND	0.0260						0		30	
1,3-Dichloropropane	ND	0.0433						0		30	
Tetrachloroethene (PCE)	ND	0.0173						0		30	
Dibromochloromethane	ND	0.0260						0		30	
1,2-Dibromoethane (EDB)	ND	0.00433						0		30	
Chlorobenzene	ND	0.0173						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0260						0		30	
Ethylbenzene	ND	0.0260						0		30	
m,p-Xylene	ND	0.0173						0		30	
o-Xylene	ND	0.0173						0		30	
Styrene	ND	0.0173						0		30	
Isopropylbenzene	ND	0.0692						0		30	
Bromoform	ND	0.0173						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0173						0		30	
n-Propylbenzene	ND	0.0173						0		30	
Bromobenzene	ND	0.0260						0		30	



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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-001BDUP	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: 21417-MB10-28	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693429	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	0.0173								30	
2-Chlorotoluene	ND	0.0173								30	
4-Chlorotoluene	ND	0.0173								30	
tert-Butylbenzene	ND	0.0173								30	
1,2,3-Trichloropropane	ND	0.0173								30	
1,2,4-Trichlorobenzene	ND	0.0433								30	
sec-Butylbenzene	ND	0.0173								30	
4-Isopropyltoluene	ND	0.0173								30	
1,3-Dichlorobenzene	ND	0.0173								30	
1,4-Dichlorobenzene	ND	0.0173								30	
n-Butylbenzene	ND	0.0173								30	
1,2-Dichlorobenzene	ND	0.0173								30	
1,2-Dibromo-3-chloropropane	ND	0.433								30	
1,2,4-Trimethylbenzene	ND	0.0173								30	
Hexachlorobutadiene	ND	0.0866								30	
Naphthalene	ND	0.0260								30	
1,2,3-Trichlorobenzene	ND	0.0173								30	
Surr: Dibromofluoromethane	0.961		1.082		88.8	56.5	129		0		
Surr: Toluene-d8	1.02		1.082		94.0	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.01		1.082		93.3	63.1	141		0		

NOTES:
 Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID: 1705140-003BMS	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: 21417-MB11-23	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693433	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.702	0.0772	1.287		54.6	43.5	121				
Chloromethane	0.939	0.0772	1.287		73.0	45	130				
Vinyl chloride	0.866	0.00257	1.287		67.3	51.2	146				
Bromomethane	0.873	0.116	1.287		67.8	21.3	120				



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMS	SamptType: MS	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204							
Client ID: 21417-MB11:23	Batch ID: 17056		Analysis Date: 5/16/2017	SeqNo: 693433							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichlorofluoromethane (CFC-11)	1.23	0.0643	1.287	0	95.9	35	131				
Chloroethane	1.07	0.0772	1.287	0	82.9	31.9	123				
1,1-Dichloroethene	1.11	0.0643	1.287	0	86.1	61.9	141				
Methylene chloride	1.13	0.0257	1.287	0	87.5	54.7	142				
trans-1,2-Dichloroethene	1.08	0.0257	1.287	0	84.2	52	136				
Methyl tert-butyl ether (MTBE)	1.09	0.0643	1.287	0	84.8	54.4	132				
1,1-Dichloroethane	1.18	0.0257	1.287	0	91.7	51.8	141				
2,2-Dichloropropane	0.530	0.0643	1.287	0	41.2	36	123				
cis-1,2-Dichloroethene	1.20	0.0257	1.287	0	93.0	58.6	136				
Chloroform	1.20	0.0257	1.287	0	93.1	53.2	129				
1,1,1-Trichloroethane (TCA)	1.11	0.0257	1.287	0	86.0	58.3	145				
1,1-Dichloropropene	1.15	0.0257	1.287	0	89.7	55.1	138				
Carbon tetrachloride	1.01	0.0257	1.287	0	78.7	53.3	144				
1,2-Dichloroethane (EDC)	1.20	0.0386	1.287	0	93.5	51.3	139				
Benzene	1.20	0.0257	1.287	0	94.5	63.5	133				
Trichloroethene (TCE)	1.22	0.0257	1.287	0	94.5	68.6	132				
1,2-Dichloropropane	1.23	0.0257	1.287	0	95.8	59	136				
Bromodichloromethane	1.01	0.0257	1.287	0	78.5	50.7	141				
Dibromomethane	1.13	0.0515	1.287	0	87.6	50.6	137				
cis-1,3-Dichloropropene	1.08	0.0257	1.287	0	83.8	50.4	138				
Toluene	1.24	0.0257	1.287	0.03477	94.0	63.4	132				
trans-1,3-Dichloropropylene	1.07	0.0386	1.287	0	83.3	44.1	147				
1,1,2-Trichloroethane	1.17	0.0386	1.287	0	90.6	51.6	137				
1,3-Dichloropropane	1.20	0.0643	1.287	0	93.5	53.1	134				
Tetrachloroethene (PCE)	1.19	0.0257	1.287	0	92.1	35.6	158				
Dibromochloromethane	1.11	0.0386	1.287	0	86.1	55.3	140				
1,2-Dibromoethane (EDB)	1.16	0.00643	1.287	0	90.5	50.4	136				
Chlorobenzene	1.25	0.0257	1.287	0	97.2	60	133				
1,1,1,2-Tetrachloroethane	1.15	0.0386	1.287	0	89.0	53.1	142				
Ethylbenzene	1.25	0.0386	1.287	0	97.1	54.5	134				
m,p-Xylene	2.52	0.0257	2.574	0	97.7	53.1	132				



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMS	SamplType: MS	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204							
Client ID: 21417-MB11:23	Batch ID: 17056		Analysis Date: 5/16/2017	SeqNo: 693433							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

o-Xylene	1.24	0.0257	1.287	0	96.0	53.3	139				
Styrene	1.23	0.0257	1.287	0	95.6	51.1	132				
Isopropylbenzene	1.24	0.103	1.287	0	96.2	58.9	138				
Bromoform	0.930	0.0257	1.287	0	72.3	57.9	130				
1,1,2,2-Tetrachloroethane	1.15	0.0257	1.287	0	89.2	51.9	131				
n-Propylbenzene	1.22	0.0257	1.287	0	94.9	53.6	140				
Bromobenzene	1.23	0.0386	1.287	0	95.3	54.2	140				
1,3,5-Trimethylbenzene	1.22	0.0257	1.287	0	94.8	51.8	136				
2-Chlorotoluene	1.22	0.0257	1.287	0	95.2	51.6	136				
4-Chlorotoluene	1.23	0.0257	1.287	0	95.7	50.1	139				
tert-Butylbenzene	1.23	0.0257	1.287	0	95.2	50.5	135				
1,2,3-Trichloropropane	1.13	0.0257	1.287	0	88.1	50.5	131				
1,2,4-Trichlorobenzene	1.27	0.0643	1.287	0	98.3	50.8	130				
sec-Butylbenzene	1.27	0.0257	1.287	0	98.3	52.6	141				
4-Isopropyltoluene	1.23	0.0257	1.287	0	95.5	52.9	134				
1,3-Dichlorobenzene	1.28	0.0257	1.287	0	99.4	52.6	131				
1,4-Dichlorobenzene	1.27	0.0257	1.287	0	99.0	52.9	129				
n-Butylbenzene	1.26	0.0257	1.287	0	98.2	52.6	130				
1,2-Dichlorobenzene	1.28	0.0257	1.287	0	99.5	55.8	129				
1,2-Dibromo-3-chloropropane	0.940	0.643	1.287	0	73.0	40.5	131				
1,2,4-Trimethylbenzene	1.19	0.0257	1.287	0	92.3	50.6	137				
Hexachlorobutadiene	1.27	0.129	1.287	0	98.9	40.6	158				
Naphthalene	1.35	0.0386	1.287	0	105	52.3	124				
1,2,3-Trichlorobenzene	1.30	0.0257	1.287	0	101	54.4	124				
Surr: Dibromofluoromethane	1.58		1.609		98.5	56.5	129				
Surr: Toluene-d8	1.65		1.609		103	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.71		1.609		106	63.1	141				



Date: 5/26/2017

Work Order: 1705140
CLIENT: Shannon & Wilson
Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMSD	SamplType: MSD	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: 21417-MB11:23	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693434	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.798	0.0772	1.287	0	62.0	43.5	121	0.7025	12.8	30	
Chloromethane	1.02	0.0772	1.287	0	79.4	45	130	0.9393	8.40	30	
Vinyl chloride	0.957	0.00257	1.287	0	74.3	51.2	146	0.8657	9.99	30	
Bromomethane	0.898	0.116	1.287	0	69.8	21.3	120	0.8727	2.85	30	
Trichlorofluoromethane (CFC-11)	1.33	0.0643	1.287	0	104	35	131	1.234	7.79	30	
Chloroethane	1.05	0.0772	1.287	0	81.9	31.9	123	1.066	1.20	30	
1,1-Dichloroethene	1.20	0.0643	1.287	0	93.4	61.9	141	1.108	8.16	30	
Methylene chloride	1.15	0.0257	1.287	0	89.3	54.7	142	1.126	2.11	30	
trans-1,2-Dichloroethene	1.11	0.0257	1.287	0	85.9	52	136	1.083	2.04	30	
Methyl tert-butyl ether (MTBE)	1.15	0.0643	1.287	0	89.3	54.4	132	1.091	5.21	30	
1,1-Dichloroethane	1.19	0.0257	1.287	0	92.4	51.8	141	1.180	0.752	30	
2,2-Dichloropropane	0.555	0.0643	1.287	0	43.1	36	123	0.5297	4.63	30	
cis-1,2-Dichloroethene	1.20	0.0257	1.287	0	93.0	58.6	136	1.196	0.0639	30	
Chloroform	1.21	0.0257	1.287	0	93.8	53.2	129	1.198	0.797	30	
1,1,1-Trichloroethane (TCA)	1.12	0.0257	1.287	0	86.7	58.3	145	1.106	0.844	30	
1,1-Dichloropropene	1.17	0.0257	1.287	0	91.2	55.1	138	1.154	1.68	30	
Carbon tetrachloride	0.971	0.0257	1.287	0	75.5	53.3	144	1.013	4.28	30	
1,2-Dichloroethane (EDC)	1.23	0.0386	1.287	0	95.8	51.3	139	1.204	2.35	30	
Benzene	1.21	0.0257	1.287	0	93.7	63.5	133	1.199	0.543	30	
Trichloroethene (TCE)	1.24	0.0257	1.287	0	96.3	68.6	132	1.216	1.90	30	
1,2-Dichloropropane	1.18	0.0257	1.287	0	91.7	59	136	1.232	4.38	30	
Bromodichloromethane	1.01	0.0257	1.287	0	78.9	50.7	141	1.010	0.471	30	
Dibromomethane	1.14	0.0515	1.287	0	88.9	50.6	137	1.128	1.40	30	
cis-1,3-Dichloropropene	1.08	0.0257	1.287	0	84.0	50.4	138	1.078	0.216	30	
Toluene	1.24	0.0257	1.287	0.03477	93.6	63.4	132	1.245	0.482	30	
trans-1,3-Dichloropropylene	1.09	0.0386	1.287	0	85.1	44.1	147	1.072	2.10	30	
1,1,2-Trichloroethane	1.18	0.0386	1.287	0	92.0	51.6	137	1.165	1.56	30	
1,3-Dichloropropane	1.22	0.0643	1.287	0	94.4	53.1	134	1.204	0.948	30	
Tetrachloroethene (PCE)	1.19	0.0257	1.287	0	92.7	35.6	158	1.186	0.668	30	
Dibromochloromethane	1.11	0.0386	1.287	0	86.5	55.3	140	1.108	0.432	30	
1,2-Dibromoethane (EDB)	1.20	0.00643	1.287	0	92.9	50.4	136	1.165	2.57	30	



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMSD

Units: mg/Kg-dry

Prep Date: 5/15/2017

RunNo: 36204

Client ID: 21417-MB11:23

Analysis Date: 5/16/2017

SeqNo: 693434

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	1.25	0.0257	1.287	0	96.8	60	133	1.252	0.438	30	
1,1,1,2-Tetrachloroethane	1.12	0.0386	1.287	0	87.3	53.1	142	1.145	1.89	30	
Ethylbenzene	1.25	0.0386	1.287	0	97.2	54.5	134	1.250	0.0296	30	
m,p-Xylene	2.51	0.0257	2.574	0	97.6	53.1	132	2.516	0.166	30	
o-Xylene	1.25	0.0257	1.287	0	96.9	53.3	139	1.235	0.890	30	
Styrene	1.23	0.0257	1.287	0	95.7	51.1	132	1.230	0.159	30	
Isopropylbenzene	1.25	0.103	1.287	0	97.4	58.9	138	1.238	1.27	30	
Bromoforn	0.908	0.0257	1.287	0	70.6	57.9	130	0.9304	2.39	30	
1,1,2,2-Tetrachloroethane	1.15	0.0257	1.287	0	89.6	51.9	131	1.148	0.407	30	
n-Propylbenzene	1.23	0.0257	1.287	0	95.9	53.6	140	1.221	1.01	30	
Bromobenzene	1.22	0.0386	1.287	0	94.6	54.2	140	1.226	0.698	30	
1,3,5-Trimethylbenzene	1.22	0.0257	1.287	0	94.5	51.8	136	1.220	0.316	30	
2-Chlorotoluene	1.23	0.0257	1.287	0	95.2	51.6	136	1.225	0.0954	30	
4-Chlorotoluene	1.23	0.0257	1.287	0	95.2	50.1	139	1.231	0.460	30	
tert-Butylbenzene	1.23	0.0257	1.287	0	95.8	50.5	135	1.225	0.580	30	
1,2,3-Trichloropropane	1.22	0.0257	1.287	0	94.7	50.5	131	1.134	7.19	30	
1,2,4-Trichlorobenzene	1.29	0.0643	1.287	0	100	50.8	130	1.265	1.72	30	
sec-Butylbenzene	1.28	0.0257	1.287	0	99.4	52.6	141	1.265	1.13	30	
4-Isopropyltoluene	1.23	0.0257	1.287	0	95.6	52.9	134	1.229	0.0302	30	
1,3-Dichlorobenzene	1.28	0.0257	1.287	0	99.8	52.6	131	1.279	0.368	30	
1,4-Dichlorobenzene	1.27	0.0257	1.287	0	98.4	52.9	129	1.274	0.580	30	
n-Butylbenzene	1.29	0.0257	1.287	0	101	52.6	130	1.264	2.42	30	
1,2-Dichlorobenzene	1.27	0.0257	1.287	0	99.0	55.8	129	1.281	0.532	30	
1,2-Dibromo-3-chloropropane	0.980	0.643	1.287	0	76.1	40.5	131	0.9400	4.15	30	
1,2,4-Trimethylbenzene	1.18	0.0257	1.287	0	91.5	50.6	137	1.188	0.881	30	
Hexachlorobutadiene	1.29	0.129	1.287	0	100	40.6	158	1.273	1.41	30	
Naphthalene	1.41	0.0386	1.287	0	110	52.3	124	1.350	4.56	30	
1,2,3-Trichlorobenzene	1.29	0.0257	1.287	0	100	54.4	124	1.296	0.259	30	
Surr: Dibromofluoromethane	1.58		1.609		98.2	56.5	129		0		
Surr: Toluene-d8	1.63		1.609		101	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.71		1.609		106	63.1	141		0		



Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1705140-003BMSD	SamptType:	MSD	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36204		
Client ID:	21417-MB11:23	Batch ID:	17056			Analysis Date:	5/16/2017	SeqNo:	693434		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17040	SamptType	LCS	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132					
Client ID:	LCSW	Batch ID:	17040	Analysis Date:	5/12/2017	SeqNo:	692023							
Analyte		Result		RL		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	13.7	1.00	20.00	0	68.6	18.7	171							
Chloromethane	21.3	1.00	20.00	0	107	38.5	171							
Vinyl chloride	21.2	0.200	20.00	0	106	48	145							
Bromomethane	20.1	1.00	20.00	0	100	32.5	184							
Trichlorofluoromethane (CFC-11)	19.9	1.00	20.00	0	99.5	43.5	149							
Chloroethane	20.7	1.00	20.00	0	103	43.8	168							
1,1-Dichloroethene	17.3	1.00	20.00	0	86.6	57.5	150							
Methylene chloride	18.6	1.00	20.00	0	92.9	67.1	131							
trans-1,2-Dichloroethene	19.6	1.00	20.00	0	97.9	71.7	129							
Methyl tert-butyl ether (MTBE)	21.5	1.00	20.00	0	108	58	138							
1,1-Dichloroethane	19.0	1.00	20.00	0	95.0	67.9	134							
2,2-Dichloropropane	35.8	2.00	20.00	0	179	26.5	185							
cis-1,2-Dichloroethene	18.7	1.00	20.00	0	93.6	70.2	139							
Chloroform	18.2	1.00	20.00	0	90.8	66.3	131							
1,1,1-Trichloroethane (TCA)	21.2	1.00	20.00	0	106	71	131							
1,1-Dichloropropene	20.4	1.00	20.00	0	102	69.9	124							
Carbon tetrachloride	18.8	1.00	20.00	0	93.9	66.2	134							
1,2-Dichloroethane (EDC)	19.3	1.00	20.00	0	96.4	67	126							
Benzene	19.8	1.00	20.00	0	98.9	69.3	132							
Trichloroethene (TCE)	19.9	0.500	20.00	0	99.4	65.2	136							
1,2-Dichloropropane	19.9	1.00	20.00	0	99.7	70.5	130							
Bromodichloromethane	19.1	1.00	20.00	0	95.7	67.2	137							
Dibromomethane	20.2	1.00	20.00	0	101	69.3	143							
cis-1,3-Dichloropropene	23.0	1.00	20.00	0	115	62.6	137							
Toluene	19.6	1.00	20.00	0	98.0	61.3	145							
trans-1,3-Dichloropropylene	21.9	1.00	20.00	0	110	56.5	163							
1,1,2-Trichloroethane	20.6	1.00	20.00	0	103	71.7	131							
1,3-Dichloropropane	20.8	1.00	20.00	0	104	73.5	127							
Tetrachloroethene (PCE)	19.8	1.00	20.00	0	99.2	47.5	147							
Dibromochloromethane	20.1	1.00	20.00	0	101	67.2	134							
1,2-Dibromoethane (EDB)	21.3	0.0600	20.00	0	106	73.6	125							



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: LCS-17040	SamplType: LCS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: LCSW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692023							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chlorobenzene	20.0	1.00	20.00	0	99.9	73.9	126				
1,1,1,2-Tetrachloroethane	19.8	1.00	20.00	0	99.2	76.8	124				
Ethylbenzene	20.6	1.00	20.00	0	103	72	130				
m,p-Xylene	41.2	1.00	40.00	0	103	70.3	134				
o-Xylene	20.0	1.00	20.00	0	100	72.1	131				
Styrene	20.3	1.00	20.00	0	102	64.3	140				
Isopropylbenzene	20.3	1.00	20.00	0	101	73.9	128				
Bromoforn	20.5	1.00	20.00	0	102	55.3	141				
1,1,2,2-Tetrachloroethane	20.9	1.00	20.00	0	104	62.9	132				
n-Propylbenzene	20.2	1.00	20.00	0	101	74.5	127				
Bromobenzene	20.1	1.00	20.00	0	101	71	131				
1,3,5-Trimethylbenzene	19.8	1.00	20.00	0	99.1	73.1	128				
2-Chlorotoluene	20.2	1.00	20.00	0	101	70.8	130				
4-Chlorotoluene	20.2	1.00	20.00	0	101	70.1	131				
tert-Butylbenzene	19.8	1.00	20.00	0	98.9	68.2	131				
1,2,3-Trichloropropane	21.5	1.00	20.00	0	108	67.7	131				
1,2,4-Trichlorobenzene	26.0	2.00	20.00	0	130	51.8	152				
sec-Butylbenzene	20.2	1.00	20.00	0	101	72	129				
4-Isopropyltoluene	20.2	1.00	20.00	0	101	69.2	130				
1,3-Dichlorobenzene	20.9	1.00	20.00	0	105	80.4	124				
1,4-Dichlorobenzene	20.9	1.00	20.00	0	105	66.8	119				
n-Butylbenzene	23.8	1.00	20.00	0	119	73.8	127				
1,2-Dichlorobenzene	22.1	1.00	20.00	0	111	69.7	119				
1,2-Dibromo-3-chloropropane	23.4	1.00	20.00	0	117	63.1	136				
1,2,4-Trimethylbenzene	20.4	1.00	20.00	0	102	73.4	127				
Hexachloro-1,3-butadiene	22.1	4.00	20.00	0	110	58.6	138				
Naphthalene	26.8	1.00	20.00	0	134	41.8	165				
1,2,3-Trichlorobenzene	26.1	4.00	20.00	0	131	48.7	156				
Surr: Dibromofluoromethane	21.8		25.00		87.1	45.4	152				
Surr: Toluene-d8	25.4		25.00		102	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	26.8		25.00		107	64.2	128				



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17040	SamptType:	LCS	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132				
Client ID:	LCSW	Batch ID:	17040	Analysis Date:	5/12/2017	SeqNo:	692023						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	MB-17040	SamptType:	MLBK	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132				
Client ID:	MBLKW	Batch ID:	17040	Analysis Date:	5/12/2017	SeqNo:	692024						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	1.00											Q
Chloromethane	ND	1.00											
Vinyl chloride	ND	0.200											
Bromomethane	ND	1.00											
Trichlorofluoromethane (CFC-11)	ND	1.00											
Chloroethane	ND	1.00											
1,1-Dichloroethene	ND	1.00											
Methylene chloride	ND	1.00											
trans-1,2-Dichloroethene	ND	1.00											
Methyl tert-butyl ether (MTBE)	ND	1.00											
1,1-Dichloroethane	ND	1.00											
2,2-Dichloropropane	ND	2.00											
cis-1,2-Dichloroethene	ND	1.00											
Chloroform	ND	1.00											
1,1,1-Trichloroethane (TCA)	ND	1.00											
1,1-Dichloropropene	ND	1.00											
Carbon tetrachloride	ND	1.00											
1,2-Dichloroethane (EDC)	ND	1.00											
Benzene	ND	1.00											
Trichloroethene (TCE)	ND	0.500											
1,2-Dichloropropane	ND	1.00											
Bromodichloromethane	ND	1.00											
Dibromomethane	ND	1.00											
cis-1,3-Dichloropropene	ND	1.00											
Toluene	ND	1.00											



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: MB-17040	SamptType: MBLK	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: MBLKW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692024							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	1.00									
Chlorobenzene	ND	0.0600									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									



Work Order: 1705140
CLIENT: Shannon & Wilson
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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17040	SamptType:	MBLK	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132					
Client ID:	MBLKW	Batch ID:	17040	Analysis Date:	5/12/2017	SeqNo:	692024							
Analyte		Result		RL		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Hexachloro-1,3-butadiene	ND	4.00												
Naphthalene	ND	1.00												
1,2,3-Trichlorobenzene	ND	4.00												
Surr: Dibromofluoromethane	22.8		25.00		91.1	45.4	152							
Surr: Toluene-d8	23.7		25.00		94.9	40.1	139							
Surr: 1-Bromo-4-fluorobenzene	21.3		25.00		85.3	64.2	128							

Sample ID	1705106-002DDUP	SamptType:	DUP	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132					
Client ID:	BATCH	Batch ID:	17040	Analysis Date:	5/12/2017	SeqNo:	692000							
Analyte		Result		RL		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	1.00											30	Q
Chloromethane	ND	1.00											30	
Vinyl chloride	ND	0.200											30	
Bromomethane	ND	1.00											30	
Trichlorofluoromethane (CFC-11)	ND	1.00											30	
Chloroethane	ND	1.00											30	
1,1-Dichloroethene	ND	1.00											30	Q
Methylene chloride	ND	1.00											30	
trans-1,2-Dichloroethene	ND	1.00											30	
Methyl tert-butyl ether (MTBE)	ND	1.00											30	
1,1-Dichloroethane	ND	1.00											30	
2,2-Dichloropropane	ND	2.00											30	
cis-1,2-Dichloroethene	ND	1.00											30	
Chloroform	ND	1.00											30	
1,1,1-Trichloroethane (TCA)	ND	1.00											30	
1,1-Dichloropropene	ND	1.00											30	
Carbon tetrachloride	ND	1.00											30	
1,2-Dichloroethane (EDC)	ND	1.00											30	
Benzene	ND	1.00											30	



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705106-002DDUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692000							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.0600						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	2.67	1.00						1.938	31.6	30	
o-Xylene	1.61	1.00						1.325	19.2	30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	



Work Order: 1705140
CLIENT: Shannon & Wilson
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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705106-002DDUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692000							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	1.40	1.00						1.220	13.8	30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	22.5		25.00		90.0	45.4	152		0		
Surr: Toluene-d8	23.4		25.00		93.5	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	23.1		25.00		92.2	64.2	128		0		

Sample ID: 1705155-001AMS	SamptType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692017							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	16.4	1.00	20.00	0	81.9	33.3	122				
Chloromethane	22.4	1.00	20.00	0	112	39.7	143				
Vinyl chloride	24.2	0.200	20.00	0	121	41	165				
Bromomethane	23.1	1.00	20.00	0	116	31.5	135				
Trichlorofluoromethane (CFC-11)	24.1	1.00	20.00	0	121	54.7	138				
Chloroethane	23.0	1.00	20.00	0	115	49.9	143				
1,1-Dichloroethene	20.7	1.00	20.00	0	103	51.6	164				
Methylene chloride	20.9	1.00	20.00	11.29	47.9	61.6	135				S
trans-1,2-Dichloroethene	22.1	1.00	20.00	0	111	63.5	138				
Methyl tert-butyl ether (MTBE)	23.0	1.00	20.00	0	115	60.9	132				
1,1-Dichloroethane	21.8	1.00	20.00	0	109	55.7	151				
2,2-Dichloropropane	33.8	2.00	20.00	0	169	37.7	150				S
cis-1,2-Dichloroethene	21.3	1.00	20.00	0	106	60	154				



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMS	SamptType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692017							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloroform	21.7	1.00	20.00	0	109	48.1	140				
1,1,1-Trichloroethane (TCA)	26.9	1.00	20.00	0	135	64.2	146				
1,1-Dichloropropene	26.6	1.00	20.00	0	133	73.8	136				
Carbon tetrachloride	25.5	1.00	20.00	0	128	62.7	146				
1,2-Dichloroethane (EDC)	22.2	1.00	20.00	0	111	63.4	137				
Benzene	21.5	1.00	20.00	0	107	65.4	138				
Trichloroethene (TCE)	20.9	0.500	20.00	0	105	60.4	134				
1,2-Dichloropropane	20.8	1.00	20.00	0	104	62.6	138				
Bromodichloromethane	19.1	1.00	20.00	0	95.5	59.4	139				
Dibromomethane	20.5	1.00	20.00	0	102	58.7	148				
cis-1,3-Dichloropropene	21.3	1.00	20.00	0	107	63.8	132				
Toluene	18.2	1.00	20.00	0	90.8	52	147				
trans-1,3-Dichloropropylene	20.4	1.00	20.00	0	102	57.7	125				
1,1,2-Trichloroethane	19.7	1.00	20.00	0	98.3	57.5	153				
1,3-Dichloropropane	19.7	1.00	20.00	0	98.5	54.1	157				
Tetrachloroethene (PCE)	18.7	1.00	20.00	0	93.6	50.3	133				
Dibromochloromethane	19.1	1.00	20.00	0	95.3	61.6	139				
1,2-Dibromoethane (EDB)	19.9	0.0600	20.00	0	99.7	63.2	134				
Chlorobenzene	23.0	1.00	20.00	0	115	65.8	134				
1,1,1,2-Tetrachloroethane	23.6	1.00	20.00	0	118	65.4	135				
Ethylbenzene	22.4	1.00	20.00	0	112	64.5	136				
m,p-Xylene	43.2	1.00	40.00	0	108	63.3	135				
o-Xylene	20.4	1.00	20.00	0	102	64.8	150				
Styrene	21.7	1.00	20.00	0	108	52.9	163				
Isopropylbenzene	18.2	1.00	20.00	0	91.0	56	147				
Bromoform	25.2	1.00	20.00	0	126	57.7	139				
1,1,2,2-Tetrachloroethane	27.4	1.00	20.00	0	137	59.8	146				
n-Propylbenzene	20.2	1.00	20.00	0	101	57.6	142				
Bromobenzene	22.9	1.00	20.00	0	114	69.3	157				
1,3,5-Trimethylbenzene	20.0	1.00	20.00	0	100	59.9	136				
2-Chlorotoluene	22.1	1.00	20.00	0	111	61.7	134				



Work Order: 1705140

CLIENT: Shannon & Wilson

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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMS	SamptType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692017

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Chlorotoluene	22.2	1.00	20.00	0	111	58.4	134				
tert-Butylbenzene	19.4	1.00	20.00	0	96.8	66.8	141				
1,2,3-Trichloropropane	32.0	1.00	20.00	0	160	62.4	129				S
1,2,4-Trichlorobenzene	25.3	2.00	20.00	0	127	50.9	133				
sec-Butylbenzene	21.5	1.00	20.00	0	107	56	146				
4-Isopropyltoluene	20.8	1.00	20.00	0	104	56.4	136				
1,3-Dichlorobenzene	12.4	1.00	20.00	0	61.8	58.2	128				
1,4-Dichlorobenzene	20.1	1.00	20.00	0	101	60.1	123				
n-Butylbenzene	20.4	1.00	20.00	0	102	54.6	135				
1,2-Dichlorobenzene	21.7	1.00	20.00	0	109	65.4	133				
1,2-Dibromo-3-chloropropane	28.5	1.00	20.00	0	143	51.8	142				S
1,2,4-Trimethylbenzene	21.1	1.00	20.00	0	105	63.7	132				
Hexachloro-1,3-butadiene	18.7	4.00	20.00	0	93.3	58.1	130				
Naphthalene	36.2	1.00	20.00	0	181	50.7	154				S
1,2,3-Trichlorobenzene	26.9	4.00	20.00	0	134	57	131				S
Surr: Dibromofluoromethane	24.9		25.00		99.6	45.4	152				
Surr: Toluene-d8	23.0		25.00		91.9	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	29.5		25.00		118	64.2	128				

Sample ID: 1705155-001AMS	SamptType: MSD	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692018

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	22.7	1.00	20.00	0	114	33.3	122	16.37	32.6	30	R
Chloromethane	23.1	1.00	20.00	0	116	39.7	143	22.38	3.23	30	
Vinyl chloride	24.0	0.200	20.00	0	120	41	165	24.16	0.680	30	
Bromomethane	21.8	1.00	20.00	0	109	31.5	135	23.12	5.78	30	
Trichlorofluoromethane (CFC-11)	23.9	1.00	20.00	0	120	54.7	138	24.14	0.953	30	
Chloroethane	22.8	1.00	20.00	0	114	49.9	143	22.98	0.619	30	
1,1-Dichloroethene	20.7	1.00	20.00	0	104	51.6	164	20.68	0.272	30	



Date: 5/26/2017

Work Order: 1705140
CLIENT: Shannon & Wilson
Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMS	D	MSD	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH		Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692018

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methylene chloride	20.0	1.00	20.00	11.29	43.8	61.6	135	20.86	4.01	30	S
trans-1,2-Dichloroethene	21.8	1.00	20.00	0	109	63.5	138	22.12	1.55	30	
Methyl tert-butyl ether (MTBE)	18.5	1.00	20.00	0	92.4	60.9	132	22.98	21.7	30	
1,1-Dichloroethane	20.9	1.00	20.00	0	105	55.7	151	21.78	3.98	30	
2,2-Dichloropropane	31.5	2.00	20.00	0	158	37.7	150	33.76	6.85	30	S
cis-1,2-Dichloroethene	21.2	1.00	20.00	0	106	60	154	21.30	0.557	30	
Chloroform	20.4	1.00	20.00	0	102	48.1	140	21.71	6.12	30	
1,1,1-Trichloroethane (TCA)	23.5	1.00	20.00	0	118	64.2	146	26.94	13.5	30	
1,1-Dichloropropene	23.4	1.00	20.00	0	117	73.8	136	26.63	12.9	30	
Carbon tetrachloride	23.0	1.00	20.00	0	115	62.7	146	25.54	10.6	30	
1,2-Dichloroethane (EDC)	20.1	1.00	20.00	0	100	63.4	137	22.19	9.98	30	
Benzene	21.9	1.00	20.00	0	110	65.4	138	21.46	2.04	30	
Trichloroethene (TCE)	20.8	0.500	20.00	0	104	60.4	134	20.93	0.874	30	
1,2-Dichloropropane	19.5	1.00	20.00	0	97.6	62.6	138	20.77	6.18	30	
Bromodichloromethane	19.7	1.00	20.00	0	98.7	59.4	139	19.09	3.37	30	
Dibromomethane	20.5	1.00	20.00	0	103	58.7	148	20.49	0.182	30	
cis-1,3-Dichloropropene	20.9	1.00	20.00	0	105	63.8	132	21.33	1.92	30	
Toluene	21.1	1.00	20.00	0	106	52	147	18.15	15.0	30	
trans-1,3-Dichloropropylene	20.9	1.00	20.00	0	104	57.7	125	20.43	2.13	30	
1,1,2-Trichloroethane	21.3	1.00	20.00	0	107	57.5	153	19.66	8.09	30	
1,3-Dichloropropane	21.1	1.00	20.00	0	106	54.1	157	19.71	6.88	30	
Tetrachloroethene (PCE)	22.0	1.00	20.00	0	110	50.3	133	18.73	15.9	30	
Dibromochloromethane	20.6	1.00	20.00	0	103	61.6	139	19.05	7.74	30	
1,2-Dibromoethane (EDB)	21.1	0.0600	20.00	0	105	63.2	134	19.94	5.40	30	
Chlorobenzene	21.4	1.00	20.00	0	107	65.8	134	23.02	7.38	30	
1,1,1,2-Tetrachloroethane	21.1	1.00	20.00	0	105	65.4	135	23.59	11.3	30	
Ethylbenzene	21.9	1.00	20.00	0	110	64.5	136	22.44	2.35	30	
m,p-Xylene	44.5	1.00	40.00	0	111	63.3	135	43.24	2.88	30	
o-Xylene	20.9	1.00	20.00	0	105	64.8	150	20.39	2.70	30	
Styrene	21.2	1.00	20.00	0	106	52.9	163	21.67	2.27	30	
Isopropylbenzene	21.6	1.00	20.00	0	108	56	147	18.21	17.0	30	



Date: 5/26/2017

Work Order: 1705140
 CLIENT: Shannon & Wilson
 Project: Megablock Phase II

QC SUMMARY REPORT
 Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMS	Batch ID: 17040	SamptType: MSD	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040	Result	%REC	LowLimit	HighLimit
		RL	SPK value	SPK Ref Val	RPD Ref Val
			%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Bromofom	21.1	1.00	20.00	0	105	57.7	139	25.19	17.7	30	
1,1,2,2-Tetrachloroethane	21.8	1.00	20.00	0	109	59.8	146	27.42	22.8	30	
n-Propylbenzene	22.4	1.00	20.00	0	112	57.6	142	20.22	10.4	30	
Bromobenzene	21.5	1.00	20.00	0	107	69.3	157	22.87	6.36	30	
1,3,5-Trimethylbenzene	21.4	1.00	20.00	0	107	59.9	136	20.03	6.68	30	
2-Chlorotoluene	21.8	1.00	20.00	0	109	61.7	134	22.13	1.73	30	
4-Chlorotoluene	19.9	1.00	20.00	0	99.6	58.4	134	22.23	11.0	30	
tert-Butylbenzene	21.6	1.00	20.00	0	108	66.8	141	19.36	10.8	30	
1,2,3-Trichloropropane	22.3	1.00	20.00	0	111	62.4	129	32.04	36.0	30	R
1,2,4-Trichlorobenzene	26.7	2.00	20.00	0	134	50.9	133	25.34	5.24	30	S
sec-Butylbenzene	22.5	1.00	20.00	0	113	56	146	21.50	4.70	30	
4-Isopropyltoluene	22.5	1.00	20.00	0	113	56.4	136	20.81	7.95	30	
1,3-Dichlorobenzene	21.9	1.00	20.00	0	110	58.2	128	12.36	55.7	30	R
1,4-Dichlorobenzene	22.2	1.00	20.00	0	111	60.1	123	20.14	9.66	30	
n-Butylbenzene	26.5	1.00	20.00	0	132	54.6	135	20.42	25.7	30	
1,2-Dichlorobenzene	22.8	1.00	20.00	0	114	65.4	133	21.70	4.92	30	
1,2-Dibromo-3-chloropropane	23.8	1.00	20.00	0	119	51.8	142	28.51	17.9	30	
1,2,4-Trimethylbenzene	22.1	1.00	20.00	0	111	63.7	132	21.07	4.98	30	
Hexachlor-1,3-butadiene	24.4	4.00	20.00	0	122	58.1	130	18.67	26.5	30	
Naphthalene	28.1	1.00	20.00	0	140	50.7	154	36.17	25.2	30	
1,2,3-Trichlorobenzene	28.0	4.00	20.00	0	140	57	131	26.86	4.32	30	S
Surr: Dibromofluoromethane	23.0		25.00		91.9	45.4	152		0		
Surr: Toluene-d8	25.8		25.00		103	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	27.2		25.00		109	64.2	128		0		

Sample ID: 1705151-022ADUP	Batch ID: 17040	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040	Result	%REC	LowLimit	HighLimit
		RL	SPK value	SPK Ref Val	RPD Ref Val
			%RPD	RPDLimit	Qual



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705151-022ADUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132					
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692010					
Analyte	Result	RL	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chloromethane	ND	1.00		0				30	
Vinyl chloride	ND	0.200		0				30	
Bromomethane	ND	1.00		0				30	
Trichlorofluoromethane (CFC-11)	ND	1.00		0				30	
Chloroethane	ND	1.00		0				30	
1,1-Dichloroethene	ND	1.00		0				30	
Methylene chloride	ND	1.00		0				30	
trans-1,2-Dichloroethene	ND	1.00		0				30	
Methyl tert-butyl ether (MTBE)	ND	1.00		0				30	
1,1-Dichloroethane	ND	1.00		0				30	
2,2-Dichloropropane	ND	2.00		0				30	
cis-1,2-Dichloroethene	ND	1.00		0				30	
Chloroform	ND	1.00		0				30	
1,1,1-Trichloroethane (TCA)	ND	1.00		0				30	
1,1-Dichloropropene	ND	1.00		0				30	
Carbon tetrachloride	ND	1.00		0				30	
1,2-Dichloroethane (EDC)	ND	1.00		0				30	
Benzene	ND	1.00		0				30	
Trichloroethene (TCE)	ND	0.500		0				30	
1,2-Dichloropropane	ND	1.00		0				30	
Bromodichloromethane	ND	1.00		0				30	
Dibromomethane	ND	1.00		0				30	
cis-1,3-Dichloropropene	ND	1.00		0				30	
Toluene	ND	1.00		0				30	
trans-1,3-Dichloropropylene	ND	1.00		0				30	
1,1,2-Trichloroethane	ND	1.00		0				30	
1,3-Dichloropropane	ND	1.00		0				30	
Tetrachloroethene (PCE)	ND	1.00		0				30	
Dibromochloromethane	ND	1.00		0				30	
1,2-Dibromoethane (EDB)	ND	0.0600		0				30	
Chlorobenzene	ND	1.00		0				30	



Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705151-022ADUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692010							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	22.6		25.00		90.4	45.4		152		0	
Surr: Toluene-d8	23.9		25.00		95.7	40.1		139		0	
Surr: 1-Bromo-4-fluorobenzene	22.8		25.00		91.3	64.2		128		0	



Fremont
Analytical

Date: 5/26/2017

Work Order: 1705140

CLIENT: Shannon & Wilson

Project: Megablock Phase II

QC SUMMARY REPORT
Sample Moisture (Percent Moisture)

Sample ID: 1705143-001ADUP	Batch ID: BATCH	SamptType: DUP	Result: R36134	Units: wt%	Prep Date: 5/15/2017	RunNo: 36134						
		Batch ID: R36134	Result: RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture		11.3	0.500			10.82	4.68	20				

Sample ID: 1705150-004ADUP	Batch ID: BATCH	SamptType: DUP	Result: R36134	Units: wt%	Prep Date: 5/15/2017	RunNo: 36134						
		Batch ID: R36134	Result: RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture		15.5	0.500			15.53	0.430	20				



Sample Log-In Check List

Client Name: SW	Work Order Number: 1705140
Logged by: Erica Silva	Date Received: 5/11/2017 5:10:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
4. Shipping container/cooler in good condition? Yes No
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Required
6. Was an attempt made to cool the samples? Yes No NA
7. Were all items received at a temperature of >0°C to 10.0°C* Yes No NA
8. Sample(s) in proper container(s)? Yes No
9. Sufficient sample volume for indicated test(s)? Yes No
10. Are samples properly preserved? Yes No
11. Was preservative added to bottles? Yes No NA
HNO3 added to 009C, 010C, & 011C
12. Is there headspace in the VOA vials? Yes No NA
13. Did all samples containers arrive in good condition(unbroken)? Yes No
14. Does paperwork match bottle labels? Yes No
15. Are matrices correctly identified on Chain of Custody? Yes No
16. Is it clear what analyses were requested? Yes No
17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text"/>	Date:	<input type="text"/>
By Whom:	<input type="text"/>	Via:	<input type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text"/>		
Client Instructions:	<input type="text"/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler	3.1
Sample	2.7
Temp Blank	1.6

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Client: Shannon & Willeson
Address: 402 N 34th St. Seattle WA
City, State, Zip: Seattle, WA
Telephone: 206-665-6690
Fax:

Date: 5/11/17
Project Name: Megablock Phase #
Collected by: BON
Location: Megablock
Report To (PM): BON, Act
PM Email: bender.shannon@actg-shannon.com
Page: 1 of 2

Laboratory Project No (Internal): 1705140
Special Remarks: Not Field Filtered
Sample Disposal: Return to client Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GW/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DH)	SVOCs (EPA 8270 - SIM)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (C)***	EDB (8011)	Comments
1 21417-MB10:28	5/11	11:00	S	X	X	X	X	X	X	X	X	X	X	X			PCBAs
2 21417-MB6:9	5/11	3:35	S	X	X	X	X	X	X	X	X	X	X	X			
3 21417-MB11:23	5/11	9:45	S	X	X	X	X	X	X	X	X	X	X	X			
4 21417-SPW:0.0	5/11	10:35	S	X	X	X	X	X	X	X	X	X	X	X			
5 21417-MB9:22	5/11	1:45	S	X	X	X	X	X	X	X	X	X	X	X			
6 21417-MB9:13	5/11	1:05	S	X	X	X	X	X	X	X	X	X	X	X			
7 21417-MB8:27	5/11	3:15	S	X	X	X	X	X	X	X	X	X	X	X			
8 21417-MB7:11	5/11	4:05	S	X	X	X	X	X	X	X	X	X	X	X			
9 21417-MB10:5W	5/11	5:11	GW	X	X	X	X	X	X	X	X	X	X	X			Total & Dissolved Priority
10 21417-MB9:5W	5/11	1:55	GW	X	X	X	X	X	X	X	X	X	X	X			Total & Dissolved Priority

Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water
Metals (Circle): MTCA-5 **RCRA-9** **Priority Pollutants** TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sp Se Sr Sn Tl U V Zn
Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished: [Signature] Date/Time 5/11/17 17:10
Received: [Signature] Date/Time 5/11/17 17:10
Turn-around Time: Standard 3 Day 2 Day Next Day
Same Day (specify) _____



3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 5/11/17 Page: 2 of 2

Project Name: Megablock Phase 2

Project No: 21-1-21417-205

Collected by: BNV

Location: Megablock

Report To (PM): BNV Act

PM Email: borgshawn@act@shawni.com

Laboratory Project No (Internal): 1705140

Special Remarks: Not Field Filtrated

Sample Disposal: Return to client Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCS (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) / Dissolved (D)	Anions (IC)**	EDB (8011)	Comments
1 21417-MB1:GW	5/11/17	1200	GW	X	X	X	X	X	X	X	X	X	X	X	X	X	Total & Dissolved, Priority
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water

**Metals (Circle): MICA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Tl U V Zn

***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide Iodide Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Retrieved Date/Time 5/11/17 17:10

Received Date/Time 5/11/17 17:10

Retrieved Date/Time 5/11/17 17:10

Received Date/Time 5/11/17 17:10

Turn-around Time:
 Standard
 3 Day
 2 Day
 Next Day
 Same Day (specify) _____



Fremont
ANALYTICAL

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 5/11/17 Page: 1 of 2 Laboratory Project No (Internal): 1705140

Project Name: Megablock Phase # Special Remarks:

Project No: 21417-205 Not Field

Collected by: BWN Filled

Location: Megablock

Report To (PM): BWN, ACT

PM Email: bords.hanni@com ACT@shaw.wa.gov

Sample Disposal: Return to client Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 524)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCD)	Diesel/Heavy Oil Range Organics (HX)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals* (EPA 6020 / 200.9)	Total (T) / Dissolved (D)	Anions (IC)**	EDB (801)	Comments
21417-MB10:28	5/11	11:00	S	X	X	X	X	X	X	X	X	X	X	X	X	X	PCBAs
21417-MB6:9	5/11	3:35	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
21417-MB11:23	5/11	9:45	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
21417-SPW:0.0	5/11	10:35	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
21417-MB9:22	5/11	11:45	S	X	X	X	X	X	X	X	X	X	X	X	X	X	Add Cu, Ni, Zn per Blain N.
21417-MB9:13	5/11	11:05	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
21417-MB8:27	5/11	3:15	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
21417-MB7:11	5/11	4:05	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
21417-MB10:GW	5/11	10:00	GW	X	X	X	X	X	X	X	X	X	X	X	X	X	Total & Dissolved Priority
21417-MB9:GW	5/11	1:55	GW	X	X	X	X	X	X	X	X	X	X	X	X	X	

Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water
 **Metals (Circle): MTCA-5 (RCRA-8) (Priority Pollutants) TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sn Se Sr Sn Ti Tl U V Zn
 ***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Retinquished: 5/11/17 17:10 Received: 5/11/17 17:10
 Date/Time Date/Time

Turn-around Time: Standard 3 Day 2 Day Next Day Same Day (Specify)



Fremont
ANALYTICAL

3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Date: 5/11/17 Page: 2 of 2

Project Name: Megablock Phase 2

Collected by: BON

Location: Megablock

Report To (PM): BON, Act

PM Email: bon@shawnil.com Act@shawnil.com

Sample Disposal: Return to client Disposal by lab (after 30 days)

Laboratory Project No (Internal): 1705140

Special Remarks: Not Field Filtered

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)*	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DHO)	SVOCS (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6030 / 200.8)	Total (T) Dissolved (D)	Anions (Cl)**	EDB (8011)	Comments
2417-MB1:GW	5/11/17	1000	GW	X	X	X	X	X	X	X	X	X	X	X	X	X	Total & Dissolved, Priority

Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water
 Metals (Circle): MTCA-5 RCRA-8 TAL Individual: Ag Al As B Ba Be Ca Cd Co Cr Cu Fe Hg K Mg Mn Mo Na Ni Pb Sb Se Sr Sn Tl U V Zn
 Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide Iodide Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished Date/Time: 5/11/17 17:10 Received Date/Time: 5/11/17 17:10



3600 Fremont Ave. N.
Seattle, WA 98103
T: (206) 352-3790
F: (206) 352-7178
info@fremontanalytical.com

Shannon & Wilson

Blaine Nesbit
400 N. 34th Street, Suite 100
Seattle, WA 98103

RE: Broad Megablock Phase II
Work Order Number: 1705152

May 19, 2017

Attention Blaine Nesbit:

Fremont Analytical, Inc. received 11 sample(s) on 5/12/2017 for the analyses presented in the following report.

- Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.***
- Gasoline by NWTPH-Gx***
- Mercury by EPA Method 7471***
- Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)***
- Sample Moisture (Percent Moisture)***
- Total Metals by EPA Method 6020***
- Volatile Organic Compounds by EPA Method 8260C***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike C. Ridgeway".

Mike Ridgeway
Laboratory Director

CC:
Agnes Tirao

DoD/ELAP Certification #L2371, ISO/IEC 17025:2005
ORELAP Certification: WA 100009-007 (NELAP Recognized)



Date: 05/19/2017

CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II
Work Order: 1705152

Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1705152-001	21417-MB1:9	05/12/2017 12:00 PM	05/12/2017 2:02 PM
1705152-002	21417-MB2:10	05/12/2017 11:30 AM	05/12/2017 2:02 PM
1705152-003	21417-MB3:20	05/12/2017 9:55 AM	05/12/2017 2:02 PM
1705152-004	21417-MB5:9	05/12/2017 9:10 AM	05/12/2017 2:02 PM
1705152-005	21417-MB4:24	05/12/2017 10:30 AM	05/12/2017 2:02 PM
1705152-006	21417-MB2:1	05/12/2017 11:20 AM	05/12/2017 2:02 PM
1705152-007	21417-MB3:1	05/12/2017 9:20 AM	05/12/2017 2:02 PM
1705152-008	21417-MB4:GW	05/12/2017 10:45 AM	05/12/2017 2:02 PM
1705152-009	Trip Blank	05/09/2017 5:30 PM	05/12/2017 2:02 PM
1705152-010	Trip Blank	05/09/2017 5:30 PM	05/12/2017 2:02 PM
1705152-011	Trip Blank	05/10/2017 11:07 AM	05/12/2017 2:02 PM



Case Narrative

WO#: 1705152

Date: 5/19/2017

CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

I. SAMPLE RECEIPT:

Samples receipt information is recorded on the attached Sample Receipt Checklist.

II. GENERAL REPORTING COMMENTS:

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

III. ANALYSES AND EXCEPTIONS:

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



Qualifiers & Acronyms

WO#: 1705152

Date Reported: 5/19/2017

Qualifiers:

- * - Flagged value is not within established control limits
- B - Analyte detected in the associated Method Blank
- D - Dilution was required
- E - Value above quantitation range
- H - Holding times for preparation or analysis exceeded
- I - Analyte with an internal standard that does not meet established acceptance criteria
- J - Analyte detected below Reporting Limit
- N - Tentatively Identified Compound (TIC)
- Q - Analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF)
- S - Spike recovery outside accepted recovery limits
- ND - Not detected at the Reporting Limit
- R - High relative percent difference observed

Acronyms:

- %Rec - Percent Recovery
- CCB - Continued Calibration Blank
- CCV - Continued Calibration Verification
- DF - Dilution Factor
- HEM - Hexane Extractable Material
- ICV - Initial Calibration Verification
- LCS/LCSD - Laboratory Control Sample / Laboratory Control Sample Duplicate
- MB or MBLANK - Method Blank
- MDL - Method Detection Limit
- MS/MSD - Matrix Spike / Matrix Spike Duplicate
- PDS - Post Digestion Spike
- Ref Val - Reference Value
- RL - Reporting Limit
- RPD - Relative Percent Difference
- SD - Serial Dilution
- SGT - Silica Gel Treatment
- SPK - Spike
- Surr - Surrogate



Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 12:00:00 PM

Project: Broad Megablock Phase II

Lab ID: 1705152-001

Matrix: Soil

Client Sample ID: 21417-MB1:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>				Batch ID: 17057		Analyst: SB
Diesel (Fuel Oil)	ND	22.2		mg/Kg-dry	1	5/17/2017 5:02:12 AM
Heavy Oil	ND	55.4		mg/Kg-dry	1	5/17/2017 5:02:12 AM
Surr: 2-Fluorobiphenyl	91.8	50-150		%Rec	1	5/17/2017 5:02:12 AM
Surr: o-Terphenyl	92.6	50-150		%Rec	1	5/17/2017 5:02:12 AM
<u>Gasoline by NWTPH-Gx</u>				Batch ID: 17056		Analyst: NG
Gasoline	ND	4.04		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Surr: Toluene-d8	103	65-135		%Rec	1	5/16/2017 10:19:02 PM
Surr: 4-Bromofluorobenzene	95.3	65-135		%Rec	1	5/16/2017 10:19:02 PM
<u>Volatile Organic Compounds by EPA Method 8260C</u>				Batch ID: 17056		Analyst: NG
Dichlorodifluoromethane (CFC-12)	ND	0.0485	Q	mg/Kg-dry	1	5/16/2017 10:19:02 PM
Chloromethane	ND	0.0485		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Vinyl chloride	ND	0.00162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Bromomethane	ND	0.0727		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Trichlorofluoromethane (CFC-11)	ND	0.0404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Chloroethane	ND	0.0485		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,1-Dichloroethene	ND	0.0404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Methylene chloride	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
trans-1,2-Dichloroethene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Methyl tert-butyl ether (MTBE)	ND	0.0404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,1-Dichloroethane	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
2,2-Dichloropropane	ND	0.0404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
cis-1,2-Dichloroethene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Chloroform	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,1,1-Trichloroethane (TCA)	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,1-Dichloropropene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Carbon tetrachloride	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2-Dichloroethane (EDC)	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Benzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Trichloroethene (TCE)	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2-Dichloropropane	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Bromodichloromethane	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Dibromomethane	ND	0.0323		mg/Kg-dry	1	5/16/2017 10:19:02 PM
cis-1,3-Dichloropropene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Toluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
trans-1,3-Dichloropropylene	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM



Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 12:00:00 PM

Project: Broad Megablock Phase II

Lab ID: 1705152-001

Matrix: Soil

Client Sample ID: 21417-MB1:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,3-Dichloropropane	ND	0.0404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Tetrachloroethene (PCE)	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Dibromochloromethane	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2-Dibromoethane (EDB)	ND	0.00404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Chlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,1,1,2-Tetrachloroethane	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Ethylbenzene	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM
m,p-Xylene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
o-Xylene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Styrene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Isopropylbenzene	ND	0.0646		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Bromoform	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,1,2,2-Tetrachloroethane	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
n-Propylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Bromobenzene	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,3,5-Trimethylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
2-Chlorotoluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
4-Chlorotoluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
tert-Butylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2,3-Trichloropropane	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2,4-Trichlorobenzene	ND	0.0404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
sec-Butylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
4-Isopropyltoluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,3-Dichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,4-Dichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
n-Butylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2-Dichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2-Dibromo-3-chloropropane	ND	0.404		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2,4-Trimethylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Hexachlorobutadiene	ND	0.0808		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Naphthalene	ND	0.0242		mg/Kg-dry	1	5/16/2017 10:19:02 PM
1,2,3-Trichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 10:19:02 PM
Surr: Dibromofluoromethane	88.4	56.5-129		%Rec	1	5/16/2017 10:19:02 PM
Surr: Toluene-d8	97.2	64.5-151		%Rec	1	5/16/2017 10:19:02 PM
Surr: 1-Bromo-4-fluorobenzene	91.9	63.1-141		%Rec	1	5/16/2017 10:19:02 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 12:00:00 PM

Project: Broad Megablock Phase II

Lab ID: 1705152-001

Matrix: Soil

Client Sample ID: 21417-MB1:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.293		mg/Kg-dry	1	5/17/2017 3:32:21 PM
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Total Metals by EPA Method 6020

Batch ID: 17060 Analyst: TN

Arsenic	4.78	0.0962		mg/Kg-dry	1	5/16/2017 5:02:42 PM
Cadmium	ND	0.192		mg/Kg-dry	1	5/16/2017 5:02:42 PM
Chromium	41.2	0.0962		mg/Kg-dry	1	5/16/2017 5:02:42 PM
Lead	2.43	0.192		mg/Kg-dry	1	5/16/2017 5:02:42 PM

Sample Moisture (Percent Moisture)

Batch ID: R36151 Analyst: BB

Percent Moisture	19.4			wt%	1	5/16/2017 10:05:52 AM
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Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 11:30:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-002

Matrix: Soil

Client Sample ID: 21417-MB2:10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>				Batch ID: 17057		Analyst: SB
Diesel (Fuel Oil)	ND	22.6		mg/Kg-dry	1	5/17/2017 5:33:22 AM
Heavy Oil	ND	56.6		mg/Kg-dry	1	5/17/2017 5:33:22 AM
Surr: 2-Fluorobiphenyl	86.5	50-150		%Rec	1	5/17/2017 5:33:22 AM
Surr: o-Terphenyl	86.7	50-150		%Rec	1	5/17/2017 5:33:22 AM
<u>Gasoline by NWTPH-Gx</u>				Batch ID: 17056		Analyst: NG
Gasoline	ND	4.69		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Surr: Toluene-d8	101	65-135		%Rec	1	5/16/2017 10:47:34 PM
Surr: 4-Bromofluorobenzene	96.3	65-135		%Rec	1	5/16/2017 10:47:34 PM
<u>Volatile Organic Compounds by EPA Method 8260C</u>				Batch ID: 17056		Analyst: NG
Dichlorodifluoromethane (CFC-12)	ND	0.0562	Q	mg/Kg-dry	1	5/16/2017 10:47:34 PM
Chloromethane	ND	0.0562		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Vinyl chloride	ND	0.00187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Bromomethane	ND	0.0844		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Trichlorofluoromethane (CFC-11)	ND	0.0469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Chloroethane	ND	0.0562		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,1-Dichloroethene	ND	0.0469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Methylene chloride	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
trans-1,2-Dichloroethene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Methyl tert-butyl ether (MTBE)	ND	0.0469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,1-Dichloroethane	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
2,2-Dichloropropane	ND	0.0469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
cis-1,2-Dichloroethene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Chloroform	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,1,1-Trichloroethane (TCA)	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,1-Dichloropropene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Carbon tetrachloride	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2-Dichloroethane (EDC)	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Benzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Trichloroethene (TCE)	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2-Dichloropropane	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Bromodichloromethane	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Dibromomethane	ND	0.0375		mg/Kg-dry	1	5/16/2017 10:47:34 PM
cis-1,3-Dichloropropene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Toluene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
trans-1,3-Dichloropropylene	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM

Original



Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 11:30:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-002

Matrix: Soil

Client Sample ID: 21417-MB2:10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,3-Dichloropropane	ND	0.0469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Tetrachloroethene (PCE)	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Dibromochloromethane	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2-Dibromoethane (EDB)	ND	0.00469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Chlorobenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,1,1,2-Tetrachloroethane	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Ethylbenzene	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM
m,p-Xylene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
o-Xylene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Styrene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Isopropylbenzene	ND	0.0750		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Bromoform	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,1,2,2-Tetrachloroethane	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
n-Propylbenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Bromobenzene	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,3,5-Trimethylbenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
2-Chlorotoluene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
4-Chlorotoluene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
tert-Butylbenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2,3-Trichloropropane	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2,4-Trichlorobenzene	ND	0.0469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
sec-Butylbenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
4-Isopropyltoluene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,3-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,4-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
n-Butylbenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2-Dichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2-Dibromo-3-chloropropane	ND	0.469		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2,4-Trimethylbenzene	0.0455	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Hexachlorobutadiene	ND	0.0937		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Naphthalene	ND	0.0281		mg/Kg-dry	1	5/16/2017 10:47:34 PM
1,2,3-Trichlorobenzene	ND	0.0187		mg/Kg-dry	1	5/16/2017 10:47:34 PM
Surr: Dibromofluoromethane	88.7	56.5-129		%Rec	1	5/16/2017 10:47:34 PM
Surr: Toluene-d8	97.9	64.5-151		%Rec	1	5/16/2017 10:47:34 PM
Surr: 1-Bromo-4-fluorobenzene	92.6	63.1-141		%Rec	1	5/16/2017 10:47:34 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 11:30:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-002

Matrix: Soil

Client Sample ID: 21417-MB2:10

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Sample Moisture (Percent Moisture)

Batch ID: R36151 Analyst: BB

Percent Moisture	13.0	0.500		wt%	1	5/16/2017 10:05:52 AM
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Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 9:55:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-003

Matrix: Soil

Client Sample ID: 21417-MB3:20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17057

Analyst: SB

Diesel (Fuel Oil)	ND	20.9		mg/Kg-dry	1	5/17/2017 7:38:17 AM
Heavy Oil	120	52.1		mg/Kg-dry	1	5/17/2017 7:38:17 AM
Surr: 2-Fluorobiphenyl	91.4	50-150		%Rec	1	5/17/2017 7:38:17 AM
Surr: o-Terphenyl	95.9	50-150		%Rec	1	5/17/2017 7:38:17 AM

Gasoline by NWTPH-Gx

Batch ID: 17056

Analyst: NG

Gasoline	ND	4.06		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Surr: Toluene-d8	101	65-135		%Rec	1	5/16/2017 11:16:00 PM
Surr: 4-Bromofluorobenzene	95.9	65-135		%Rec	1	5/16/2017 11:16:00 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	0.0487	Q	mg/Kg-dry	1	5/16/2017 11:16:00 PM
Chloromethane	ND	0.0487		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Vinyl chloride	ND	0.00162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Bromomethane	ND	0.0731		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Trichlorofluoromethane (CFC-11)	ND	0.0406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Chloroethane	ND	0.0487		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,1-Dichloroethene	ND	0.0406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Methylene chloride	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
trans-1,2-Dichloroethene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Methyl tert-butyl ether (MTBE)	ND	0.0406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,1-Dichloroethane	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
2,2-Dichloropropane	ND	0.0406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
cis-1,2-Dichloroethene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Chloroform	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,1,1-Trichloroethane (TCA)	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,1-Dichloropropene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Carbon tetrachloride	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2-Dichloroethane (EDC)	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Benzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Trichloroethene (TCE)	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2-Dichloropropane	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Bromodichloromethane	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Dibromomethane	ND	0.0325		mg/Kg-dry	1	5/16/2017 11:16:00 PM
cis-1,3-Dichloropropene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Toluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
trans-1,3-Dichloropropylene	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM

Original



Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 9:55:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-003

Matrix: Soil

Client Sample ID: 21417-MB3:20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,3-Dichloropropane	ND	0.0406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Tetrachloroethene (PCE)	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Dibromochloromethane	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2-Dibromoethane (EDB)	ND	0.00406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Chlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,1,1,2-Tetrachloroethane	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Ethylbenzene	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM
m,p-Xylene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
o-Xylene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Styrene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Isopropylbenzene	ND	0.0650		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Bromoform	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,1,2,2-Tetrachloroethane	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
n-Propylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Bromobenzene	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,3,5-Trimethylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
2-Chlorotoluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
4-Chlorotoluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
tert-Butylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2,3-Trichloropropane	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2,4-Trichlorobenzene	ND	0.0406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
sec-Butylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
4-Isopropyltoluene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,3-Dichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,4-Dichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
n-Butylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2-Dichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2-Dibromo-3-chloropropane	ND	0.406		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2,4-Trimethylbenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Hexachlorobutadiene	ND	0.0812		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Naphthalene	ND	0.0244		mg/Kg-dry	1	5/16/2017 11:16:00 PM
1,2,3-Trichlorobenzene	ND	0.0162		mg/Kg-dry	1	5/16/2017 11:16:00 PM
Surr: Dibromofluoromethane	88.0	56.5-129		%Rec	1	5/16/2017 11:16:00 PM
Surr: Toluene-d8	98.1	64.5-151		%Rec	1	5/16/2017 11:16:00 PM
Surr: 1-Bromo-4-fluorobenzene	92.4	63.1-141		%Rec	1	5/16/2017 11:16:00 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 9:55:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-003

Matrix: Soil

Client Sample ID: 21417-MB3:20

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Sample Moisture (Percent Moisture)

Batch ID: R36151 Analyst: BB

Percent Moisture	8.83	0.500		wt%	1	5/16/2017 10:05:52 AM
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Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 9:10:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-004

Matrix: Soil

Client Sample ID: 21417-MB5:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>				Batch ID: 17057		Analyst: SB
Diesel (Fuel Oil)	ND	20.9		mg/Kg-dry	1	5/17/2017 8:09:25 AM
Heavy Oil	ND	52.3		mg/Kg-dry	1	5/17/2017 8:09:25 AM
Surr: 2-Fluorobiphenyl	89.8	50-150		%Rec	1	5/17/2017 8:09:25 AM
Surr: o-Terphenyl	86.4	50-150		%Rec	1	5/17/2017 8:09:25 AM
<u>Gasoline by NWTPH-Gx</u>				Batch ID: 17056		Analyst: NG
Gasoline	ND	3.29		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Surr: Toluene-d8	102	65-135		%Rec	1	5/16/2017 11:44:32 PM
Surr: 4-Bromofluorobenzene	94.4	65-135		%Rec	1	5/16/2017 11:44:32 PM
<u>Volatile Organic Compounds by EPA Method 8260C</u>				Batch ID: 17056		Analyst: NG
Dichlorodifluoromethane (CFC-12)	ND	0.0395	Q	mg/Kg-dry	1	5/16/2017 11:44:32 PM
Chloromethane	ND	0.0395		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Vinyl chloride	ND	0.00132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Bromomethane	ND	0.0593		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Trichlorofluoromethane (CFC-11)	ND	0.0329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Chloroethane	ND	0.0395		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,1-Dichloroethene	ND	0.0329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Methylene chloride	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
trans-1,2-Dichloroethene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Methyl tert-butyl ether (MTBE)	ND	0.0329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,1-Dichloroethane	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
2,2-Dichloropropane	ND	0.0329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
cis-1,2-Dichloroethene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Chloroform	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,1,1-Trichloroethane (TCA)	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,1-Dichloropropene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Carbon tetrachloride	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2-Dichloroethane (EDC)	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Benzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Trichloroethene (TCE)	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2-Dichloropropane	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Bromodichloromethane	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Dibromomethane	ND	0.0263		mg/Kg-dry	1	5/16/2017 11:44:32 PM
cis-1,3-Dichloropropene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Toluene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
trans-1,3-Dichloropropylene	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM

Original



Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 9:10:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-004

Matrix: Soil

Client Sample ID: 21417-MB5:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,3-Dichloropropane	ND	0.0329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Tetrachloroethene (PCE)	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Dibromochloromethane	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2-Dibromoethane (EDB)	ND	0.00329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Chlorobenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,1,1,2-Tetrachloroethane	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Ethylbenzene	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM
m,p-Xylene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
o-Xylene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Styrene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Isopropylbenzene	ND	0.0527		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Bromoform	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,1,2,2-Tetrachloroethane	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
n-Propylbenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Bromobenzene	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,3,5-Trimethylbenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
2-Chlorotoluene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
4-Chlorotoluene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
tert-Butylbenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2,3-Trichloropropane	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2,4-Trichlorobenzene	ND	0.0329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
sec-Butylbenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
4-Isopropyltoluene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,3-Dichlorobenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,4-Dichlorobenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
n-Butylbenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2-Dichlorobenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2-Dibromo-3-chloropropane	ND	0.329		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2,4-Trimethylbenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Hexachlorobutadiene	ND	0.0658		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Naphthalene	ND	0.0198		mg/Kg-dry	1	5/16/2017 11:44:32 PM
1,2,3-Trichlorobenzene	ND	0.0132		mg/Kg-dry	1	5/16/2017 11:44:32 PM
Surr: Dibromofluoromethane	88.1	56.5-129		%Rec	1	5/16/2017 11:44:32 PM
Surr: Toluene-d8	97.9	64.5-151		%Rec	1	5/16/2017 11:44:32 PM
Surr: 1-Bromo-4-fluorobenzene	91.0	63.1-141		%Rec	1	5/16/2017 11:44:32 PM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 9:10:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-004

Matrix: Soil

Client Sample ID: 21417-MB5:9

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Sample Moisture (Percent Moisture)

Batch ID: R36151 Analyst: BB

Percent Moisture	8.93	0.500		wt%	1	5/16/2017 10:05:52 AM
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Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 10:30:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-005

Matrix: Soil

Client Sample ID: 21417-MB4:24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
<u>Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.</u>				Batch ID: 17057		Analyst: SB
Diesel (Fuel Oil)	ND	23.2		mg/Kg-dry	1	5/17/2017 8:40:30 AM
Heavy Oil	ND	57.9		mg/Kg-dry	1	5/17/2017 8:40:30 AM
Surr: 2-Fluorobiphenyl	92.8	50-150		%Rec	1	5/17/2017 8:40:30 AM
Surr: o-Terphenyl	92.5	50-150		%Rec	1	5/17/2017 8:40:30 AM
<u>Gasoline by NWTPH-Gx</u>				Batch ID: 17056		Analyst: NG
Gasoline	ND	3.43		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Surr: Toluene-d8	103	65-135		%Rec	1	5/17/2017 12:13:03 AM
Surr: 4-Bromofluorobenzene	95.4	65-135		%Rec	1	5/17/2017 12:13:03 AM
<u>Volatile Organic Compounds by EPA Method 8260C</u>				Batch ID: 17056		Analyst: NG
Dichlorodifluoromethane (CFC-12)	ND	0.0411	Q	mg/Kg-dry	1	5/17/2017 12:13:03 AM
Chloromethane	ND	0.0411		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Vinyl chloride	ND	0.00137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Bromomethane	ND	0.0617		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Trichlorofluoromethane (CFC-11)	ND	0.0343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Chloroethane	ND	0.0411		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,1-Dichloroethene	ND	0.0343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Methylene chloride	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
trans-1,2-Dichloroethene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Methyl tert-butyl ether (MTBE)	ND	0.0343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,1-Dichloroethane	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
2,2-Dichloropropane	ND	0.0343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
cis-1,2-Dichloroethene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Chloroform	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,1,1-Trichloroethane (TCA)	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,1-Dichloropropene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Carbon tetrachloride	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2-Dichloroethane (EDC)	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Benzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Trichloroethene (TCE)	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2-Dichloropropane	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Bromodichloromethane	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Dibromomethane	ND	0.0274		mg/Kg-dry	1	5/17/2017 12:13:03 AM
cis-1,3-Dichloropropene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Toluene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
trans-1,3-Dichloropropylene	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM



Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 10:30:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-005

Matrix: Soil

Client Sample ID: 21417-MB4:24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17056

Analyst: NG

1,1,2-Trichloroethane	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,3-Dichloropropane	ND	0.0343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Tetrachloroethene (PCE)	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Dibromochloromethane	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2-Dibromoethane (EDB)	ND	0.00343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Chlorobenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,1,1,2-Tetrachloroethane	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Ethylbenzene	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM
m,p-Xylene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
o-Xylene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Styrene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Isopropylbenzene	ND	0.0548		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Bromoform	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,1,2,2-Tetrachloroethane	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
n-Propylbenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Bromobenzene	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,3,5-Trimethylbenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
2-Chlorotoluene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
4-Chlorotoluene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
tert-Butylbenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2,3-Trichloropropane	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2,4-Trichlorobenzene	ND	0.0343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
sec-Butylbenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
4-Isopropyltoluene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,3-Dichlorobenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,4-Dichlorobenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
n-Butylbenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2-Dichlorobenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2-Dibromo-3-chloropropane	ND	0.343		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2,4-Trimethylbenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Hexachlorobutadiene	ND	0.0685		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Naphthalene	ND	0.0206		mg/Kg-dry	1	5/17/2017 12:13:03 AM
1,2,3-Trichlorobenzene	ND	0.0137		mg/Kg-dry	1	5/17/2017 12:13:03 AM
Surr: Dibromofluoromethane	87.5	56.5-129		%Rec	1	5/17/2017 12:13:03 AM
Surr: Toluene-d8	96.7	64.5-151		%Rec	1	5/17/2017 12:13:03 AM
Surr: 1-Bromo-4-fluorobenzene	91.9	63.1-141		%Rec	1	5/17/2017 12:13:03 AM

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 10:30:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-005

Matrix: Soil

Client Sample ID: 21417-MB4:24

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Mercury by EPA Method 7471

Batch ID: 17075 Analyst: WF

Mercury	ND	0.298		mg/Kg-dry	1	5/17/2017 3:33:56 PM
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Total Metals by EPA Method 6020

Batch ID: 17060 Analyst: TN

Arsenic	6.94	0.0930		mg/Kg-dry	1	5/16/2017 5:14:48 PM
Barium	68.9	0.465		mg/Kg-dry	1	5/16/2017 5:14:48 PM
Cadmium	0.192	0.186		mg/Kg-dry	1	5/16/2017 5:14:48 PM
Chromium	35.8	0.0930		mg/Kg-dry	1	5/16/2017 5:14:48 PM
Lead	40.2	0.186		mg/Kg-dry	1	5/16/2017 5:14:48 PM
Selenium	1.26	0.465		mg/Kg-dry	1	5/16/2017 5:14:48 PM
Silver	ND	0.0930	*	mg/Kg-dry	1	5/16/2017 5:14:48 PM

NOTES:

* - Flagged value is not within established control limits.

Sample Moisture (Percent Moisture)

Batch ID: R36151 Analyst: BB

Percent Moisture	17.9	0.500		wt%	1	5/16/2017 10:05:52 AM
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Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 11:20:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-006

Matrix: Soil

Client Sample ID: 21417-MB2:1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 17055

Analyst: BT

Naphthalene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
2-Methylnaphthalene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
1-Methylnaphthalene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Acenaphthylene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Acenaphthene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Fluorene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Phenanthrene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Anthracene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Fluoranthene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Pyrene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Benz(a)anthracene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Chrysene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Benzo(b)fluoranthene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Benzo(k)fluoranthene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Benzo(a)pyrene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Indeno(1,2,3-cd)pyrene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Dibenz(a,h)anthracene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Benzo(g,h,i)perylene	ND	42.6		µg/Kg-dry	1	5/16/2017 6:16:51 PM
Surr: 2-Fluorobiphenyl	69.6	24.5-139		%Rec	1	5/16/2017 6:16:51 PM
Surr: Terphenyl-d14 (surr)	63.9	44.3-176		%Rec	1	5/16/2017 6:16:51 PM

Sample Moisture (Percent Moisture)

Batch ID: R36151

Analyst: BB

Percent Moisture	7.78	0.500		wt%	1	5/16/2017 10:05:52 AM
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Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 9:20:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-007

Matrix: Soil

Client Sample ID: 21417-MB3:1

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Batch ID: 17055

Analyst: BT

Naphthalene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
2-Methylnaphthalene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
1-Methylnaphthalene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Acenaphthylene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Acenaphthene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Fluorene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Phenanthrene	45.5	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Anthracene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Fluoranthene	98.1	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Pyrene	93.9	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Benz(a)anthracene	39.3	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Chrysene	46.2	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Benzo(b)fluoranthene	50.5	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Benzo(k)fluoranthene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Benzo(a)pyrene	39.9	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Indeno(1,2,3-cd)pyrene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Dibenz(a,h)anthracene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Benzo(g,h,i)perylene	ND	38.2		µg/Kg-dry	1	5/16/2017 6:39:57 PM
Surr: 2-Fluorobiphenyl	64.2	24.5-139		%Rec	1	5/16/2017 6:39:57 PM
Surr: Terphenyl-d14 (surr)	65.3	44.3-176		%Rec	1	5/16/2017 6:39:57 PM

Sample Moisture (Percent Moisture)

Batch ID: R36151

Analyst: BB

Percent Moisture	9.86	0.500		wt%	1	5/16/2017 10:05:52 AM
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Analytical Report

Work Order: 1705152
Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 10:45:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-008

Matrix: Groundwater

Client Sample ID: 21417-MB4:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Diesel and Heavy Oil by NWTPH-Dx/Dx Ext.

Batch ID: 17035

Analyst: SB

Diesel (Fuel Oil)	281	74.3	JMDL	µg/L	1	5/15/2017 8:03:55 PM
Heavy Oil	226	119	JMDL	µg/L	1	5/15/2017 8:03:55 PM
Surr: 2-Fluorobiphenyl	81.9	50-150		%Rec	1	5/15/2017 8:03:55 PM
Surr: o-Terphenyl	81.3	50-150		%Rec	1	5/15/2017 8:03:55 PM

NOTES:

MDL - Sample reported to Method Detection Limit (MDL)

Gasoline by NWTPH-Gx

Batch ID: 17040

Analyst: NG

Gasoline	ND	50.0		µg/L	1	5/12/2017 7:12:14 PM
Surr: Toluene-d8	106	65-135		%Rec	1	5/12/2017 7:12:14 PM
Surr: 4-Bromofluorobenzene	106	65-135		%Rec	1	5/12/2017 7:12:14 PM

Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

Dichlorodifluoromethane (CFC-12)	ND	1.00	Q	µg/L	1	5/12/2017 7:12:14 PM
Chloromethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Vinyl chloride	ND	0.200		µg/L	1	5/12/2017 7:12:14 PM
Bromomethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Trichlorofluoromethane (CFC-11)	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Chloroethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,1-Dichloroethene	ND	1.00	Q	µg/L	1	5/12/2017 7:12:14 PM
Methylene chloride	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Methyl tert-butyl ether (MTBE)	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,1-Dichloroethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
2,2-Dichloropropane	ND	2.00		µg/L	1	5/12/2017 7:12:14 PM
cis-1,2-Dichloroethene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Chloroform	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,1,1-Trichloroethane (TCA)	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,1-Dichloropropene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Carbon tetrachloride	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2-Dichloroethane (EDC)	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Benzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Trichloroethene (TCE)	ND	0.500		µg/L	1	5/12/2017 7:12:14 PM
1,2-Dichloropropane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Bromodichloromethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Dibromomethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM



Analytical Report

Work Order: 1705152

Date Reported: 5/19/2017

Client: Shannon & Wilson

Collection Date: 5/12/2017 10:45:00 AM

Project: Broad Megablock Phase II

Lab ID: 1705152-008

Matrix: Groundwater

Client Sample ID: 21417-MB4:GW

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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Volatile Organic Compounds by EPA Method 8260C

Batch ID: 17040

Analyst: NG

Toluene	2.99	1.00		µg/L	1	5/12/2017 7:12:14 PM
trans-1,3-Dichloropropylene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,1,2-Trichloroethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,3-Dichloropropane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Tetrachloroethene (PCE)	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Dibromochloromethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2-Dibromoethane (EDB)	ND	0.0600		µg/L	1	5/12/2017 7:12:14 PM
Chlorobenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Ethylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
m,p-Xylene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
o-Xylene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Styrene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Isopropylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Bromoform	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
n-Propylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Bromobenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
2-Chlorotoluene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
4-Chlorotoluene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
tert-Butylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2,3-Trichloropropane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2,4-Trichlorobenzene	ND	2.00		µg/L	1	5/12/2017 7:12:14 PM
sec-Butylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
4-Isopropyltoluene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,3-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,4-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
n-Butylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2-Dichlorobenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2-Dibromo-3-chloropropane	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
Hexachloro-1,3-butadiene	ND	4.00		µg/L	1	5/12/2017 7:12:14 PM
Naphthalene	ND	1.00		µg/L	1	5/12/2017 7:12:14 PM
1,2,3-Trichlorobenzene	ND	4.00		µg/L	1	5/12/2017 7:12:14 PM
Surr: Dibromofluoromethane	93.9	45.4-152		%Rec	1	5/12/2017 7:12:14 PM
Surr: Toluene-d8	87.3	40.1-139		%Rec	1	5/12/2017 7:12:14 PM
Surr: 1-Bromo-4-fluorobenzene	83.4	64.2-128		%Rec	1	5/12/2017 7:12:14 PM



Date: 5/19/2017

Work Order: 1705152
 CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
 Diesel and Heavy Oil by NWTPH-DX/DX Ext.

Sample ID	MB-17057	SamptType:	MBLK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36218
Client ID:	MBLKS	Batch ID:	17057	Analysis Date:	5/16/2017	SeqNo:	693750		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Diesel (Fuel Oil)	ND	20.0							
Heavy Oil	ND	50.0							
Surr: 2-Fluorobiphenyl	19.0		20.00		94.8	50	150		
Surr: o-Terphenyl	18.9		20.00		94.4	50	150		

Sample ID	LCS-17057	SamptType:	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36218
Client ID:	LCSS	Batch ID:	17057	Analysis Date:	5/16/2017	SeqNo:	693749		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Diesel (Fuel Oil)	515	20.0	500.0	0	103	65	135		
Surr: 2-Fluorobiphenyl	19.5		20.00		97.6	50	150		
Surr: o-Terphenyl	21.7		20.00		108	50	150		

Sample ID	1705177-001ADUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36218
Client ID:	BATCH	Batch ID:	17057	Analysis Date:	5/16/2017	SeqNo:	693732		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Diesel (Fuel Oil)	ND	22.2						0	30
Heavy Oil	ND	55.5						0	30
Surr: 2-Fluorobiphenyl	23.1		22.19		104	50	150		0
Surr: o-Terphenyl	23.4		22.19		105	50	150		0

Sample ID	1705177-001AMS	SamptType:	MS	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36218
Client ID:	BATCH	Batch ID:	17057	Analysis Date:	5/16/2017	SeqNo:	693733		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual
Diesel (Fuel Oil)	534	20.1	502.0	0	106	65	135		
Surr: 2-Fluorobiphenyl	20.7		20.08		103	50	150		
Surr: o-Terphenyl	23.5		20.08		117	50	150		



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT Diesel and Heavy Oil by NWTPH-DX/DX Ext.

Sample ID	1705177-001AMS	SamptType:	MS	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36218				
Client ID:	BATCH	Batch ID:	17057	Analysis Date:	5/16/2017	SeqNo:	693733						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	1705177-001AMSD	SamptType:	MSD	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36218				
Client ID:	BATCH	Batch ID:	17057	Analysis Date:	5/16/2017	SeqNo:	693734						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	584	21.7	543.0	0	108	65	135	533.9	9.05	30
Surr: 2-Fluorobiphenyl	25.0		21.72		115	50	150		0	
Surr: o-Terphenyl	27.3		21.72		126	50	150		0	

Sample ID	1705152-002ADUP	SamptType:	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36218				
Client ID:	21417-AMB2:10	Batch ID:	17057	Analysis Date:	5/17/2017	SeqNo:	693720						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Diesel (Fuel Oil)	ND	22.3						0		30
Heavy Oil	ND	55.7						0		30
Surr: 2-Fluorobiphenyl	19.1		22.30		85.9	50	150		0	
Surr: o-Terphenyl	19.2		22.30		86.3	50	150		0	



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Diesel and Heavy Oil by NWTPH-DX/DX Ext.

Sample ID	MBLKW	MBLK	SampleType	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36159					
Client ID:	MBLKW	MBLK	Batch ID: 17035		Analysis Date: 5/15/2017	SeqNo: 692611					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	49.9									
Heavy Oil	ND	99.8									
Surr: 2-Fluorobiphenyl	59.5		79.83		74.6	50	150				
Surr: o-Terphenyl	60.7		79.83		76.1	50	150				

Sample ID	LCSW	LCS	SampleType	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36159					
Client ID:	LCSW	LCS	Batch ID: 17035		Analysis Date: 5/15/2017	SeqNo: 692609					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	797	49.9									
Surr: 2-Fluorobiphenyl	57.7		79.91		72.2	50	150				
Surr: o-Terphenyl	62.1		79.91		77.8	50	150				

Sample ID	LCSW02	LCSW	SampleType	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36159					
Client ID:	LCSW02	LCSW	Batch ID: 17035		Analysis Date: 5/15/2017	SeqNo: 692610					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	699	49.9									
Surr: 2-Fluorobiphenyl	52.9		79.89		66.2	50	150				
Surr: o-Terphenyl	58.0		79.89		72.6	50	150				

Sample ID	BATCH	BATCH	SampleType	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36159					
Client ID:	BATCH	BATCH	Batch ID: 17035		Analysis Date: 5/15/2017	SeqNo: 692601					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Diesel (Fuel Oil)	ND	50.2									
Heavy Oil	142	100									
Surr: 2-Fluorobiphenyl	58.4		80.32		72.7	50	150				
Surr: o-Terphenyl	38.8		80.32		48.3	50	150				S



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QC SUMMARY REPORT
Diesel and Heavy Oil by NWTPH-DX/DX Ext.

Sample ID	1705140-010ADUP	SamptType:	DUP	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36159				
Client ID:	BATCH	Batch ID:	17035	Analysis Date:	5/15/2017	SeqNo:	692601						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

S - Outlying surrogate recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.



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CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
 Gasoline by NWTPH-GX

Sample ID	LCS-17056	SampleType: LCS	Units: mg/Kg	Prep Date: 5/15/2017	RunNo: 36205						
Client ID:	LCSS	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693478							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	29.6	5.00	25.00	0	118	65	135				
Surr: Toluene-d8	1.27		1.250		101	65	135				
Surr: 4-Bromofluorobenzene	1.23		1.250		98.6	65	135				

Sample ID	MB-17056	SampleType: MBLK	Units: mg/Kg	Prep Date: 5/15/2017	RunNo: 36205						
Client ID:	MBLKS	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693479							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.00									
Surr: Toluene-d8	1.25		1.250		100	65	135				
Surr: 4-Bromofluorobenzene	1.26		1.250		101	65	135				

Sample ID	1705143-001BDUP	SampleType: DUP	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36205						
Client ID:	BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693492							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	5.11									
Surr: Toluene-d8	1.28		1.278		100	65	135			0	
Surr: 4-Bromofluorobenzene	1.29		1.278		101	65	135			0	

Sample ID	1705140-001BDUP	SampleType: DUP	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36205						
Client ID:	BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693481							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	4.33									
Surr: Toluene-d8	1.10		1.082		101	65	135			0	
Surr: 4-Bromofluorobenzene	1.05		1.082		96.8	65	135			0	



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QC SUMMARY REPORT

Gasoline by NWTPH-GX

Sample ID: 1705140-007BMS	Batch ID: BATCH	SamptType: MS	Result: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36205					
Client ID: BATCH	Batch ID: 17056				Analysis Date: 5/17/2017	SeqNo: 693488					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	13.7	3.81	19.06	0	71.9	65	135				
Surr: Toluene-d8	0.968		0.9529		102	65	135				
Surr: 4-Bromofluorobenzene	0.937		0.9529		98.3	65	135				

Sample ID: 1705140-007BMSD	Batch ID: BATCH	SamptType: MSD	Result: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36205					
Client ID: BATCH	Batch ID: 17056				Analysis Date: 5/17/2017	SeqNo: 693489					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	19.1	3.81	19.06	0	100	65	135	13.71	32.7	30	R
Surr: Toluene-d8	0.983		0.9529		103	65	135		0		
Surr: 4-Bromofluorobenzene	0.950		0.9529		99.7	65	135		0		

NOTES:

R - High RPD observed, spike recoveries are within range.



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 CLIENT: Shannon & Wilson
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QC SUMMARY REPORT
 Gasoline by NWTPH-GX

Sample ID	LCS-17040	SamptType: LCS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	LCSW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692161						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	496	50.0	500.0	0	99.3	65	135				
Surr: Toluene-d8	25.3		25.00		101	65	135				
Surr: 4-Bromofluorobenzene	25.6		25.00		103	65	135				

Sample ID	MB-17040	SamptType: MBLK	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	MBLKW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692162						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: Toluene-d8	25.4		25.00		102	65	135				
Surr: 4-Bromofluorobenzene	24.6		25.00		98.4	65	135				

Sample ID	1705106-002DDUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692143						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	ND	50.0									
Surr: Toluene-d8	24.1		25.00		96.3	65	135			0	
Surr: 4-Bromofluorobenzene	24.3		25.00		97.0	65	135			0	

Sample ID	1705106-003DMS	SamptType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139						
Client ID:	BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692145						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Gasoline	500	50.0	500.0	0	100	65	135				
Surr: Toluene-d8	25.2		25.00		101	65	135				
Surr: 4-Bromofluorobenzene	25.3		25.00		101	65	135				



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QC SUMMARY REPORT

Gasoline by NWTPH-GX

Sample ID: 1705106-003DMSD	Batch ID: BATCH	SamptType: MSD	Result: 17040	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139					
Client ID: BATCH	Batch ID: 17040				Analysis Date: 5/13/2017	SeqNo: 692146					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	458	50.0	500.0	0	91.6	65	135	500.1	8.82	30	
Surr: Toluene-d8	25.2		25.00		101	65	135		0		
Surr: 4-Bromofluorobenzene	25.4		25.00		102	65	135		0		

Sample ID: 1705151-022ADUP	Batch ID: BATCH	SamptType: DUP	Result: 17040	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36139					
Client ID: BATCH	Batch ID: 17040				Analysis Date: 5/13/2017	SeqNo: 692153					
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Gasoline	ND	50.0						0		30	
Surr: Toluene-d8	24.4		25.00		97.8	65	135		0		
Surr: 4-Bromofluorobenzene	23.7		25.00		94.7	65	135		0		



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QC SUMMARY REPORT
 Mercury by EPA Method 7471

Sample ID	MB-17075	SamptType: MBLK	Units: mg/Kg	Prep Date: 5/17/2017	RunNo: 36198
Client ID:	MBLKS	Batch ID: 17075		Analysis Date: 5/17/2017	SeqNo: 693390
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	ND		0.250		

Sample ID	LCS-17075	SamptType: LCS	Units: mg/Kg	Prep Date: 5/17/2017	RunNo: 36198
Client ID:	LCSS	Batch ID: 17075		Analysis Date: 5/17/2017	SeqNo: 693391
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.549		0.250	0.5000	0 110 80 120

Sample ID	1705197-001ADUP	SamptType: DUP	Units: mg/Kg-dry	Prep Date: 5/17/2017	RunNo: 36198
Client ID:	BATCH	Batch ID: 17075		Analysis Date: 5/17/2017	SeqNo: 693393
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	ND		0.265		0 20

Sample ID	1705197-001AMS	SamptType: MS	Units: mg/Kg-dry	Prep Date: 5/17/2017	RunNo: 36198
Client ID:	BATCH	Batch ID: 17075		Analysis Date: 5/17/2017	SeqNo: 693394
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.617		0.265	0.5309	0.02911 111 70 130

Sample ID	1705197-001AMSD	SamptType: MSD	Units: mg/Kg-dry	Prep Date: 5/17/2017	RunNo: 36198
Client ID:	BATCH	Batch ID: 17075		Analysis Date: 5/17/2017	SeqNo: 693395
Analyte	Result	RL	SPK value	SPK Ref Val	%REC LowLimit HighLimit RPD Ref Val %RPD RPDLimit Qual
Mercury	0.627		0.271	0.5413	0.02911 110 70 130 0.6169 1.60 20



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CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	MB-17055	SamplType:	MBLK	Units:	µg/Kg	Prep Date:	5/15/2017	RunNo:	36170					
Client ID:	MBLKS	Batch ID:	17055	Analysis Date:	5/16/2017	SeqNo:	692688							
Analyte		Result		RL		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Naphthalene	ND	40.0												
2-Methylnaphthalene	ND	40.0												
1-Methylnaphthalene	ND	40.0												
Acenaphthylene	ND	40.0												
Acenaphthene	ND	40.0												
Fluorene	ND	40.0												
Phenanthrene	ND	40.0												
Anthracene	ND	40.0												
Fluoranthene	ND	40.0												
Pyrene	ND	40.0												
Benz(a)anthracene	ND	40.0												
Chrysene	ND	40.0												
Benz(o,b)fluoranthene	ND	40.0												
Benz(o,k)fluoranthene	ND	40.0												
Benz(o,a)pyrene	ND	40.0												
Indeno(1,2,3-cd)pyrene	ND	40.0												
Dibenz(a,h)anthracene	ND	40.0												
Benz(o,g,h,i)perylene	ND	40.0												
Surr: 2-Fluorobiphenyl	390					500.0		78.0	24.5		139			
Surr: Terphenyl-d14 (surr)	376					500.0		75.2	44.3		176			

Sample ID	LCS-17055	SamplType:	LCS	Units:	µg/Kg	Prep Date:	5/15/2017	RunNo:	36170					
Client ID:	LCSS	Batch ID:	17055	Analysis Date:	5/16/2017	SeqNo:	692689							
Analyte		Result		RL		SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	845	40.0				1,000	0	84.5	46.4		125			
2-Methylnaphthalene	863	40.0				1,000	0	86.3	45.1		135			
1-Methylnaphthalene	939	40.0				1,000	0	93.9	46.2		133			
Acenaphthylene	831	40.0				1,000	0	83.1	32.8		136			
Acenaphthene	868	40.0				1,000	0	86.8	38.7		129			



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CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	LCS-17055	SamptType:	LCS	Units:	µg/Kg	Prep Date:	5/15/2017	RunNo:	36170
Client ID:	LCSS	Batch ID:	17055	Analysis Date:	5/16/2017	SeqNo:	692689		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Fluorene	848	40.0	1,000	0	84.8	41.4	144		
Phenanthrene	839	40.0	1,000	0	83.9	43.9	133		
Anthracene	838	40.0	1,000	0	83.8	44.2	136		
Fluoranthene	848	40.0	1,000	0	84.8	45.9	137		
Pyrene	851	40.0	1,000	0	85.1	46.2	137		
Benz(a)anthracene	865	40.0	1,000	0	86.5	41.9	136		
Chrysene	886	40.0	1,000	0	88.6	46.9	138		
Benzof(b)fluoranthene	839	40.0	1,000	0	83.9	41	155		
Benzof(k)fluoranthene	894	40.0	1,000	0	89.4	41.8	153		
Benzof(a)pyrene	873	40.0	1,000	0	87.3	34.3	157		
Indeno(1,2,3-cd)pyrene	793	40.0	1,000	0	79.3	31.3	159		
Dibenz(a,h)anthracene	804	40.0	1,000	0	80.4	28	158		
Benzof(g,h,i)perylene	761	40.0	1,000	0	76.1	32.4	144		
Surr: 2-Fluorobiphenyl	406		500.0		81.2	24.5	139		
Surr: Terphenyl-d14 (surr)	381		500.0		76.3	44.3	176		

Sample ID	1705173-001ADUP	SamptType:	DUP	Units:	µg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36170
Client ID:	BATCH	Batch ID:	17055	Analysis Date:	5/16/2017	SeqNo:	692692		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Naphthalene	ND	44.4						0		30
2-Methylnaphthalene	ND	44.4						0		30
1-Methylnaphthalene	ND	44.4						0		30
Acenaphthylene	ND	44.4						0		30
Acenaphthene	ND	44.4						0		30
Fluorene	ND	44.4						0		30
Phenanthrene	ND	44.4						0		30
Anthracene	ND	44.4						0		30
Fluoranthene	54.3	44.4						28.11	63.6	30
Pyrene	52.8	44.4						53.46	1.23	30



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CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: 1705173-001ADUP	Batch ID: 17055	SamplType: DUP	Units: µg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36170
Client ID: BATCH	Batch ID: 17055	Result	SPK value	SPK Ref Val	%REC
Analys	Result	RL	SPK value	SPK Ref Val	%REC
Prep Date: 5/16/2017	Analysis Date: 5/16/2017	LowLimit	HighLimit	RPD Ref Val	%RPD
SeqNo: 692692	SeqNo: 692692	RPDLimit	Qual		

Benz(a)anthracene	ND	44.4	967.7	3.961	62.8	42.9	138	0	30
Chrysene	ND	44.4	967.7	16.77	66.2	42.8	151	0	30
Benz(o,b)fluoranthene	59.9	44.4	967.7	4.113	68.7	41.6	148	51.95	30
Benz(o,k)fluoranthene	ND	44.4	967.7	3.264	63.9	32.6	160	14.2	30
Benz(o,a)pyrene	ND	44.4	967.7	0	65.4	46.3	142	0	30
Indeno(1,2,3-cd)pyrene	ND	44.4	967.7	0	63.5	43.4	153	0	30
Dibenz(a,h)anthracene	ND	44.4	967.7	0	59.1	45.5	140	0	30
Benz(o,g,h,i)perylene	ND	44.4	967.7	0	64.2	44.6	161	0	30
Surr: 2-Fluorobiphenyl	322	554.7	554.7	0	54.4	32.6	160	0	30
Surr: Terphenyl-d14 (surr)	313	554.7	554.7	0	58.1	24.5	139	0	30

Sample ID: 1705173-001AMS	Batch ID: 17055	SamplType: MS	Units: µg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36170
Client ID: BATCH	Batch ID: 17055	Result	SPK value	SPK Ref Val	%REC
Analys	Result	RL	SPK value	SPK Ref Val	%REC
Prep Date: 5/16/2017	Analysis Date: 5/16/2017	LowLimit	HighLimit	RPD Ref Val	%RPD
SeqNo: 692693	SeqNo: 692693	RPDLimit	Qual		



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CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID: BATCH	Batch ID: 17055	Units: µg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36170
Client ID: BATCH	Batch ID: 17055	Analysis Date: 5/16/2017	SeqNo: 692693	
Sample ID: 1705173-001AMS	SamplType: MS	Units: µg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36170
Client ID: BATCH	Batch ID: 17055	Analysis Date: 5/16/2017	SeqNo: 692693	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Indeno(1,2,3-cd)pyrene	538	38.7	967.7	14.53	54.1	5	113				
Dibenz(a,h)anthracene	537	38.7	967.7	6.174	54.8	17.3	156				
Benzo(g,h,i)perylene	528	38.7	967.7	30.50	51.4	39.4	122				
Surr: 2-Fluorobiphenyl	288		483.8		59.5	24.5	139				
Surr: Terphenyl-d14 (surr)	277		483.8		57.2	44.3	176				

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	740	41.9	1,049	3.961	70.2	42.9	138	611.5	19.0	30	
2-Methylnaphthalene	811	41.9	1,049	16.77	75.8	42.8	151	657.2	21.0	30	
1-Methylnaphthalene	822	41.9	1,049	4.113	78.0	41.6	148	669.1	20.5	30	
Acenaphthylene	792	41.9	1,049	3.264	75.2	32.6	160	621.7	24.1	30	
Acenaphthene	790	41.9	1,049	0	75.3	46.3	142	632.9	22.0	30	
Fluorene	773	41.9	1,049	0	73.7	43.4	153	614.7	22.8	30	
Phenanthrene	773	41.9	1,049	40.15	69.9	45.5	140	611.9	23.2	30	
Anthracene	674	41.9	1,049	5.127	63.8	32.6	160	531.7	23.6	30	
Fluoranthene	833	41.9	1,049	28.11	76.8	44.6	161	649.7	24.7	30	
Pyrene	823	41.9	1,049	53.46	73.4	48.3	158	663.4	21.5	30	
Benz(a)anthracene	851	41.9	1,049	24.17	78.9	57.5	169	630.2	29.9	30	
Chrysene	790	41.9	1,049	24.87	73.0	45.2	146	634.3	21.9	30	
Benz(b)fluoranthene	909	41.9	1,049	51.95	81.7	42.2	168	648.9	33.4	30	R
Benz(k)fluoranthene	742	41.9	1,049	14.73	69.3	34.8	147	624.8	17.1	30	
Benz(a)pyrene	836	41.9	1,049	31.03	76.8	34.4	179	640.0	26.6	30	
Indeno(1,2,3-cd)pyrene	664	41.9	1,049	14.53	61.9	5	113	537.7	21.0	30	
Dibenz(a,h)anthracene	681	41.9	1,049	6.174	64.3	17.3	156	536.6	23.7	30	
Benzo(g,h,i)perylene	637	41.9	1,049	30.50	57.9	39.4	122	527.7	18.9	30	
Surr: 2-Fluorobiphenyl	337		524.3		64.2	24.5	139		0		
Surr: Terphenyl-d14 (surr)	331		524.3		63.1	44.3	176		0		



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CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT

Polyaromatic Hydrocarbons by EPA Method 8270 (SIM)

Sample ID	1705173-001AMSD	SamptType	MSD	Units	µg/Kg-dry	Prep Date	5/15/2017	RunNo	36170				
Client ID	BATCH	Batch ID	17055	Analysis Date	5/16/2017	SeqNo	692694						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

R - High RPD observed, spike recoveries are within range.



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT Sample Moisture (Percent Moisture)

Sample ID	1705177-002ADUP	SamptType:	DUP	Units:	wt%	Prep Date:	5/16/2017	RunNo:	36151				
Client ID:	BATCH	Batch ID:	R36151			Analysis Date:	5/16/2017	SeqNo:	692433				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Percent Moisture		8.18		0.500									
								8.679			5.87		20



Date: 5/19/2017

Work Order: 1705152
 CLIENT: Shannon & Wilson
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QC SUMMARY REPORT
 Total Metals by EPA Method 6020

Sample ID	MB-17060	Sample Type: MBLK	Units: mg/Kg	Prep Date: 5/16/2017	RunNo: 36175						
Client ID:	MBLKS	Batch ID: 17060	Analysis Date: 5/16/2017	SeqNo: 692870							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	ND		0.0730								
Barium	ND		0.365								
Cadmium	ND		0.146								
Chromium	ND		0.0730								
Lead	ND		0.146								
Selenium	ND		0.365								
Silver	ND		0.0730								*

NOTES:
 * - Flagged value is not within established control limits.

Sample ID	LCS-17060	Sample Type: LCS	Units: mg/Kg	Prep Date: 5/16/2017	RunNo: 36175						
Client ID:	LCSS	Batch ID: 17060	Analysis Date: 5/16/2017	SeqNo: 692871							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	38.9		0.0741	37.04	0	105	80	120			
Barium	39.9		0.370	37.04	0	108	80	120			
Cadmium	1.90		0.148	1.852	0	102	80	120			
Chromium	37.1		0.0741	37.04	0	100	80	120			
Lead	19.0		0.148	18.52	0	102	80	120			
Selenium	3.73		0.370	3.704	0	101	80	120			
Silver	1.22		0.0741	1.852	0	66.1	80	120			S

NOTES:
 S - Outlying spike recovery observed (low bias). Samples will be qualified with a *.

Sample ID	1705177-001ADUP	Sample Type: DUP	Units: mg/Kg-dry	Prep Date: 5/16/2017	RunNo: 36175						
Client ID:	BATCH	Batch ID: 17060	Analysis Date: 5/16/2017	SeqNo: 692874							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Arsenic	3.17		0.0850					3.035	4.38	20	
Barium	54.4		0.425					57.95	6.33	20	
Cadmium	ND		0.170					0		20	
Chromium	12.5		0.0850					16.04	25.0	20	R



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QC SUMMARY REPORT
 Total Metals by EPA Method 6020

Sample ID	1705177-001ADUP	SamptType: DUP	Units: mg/Kg-dry	Prep Date: 5/16/2017	RunNo: 36175						
Client ID:	BATCH	Batch ID: 17060	Analysis Date: 5/16/2017	SeqNo: 692874							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Lead	7.87	0.170	42.50	3.035	107	75	125	50.55	4.06	20	
Selenium	2.09	0.425	42.50	57.95	141	75	125	117.6	0.375	20	S
Silver	0.0872	0.0850	42.50	0.07855	122	75	125	2.707	1.66	20	
			42.50	16.04	104	75	125	61.74	2.79	20	
			21.25	8.312	86.9	75	125	27.18	1.46	20	
			4.250	1.856	107	75	125	6.728	4.88	20	
			2.125	0.07940	69.9	75	125	1.544	1.41	20	S

NOTES:
 R - High RPD observed. The method is in control as indicated by the LCS.
 * - Flagged value is not within established control limits.

Sample ID	1705177-001AMS	SamptType: MS	Units: mg/Kg-dry	Prep Date: 5/16/2017	RunNo: 36175						
Client ID:	BATCH	Batch ID: 17060	Analysis Date: 5/16/2017	SeqNo: 692876							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	50.6	0.0850	42.50	3.035	112	75	125				
Barium	118	0.425	42.50	57.95	140	75	125				S
Cadmium	2.71	0.170	2.125	0.07855	124	75	125				
Chromium	61.7	0.0850	42.50	16.04	108	75	125				
Lead	27.2	0.170	21.25	8.312	88.8	75	125				
Selenium	6.73	0.425	4.250	1.856	115	75	125				
Silver	1.54	0.0850	2.125	0.07940	68.9	75	125				S

NOTES:
 S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results.

Sample ID	1705177-001AMSD	SamptType: MSD	Units: mg/Kg-dry	Prep Date: 5/16/2017	RunNo: 36175						
Client ID:	BATCH	Batch ID: 17060	Analysis Date: 5/16/2017	SeqNo: 692877							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Arsenic	48.5	0.0850	42.50	3.035	107	75	125	50.55	4.06	20	
Barium	118	0.425	42.50	57.95	141	75	125	117.6	0.375	20	S
Cadmium	2.66	0.170	2.125	0.07855	122	75	125	2.707	1.66	20	
Chromium	60.0	0.0850	42.50	16.04	104	75	125	61.74	2.79	20	
Lead	26.8	0.170	21.25	8.312	86.9	75	125	27.18	1.46	20	
Selenium	6.41	0.425	4.250	1.856	107	75	125	6.728	4.88	20	
Silver	1.57	0.0850	2.125	0.07940	69.9	75	125	1.544	1.41	20	S



Date: 5/19/2017

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 CLIENT: Shannon & Wilson
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QC SUMMARY REPORT
 Total Metals by EPA Method 6020

Sample ID: 1705177-001AMSD	Batch ID: BATCH	SamptType: MSD	Result	Units: mg/Kg-dry	Prep Date: 5/16/2017	RunNo: 36175
Client ID: BATCH	Batch ID: 17060		RL	SPK value	SPK Ref Val	Analysis Date: 5/16/2017
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit
						HighLimit
						RPD Ref Val
						%RPD
						RPDLimit
						Qual

NOTES:
 S - Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results.

Sample ID: 1705177-001APDS	Batch ID: BATCH	SamptType: PDS	Result	Units: mg/Kg-dry	Prep Date: 5/16/2017	RunNo: 36175
Client ID: BATCH	Batch ID: 17060		RL	SPK value	SPK Ref Val	Analysis Date: 5/16/2017
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit
						HighLimit
						RPD Ref Val
						%RPD
						RPDLimit
						Qual

NOTES:
 S - Outlying spike recovery observed.

Barium	109	0.425	42.5	58.0	119	80	120
Silver	1.65	0.0850	2.12	0.0794	73.9	80	120



Date: 5/19/2017

Work Order: 1705152
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Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17056	SamplType	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204		
Client ID:	LCSS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693450				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	0.859	0.0600	1.000	0	85.9	14.3	167				
Chloromethane	1.06	0.0600	1.000	0	106	46	144				
Vinyl chloride	0.960	0.00200	1.000	0	96.0	44	142				
Bromomethane	0.833	0.0900	1.000	0	83.3	40.9	157				
Trichlorofluoromethane (CFC-11)	0.940	0.0500	1.000	0	94.0	36.9	156				
Chloroethane	0.995	0.0600	1.000	0	99.5	33.4	155				
1,1-Dichloroethene	1.04	0.0500	1.000	0	104	49.7	142				
Methylene chloride	1.05	0.0200	1.000	0	105	46.3	140				
trans-1,2-Dichloroethene	0.999	0.0200	1.000	0	99.9	68	130				
Methyl tert-butyl ether (MTBE)	0.986	0.0500	1.000	0	98.6	66.3	145				
1,1-Dichloroethane	0.855	0.0200	1.000	0	85.5	61.9	137				
2,2-Dichloropropane	0.789	0.0500	1.000	0	78.9	35.5	186				
cis-1,2-Dichloroethene	1.05	0.0200	1.000	0	105	71.3	135				
Chloroform	0.953	0.0200	1.000	0	95.3	69	145				
1,1,1-Trichloroethane (TCA)	0.935	0.0200	1.000	0	93.5	69	132				
1,1-Dichloropropene	1.10	0.0200	1.000	0	110	72.7	131				
Carbon tetrachloride	0.999	0.0200	1.000	0	99.9	63.4	137				
1,2-Dichloroethane (EDC)	1.04	0.0300	1.000	0	104	50.9	162				
Benzene	1.03	0.0200	1.000	0	103	64.3	133				
Trichloroethene (TCE)	0.958	0.0200	1.000	0	95.8	65.5	137				
1,2-Dichloropropane	0.986	0.0200	1.000	0	98.6	63.2	142				
Bromodichloromethane	0.813	0.0200	1.000	0	81.3	73.2	131				
Dibromomethane	0.897	0.0400	1.000	0	89.7	60.1	146				
cis-1,3-Dichloropropene	0.933	0.0200	1.000	0	93.3	59.1	143				
Toluene	1.01	0.0200	1.000	0	101	67.3	138				
trans-1,3-Dichloropropylene	0.924	0.0300	1.000	0	92.4	49.2	149				
1,1,2-Trichloroethane	0.954	0.0300	1.000	0	95.4	56.9	147				
1,3-Dichloropropane	0.996	0.0500	1.000	0	99.6	56.1	153				
Tetrachloroethene (PCE)	1.03	0.0200	1.000	0	103	52.7	150				
Dibromochloromethane	0.861	0.0300	1.000	0	86.1	70.6	144				
1,2-Dibromoethane (EDB)	0.962	0.00500	1.000	0	96.2	50.5	154				



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CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17056	SamplType	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204
Client ID:	LCSS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693450		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Chlorobenzene	1.03	0.0200	1.000	0	103	76.1	123		
1,1,1,2-Tetrachloroethane	0.920	0.0300	1.000	0	92.0	65.9	141		
Ethylbenzene	1.05	0.0300	1.000	0	105	74	129		
m,p-Xylene	2.11	0.0200	2.000	0	106	70	124		
o-Xylene	1.04	0.0200	1.000	0	104	68.1	139		
Styrene	1.03	0.0200	1.000	0	103	73.3	146		
Isopropylbenzene	1.05	0.0800	1.000	0	105	70	130		
Bromoforn	0.710	0.0200	1.000	0	71.0	67	154		
1,1,2,2-Tetrachloroethane	0.906	0.0200	1.000	0	90.6	44.8	165		
n-Propylbenzene	1.06	0.0200	1.000	0	106	74.8	125		
Bromobenzene	1.00	0.0300	1.000	0	100	49.2	144		
1,3,5-Trimethylbenzene	1.03	0.0200	1.000	0	103	74.6	123		
2-Chlorotoluene	1.03	0.0200	1.000	0	103	76.7	129		
4-Chlorotoluene	1.03	0.0200	1.000	0	103	77.5	125		
tert-Butylbenzene	1.06	0.0200	1.000	0	106	66.2	130		
1,2,3-Trichloropropane	0.993	0.0200	1.000	0	99.3	67.9	136		
1,2,4-Trichlorobenzene	1.14	0.0500	1.000	0	114	62.6	143		
sec-Butylbenzene	1.10	0.0200	1.000	0	110	75.6	133		
4-Isopropyltoluene	1.05	0.0200	1.000	0	105	76.8	131		
1,3-Dichlorobenzene	1.04	0.0200	1.000	0	104	72.8	128		
1,4-Dichlorobenzene	1.05	0.0200	1.000	0	105	72.6	126		
n-Butylbenzene	1.08	0.0200	1.000	0	108	65.3	136		
1,2-Dichlorobenzene	1.02	0.0200	1.000	0	102	72.8	126		
1,2-Dibromo-3-chloropropane	0.743	0.500	1.000	0	74.3	40.2	155		
1,2,4-Trimethylbenzene	0.998	0.0200	1.000	0	99.8	77.5	129		
Hexachlorobutadiene	1.12	0.100	1.000	0	112	42	151		
Naphthalene	1.17	0.0300	1.000	0	117	58.4	160		
1,2,3-Trichlorobenzene	1.15	0.0200	1.000	0	115	54.8	143		
Surr: Dibromofluoromethane	0.932		1.250		74.6	56.5	129		
Surr: Toluene-d8	1.26		1.250		101	64.5	151		
Surr: 1-Bromo-4-fluorobenzene	1.32		1.250		106	63.1	141		



Date: 5/19/2017

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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCs-17056	SamptType:	LCS	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204				
Client ID:	LCSS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693450						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	MB-17056	SamptType:	MLBK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204				
Client ID:	MBLKS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693451						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0600											Q
Chloromethane	ND	0.0600											
Vinyl chloride	ND	0.00200											
Bromomethane	ND	0.0900											
Trichlorofluoromethane (CFC-11)	ND	0.0500											
Chloroethane	ND	0.0600											
1,1-Dichloroethene	ND	0.0500											
Methylene chloride	ND	0.0200											
trans-1,2-Dichloroethene	ND	0.0200											
Methyl tert-butyl ether (MTBE)	ND	0.0500											
1,1-Dichloroethane	ND	0.0200											
2,2-Dichloropropane	ND	0.0500											Q
cis-1,2-Dichloroethene	ND	0.0200											
Chloroform	ND	0.0200											
1,1,1-Trichloroethane (TCA)	ND	0.0200											
1,1-Dichloropropene	ND	0.0200											
Carbon tetrachloride	ND	0.0200											
1,2-Dichloroethane (EDC)	ND	0.0300											
Benzene	ND	0.0200											
Trichloroethene (TCE)	ND	0.0200											
1,2-Dichloropropane	ND	0.0200											
Bromodichloromethane	ND	0.0200											
Dibromomethane	ND	0.0400											
cis-1,3-Dichloropropene	ND	0.0200											
Toluene	ND	0.0200											



Work Order: 1705152

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QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17056	SamplType	MBLK	Units:	mg/Kg	Prep Date:	5/15/2017	RunNo:	36204	
Client ID:	MBLKS	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693451			
Analyte		Result		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	0.0300									
1,1,2-Trichloroethane	ND	0.0300									
1,3-Dichloropropane	ND	0.0500									
Tetrachloroethene (PCE)	ND	0.0200									
Dibromochloromethane	ND	0.0300									
1,2-Dibromoethane (EDB)	ND	0.00500									
Chlorobenzene	ND	0.0200									
1,1,1,2-Tetrachloroethane	ND	0.0300									
Ethylbenzene	ND	0.0300									
m,p-Xylene	ND	0.0200									
o-Xylene	ND	0.0200									
Styrene	ND	0.0200									
Isopropylbenzene	ND	0.0800									
Bromoform	ND	0.0200									
1,1,2,2-Tetrachloroethane	ND	0.0200									
n-Propylbenzene	ND	0.0200									
Bromobenzene	ND	0.0300									
1,3,5-Trimethylbenzene	ND	0.0200									
2-Chlorotoluene	ND	0.0200									
4-Chlorotoluene	ND	0.0200									
tert-Butylbenzene	ND	0.0200									
1,2,3-Trichloropropane	ND	0.0200									
1,2,4-Trichlorobenzene	ND	0.0500									
sec-Butylbenzene	ND	0.0200									
4-Isopropyltoluene	ND	0.0200									
1,3-Dichlorobenzene	ND	0.0200									
1,4-Dichlorobenzene	ND	0.0200									
n-Butylbenzene	ND	0.0200									
1,2-Dichlorobenzene	ND	0.0200									
1,2-Dibromo-3-chloropropane	ND	0.500									
1,2,4-Trimethylbenzene	ND	0.0200									



Date: 5/19/2017

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QC SUMMARY REPORT
 Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17056	SampleType	MBLK	Units	mg/Kg	Prep Date	5/15/2017	RunNo	36204
Client ID	MBLKS	Batch ID	17056	Analysis Date	5/16/2017	SeqNo	693451		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Hexachlorobutadiene	ND	0.100							
Naphthalene	ND	0.0300							
1,2,3-Trichlorobenzene	ND	0.0200							
Surr: Dibromofluoromethane	1.15		1.250		91.9	56.5	129		
Surr: Toluene-d8	1.38		1.250		110	64.5	151		
Surr: 1-Bromo-4-fluorobenzene	1.20		1.250		95.7	63.1	141		

NOTES:
 Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID	1705143-001BDUP	SampleType	DUP	Units	mg/Kg-dry	Prep Date	5/15/2017	RunNo	36204
Client ID	BATCH	Batch ID	17056	Analysis Date	5/16/2017	SeqNo	693440		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Dichlorodifluoromethane (CFC-12)	ND	0.0613						0	30	Q
Chloromethane	ND	0.0613						0	30	
Vinyl chloride	ND	0.00204						0	30	
Bromomethane	ND	0.0920						0	30	
Trichlorofluoromethane (CFC-11)	ND	0.0511						0	30	
Chloroethane	ND	0.0613						0	30	
1,1-Dichloroethene	ND	0.0511						0	30	
Methylene chloride	ND	0.0204						0	30	
trans-1,2-Dichloroethene	ND	0.0204						0	30	
Methyl tert-butyl ether (MTBE)	ND	0.0511						0	30	
1,1-Dichloroethane	ND	0.0204						0	30	
2,2-Dichloropropane	ND	0.0511						0	30	Q
cis-1,2-Dichloroethene	ND	0.0204						0	30	
Chloroform	ND	0.0204						0	30	
1,1,1-Trichloroethane (TCA)	ND	0.0204						0	30	
1,1-Dichloropropene	ND	0.0204						0	30	
Carbon tetrachloride	ND	0.0204						0	30	
1,2-Dichloroethane (EDC)	ND	0.0307						0	30	



Date: 5/19/2017

Work Order: 1705152

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QC SUMMARY REPORT Volatile Organic Compounds by EPA Method 8260C

Sample ID	1705143-001BDUP	SamplType	DUP	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36204		
Client ID:	BATCH	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693440				
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Benzene	ND	0.0204						0		30	
Trichloroethene (TCE)	ND	0.0204						0		30	
1,2-Dichloropropane	ND	0.0204						0		30	
Bromodichloromethane	ND	0.0204						0		30	
Dibromomethane	ND	0.0409						0		30	
cis-1,3-Dichloropropene	ND	0.0204						0		30	
Toluene	ND	0.0204						0.02925	39.1	30	
trans-1,3-Dichloropropylene	ND	0.0307						0		30	
1,1,2-Trichloroethane	ND	0.0307						0		30	
1,3-Dichloropropane	ND	0.0511						0		30	
Tetrachloroethene (PCE)	ND	0.0204						0		30	
Dibromochloromethane	ND	0.0307						0		30	
1,2-Dibromoethane (EDB)	ND	0.00511						0		30	
Chlorobenzene	ND	0.0204						0		30	
1,1,1,2-Tetrachloroethane	ND	0.0307						0		30	
Ethylbenzene	ND	0.0307						0		30	
m,p-Xylene	0.0271	0.0204						0.03362	21.7	30	
o-Xylene	ND	0.0204						0		30	
Styrene	ND	0.0204						0		30	
Isopropylbenzene	ND	0.0818						0		30	
Bromoform	ND	0.0204						0		30	
1,1,2,2-Tetrachloroethane	ND	0.0204						0		30	
n-Propylbenzene	ND	0.0204						0		30	
Bromobenzene	ND	0.0307						0		30	
1,3,5-Trimethylbenzene	ND	0.0204						0		30	
2-Chlorotoluene	ND	0.0204						0		30	
4-Chlorotoluene	ND	0.0204						0		30	
tert-Butylbenzene	ND	0.0204						0		30	
1,2,3-Trichloropropane	ND	0.0204						0		30	
1,2,4-Trichlorobenzene	ND	0.0511						0		30	
sec-Butylbenzene	ND	0.0204						0		30	



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705143-001BDUP	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693440	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	ND	0.0204								30	
1,3-Dichlorobenzene	ND	0.0204								30	
1,4-Dichlorobenzene	ND	0.0204								30	
n-Butylbenzene	ND	0.0204								30	
1,2-Dichlorobenzene	ND	0.0204								30	
1,2-Dibromo-3-chloropropane	ND	0.511								30	
1,2,4-Trimethylbenzene	0.0444	0.0204						0.04638	4.41	30	
Hexachlorobutadiene	ND	0.102								30	
Naphthalene	ND	0.0307								30	
1,2,3-Trichlorobenzene	ND	0.0204								30	
Surr: Dibromofluoromethane	1.17		1.278		91.4	56.5	129		0		
Surr: Toluene-d8	1.70		1.278		133	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.24		1.278		96.9	63.1	141		0		

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID: 1705140-001BDUP	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693429	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	0.0519								30	Q
Chloromethane	ND	0.0519								30	
Vinyl chloride	ND	0.00173								30	
Bromomethane	ND	0.0779								30	
Trichlorofluoromethane (CFC-11)	ND	0.0433								30	
Chloroethane	ND	0.0519								30	
1,1-Dichloroethene	ND	0.0433								30	
Methylene chloride	ND	0.0173								30	
trans-1,2-Dichloroethene	ND	0.0173								30	
Methyl tert-butyl ether (MTBE)	ND	0.0433								30	
1,1-Dichloroethane	ND	0.0173								30	



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-001BDUP	Batch ID: 17056	SamptType: DUP	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204						
Client ID: BATCH	Batch ID: 17056			Analysis Date: 5/16/2017	SeqNo: 693429						
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

2,2-Dichloropropane	ND	0.0433				0				30	Q
cis-1,2-Dichloroethene	ND	0.0173				0				30	
Chloroform	ND	0.0173				0				30	
1,1,1-Trichloroethane (TCA)	ND	0.0173				0				30	
1,1-Dichloropropene	ND	0.0173				0				30	
Carbon tetrachloride	ND	0.0173				0				30	
1,2-Dichloroethane (EDC)	ND	0.0260				0				30	
Benzene	ND	0.0173				0				30	
Trichloroethene (TCE)	ND	0.0173				0				30	
1,2-Dichloropropane	ND	0.0173				0				30	
Bromodichloromethane	ND	0.0173				0				30	
Dibromomethane	ND	0.0346				0				30	
cis-1,3-Dichloropropene	ND	0.0173				0				30	
Toluene	ND	0.0173				0				30	
trans-1,3-Dichloropropylene	ND	0.0260				0				30	
1,1,2-Trichloroethane	ND	0.0260				0				30	
1,3-Dichloropropane	ND	0.0433				0				30	
Tetrachloroethene (PCE)	ND	0.0173				0				30	
Dibromochloromethane	ND	0.0260				0				30	
1,2-Dibromoethane (EDB)	ND	0.00433				0				30	
Chlorobenzene	ND	0.0173				0				30	
1,1,1,2-Tetrachloroethane	ND	0.0260				0				30	
Ethylbenzene	ND	0.0260				0				30	
m,p-Xylene	ND	0.0173				0				30	
o-Xylene	ND	0.0173				0				30	
Styrene	ND	0.0173				0				30	
Isopropylbenzene	ND	0.0692				0				30	
Bromoform	ND	0.0173				0				30	
1,1,2,2-Tetrachloroethane	ND	0.0173				0				30	
n-Propylbenzene	ND	0.0173				0				30	
Bromobenzene	ND	0.0260				0				30	



Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-001BDUP	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693429	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	ND	0.0173								30	
2-Chlorotoluene	ND	0.0173								30	
4-Chlorotoluene	ND	0.0173								30	
tert-Butylbenzene	ND	0.0173								30	
1,2,3-Trichloropropane	ND	0.0173								30	
1,2,4-Trichlorobenzene	ND	0.0433								30	
sec-Butylbenzene	ND	0.0173								30	
4-Isopropyltoluene	ND	0.0173								30	
1,3-Dichlorobenzene	ND	0.0173								30	
1,4-Dichlorobenzene	ND	0.0173								30	
n-Butylbenzene	ND	0.0173								30	
1,2-Dichlorobenzene	ND	0.0173								30	
1,2-Dibromo-3-chloropropane	ND	0.433								30	
1,2,4-Trimethylbenzene	ND	0.0173								30	
Hexachlorobutadiene	ND	0.0866								30	
Naphthalene	ND	0.0260								30	
1,2,3-Trichlorobenzene	ND	0.0173								30	
Surr: Dibromofluoromethane	0.961		1.082		88.8	56.5	129		0		
Surr: Toluene-d8	1.02		1.082		94.0	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.01		1.082		93.3	63.1	141		0		

NOTES:
 Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID: 1705140-003BMS	Batch ID: 17056	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693433	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.702	0.0772	1.287	0	54.6	43.5	121				
Chloromethane	0.939	0.0772	1.287	0	73.0	45	130				
Vinyl chloride	0.866	0.00257	1.287	0	67.3	51.2	146				
Bromomethane	0.873	0.116	1.287	0	67.8	21.3	120				



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMS	SamptType: MS	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204							
Client ID: BATCH	Batch ID: 17056		Analysis Date: 5/16/2017	SeqNo: 693433							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichlorofluoromethane (CFC-11)	1.23	0.0643	1.287	0	95.9	35	131				
Chloroethane	1.07	0.0772	1.287	0	82.9	31.9	123				
1,1-Dichloroethene	1.11	0.0643	1.287	0	86.1	61.9	141				
Methylene chloride	1.13	0.0257	1.287	0	87.5	54.7	142				
trans-1,2-Dichloroethene	1.08	0.0257	1.287	0	84.2	52	136				
Methyl tert-butyl ether (MTBE)	1.09	0.0643	1.287	0	84.8	54.4	132				
1,1-Dichloroethane	1.18	0.0257	1.287	0	91.7	51.8	141				
2,2-Dichloropropane	0.530	0.0643	1.287	0	41.2	36	123				
cis-1,2-Dichloroethene	1.20	0.0257	1.287	0	93.0	58.6	136				
Chloroform	1.20	0.0257	1.287	0	93.1	53.2	129				
1,1,1-Trichloroethane (TCA)	1.11	0.0257	1.287	0	86.0	58.3	145				
1,1-Dichloropropene	1.15	0.0257	1.287	0	89.7	55.1	138				
Carbon tetrachloride	1.01	0.0257	1.287	0	78.7	53.3	144				
1,2-Dichloroethane (EDC)	1.20	0.0386	1.287	0	93.5	51.3	139				
Benzene	1.20	0.0257	1.287	0	93.2	63.5	133				
Trichloroethene (TCE)	1.22	0.0257	1.287	0	94.5	68.6	132				
1,2-Dichloropropane	1.23	0.0257	1.287	0	95.8	59	136				
Bromodichloromethane	1.01	0.0257	1.287	0	78.5	50.7	141				
Dibromomethane	1.13	0.0515	1.287	0	87.6	50.6	137				
cis-1,3-Dichloropropene	1.08	0.0257	1.287	0	83.8	50.4	138				
Toluene	1.24	0.0257	1.287	0.03477	94.0	63.4	132				
trans-1,3-Dichloropropylene	1.07	0.0386	1.287	0	83.3	44.1	147				
1,1,2-Trichloroethane	1.17	0.0386	1.287	0	90.6	51.6	137				
1,3-Dichloropropane	1.20	0.0643	1.287	0	93.5	53.1	134				
Tetrachloroethene (PCE)	1.19	0.0257	1.287	0	92.1	35.6	158				
Dibromochloromethane	1.11	0.0386	1.287	0	86.1	55.3	140				
1,2-Dibromoethane (EDB)	1.16	0.00643	1.287	0	90.5	50.4	136				
Chlorobenzene	1.25	0.0257	1.287	0	97.2	60	133				
1,1,1,2-Tetrachloroethane	1.15	0.0386	1.287	0	89.0	53.1	142				
Ethylbenzene	1.25	0.0386	1.287	0	97.1	54.5	134				
m,p-Xylene	2.52	0.0257	2.574	0	97.7	53.1	132				



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMS	SamprType: MS	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204							
Client ID: BATCH	Batch ID: 17056		Analysis Date: 5/16/2017	SeqNo: 693433							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

o-Xylene	1.24	0.0257	1.287	0	96.0	53.3	139				
Styrene	1.23	0.0257	1.287	0	95.6	51.1	132				
Isopropylbenzene	1.24	0.103	1.287	0	96.2	58.9	138				
Bromoform	0.930	0.0257	1.287	0	72.3	57.9	130				
1,1,2,2-Tetrachloroethane	1.15	0.0257	1.287	0	89.2	51.9	131				
n-Propylbenzene	1.22	0.0257	1.287	0	94.9	53.6	140				
Bromobenzene	1.23	0.0386	1.287	0	95.3	54.2	140				
1,3,5-Trimethylbenzene	1.22	0.0257	1.287	0	94.8	51.8	136				
2-Chlorotoluene	1.22	0.0257	1.287	0	95.2	51.6	136				
4-Chlorotoluene	1.23	0.0257	1.287	0	95.7	50.1	139				
tert-Butylbenzene	1.23	0.0257	1.287	0	95.2	50.5	135				
1,2,3-Trichloropropane	1.13	0.0257	1.287	0	88.1	50.5	131				
1,2,4-Trichlorobenzene	1.27	0.0643	1.287	0	98.3	50.8	130				
sec-Butylbenzene	1.27	0.0257	1.287	0	98.3	52.6	141				
4-Isopropyltoluene	1.23	0.0257	1.287	0	95.5	52.9	134				
1,3-Dichlorobenzene	1.28	0.0257	1.287	0	99.4	52.6	131				
1,4-Dichlorobenzene	1.27	0.0257	1.287	0	99.0	52.9	129				
n-Butylbenzene	1.26	0.0257	1.287	0	98.2	52.6	130				
1,2-Dichlorobenzene	1.28	0.0257	1.287	0	99.5	55.8	129				
1,2-Dibromo-3-chloropropane	0.940	0.643	1.287	0	73.0	40.5	131				
1,2,4-Trimethylbenzene	1.19	0.0257	1.287	0	92.3	50.6	137				
Hexachlorobutadiene	1.27	0.129	1.287	0	98.9	40.6	158				
Naphthalene	1.35	0.0386	1.287	0	105	52.3	124				
1,2,3-Trichlorobenzene	1.30	0.0257	1.287	0	101	54.4	124				
Surr: Dibromofluoromethane	1.58		1.609		98.5	56.5	129				
Surr: Toluene-d8	1.65		1.609		103	64.5	151				
Surr: 1-Bromo-4-fluorobenzene	1.71		1.609		106	63.1	141				



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMSD	SamplType: MSD	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693434	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	0.798	0.0772	1.287	0	62.0	43.5	121	0.7025	12.8	30	
Chloromethane	1.02	0.0772	1.287	0	79.4	45	130	0.9393	8.40	30	
Vinyl chloride	0.957	0.00257	1.287	0	74.3	51.2	146	0.8657	9.99	30	
Bromomethane	0.898	0.116	1.287	0	69.8	21.3	120	0.8727	2.85	30	
Trichlorofluoromethane (CFC-11)	1.33	0.0643	1.287	0	104	35	131	1.234	7.79	30	
Chloroethane	1.05	0.0772	1.287	0	81.9	31.9	123	1.066	1.20	30	
1,1-Dichloroethene	1.20	0.0643	1.287	0	93.4	61.9	141	1.108	8.16	30	
Methylene chloride	1.15	0.0257	1.287	0	89.3	54.7	142	1.126	2.11	30	
trans-1,2-Dichloroethene	1.11	0.0257	1.287	0	85.9	52	136	1.083	2.04	30	
Methyl tert-butyl ether (MTBE)	1.15	0.0643	1.287	0	89.3	54.4	132	1.091	5.21	30	
1,1-Dichloroethane	1.19	0.0257	1.287	0	92.4	51.8	141	1.180	0.752	30	
2,2-Dichloropropane	0.555	0.0643	1.287	0	43.1	36	123	0.5297	4.63	30	
cis-1,2-Dichloroethene	1.20	0.0257	1.287	0	93.0	58.6	136	1.196	0.0639	30	
Chloroform	1.21	0.0257	1.287	0	93.8	53.2	129	1.198	0.797	30	
1,1,1-Trichloroethane (TCA)	1.12	0.0257	1.287	0	86.7	58.3	145	1.106	0.844	30	
Carbon tetrachloride	1.17	0.0257	1.287	0	91.2	55.1	138	1.154	1.68	30	
1,2-Dichloroethane (EDC)	0.971	0.0257	1.287	0	75.5	53.3	144	1.013	4.28	30	
Benzene	1.23	0.0386	1.287	0	95.8	51.3	139	1.204	2.35	30	
Trichloroethene (TCE)	1.21	0.0257	1.287	0	93.7	63.5	133	1.199	0.543	30	
1,2-Dichloropropane	1.24	0.0257	1.287	0	96.3	68.6	132	1.216	1.90	30	
Bromodichloromethane	1.18	0.0257	1.287	0	91.7	59	136	1.232	4.38	30	
Dibromomethane	1.01	0.0257	1.287	0	78.9	50.7	141	1.010	0.471	30	
cis-1,3-Dichloropropene	1.14	0.0515	1.287	0	88.9	50.6	137	1.128	1.40	30	
Toluene	1.08	0.0257	1.287	0	84.0	50.4	138	1.078	0.216	30	
trans-1,3-Dichloropropylene	1.24	0.0257	1.287	0.03477	93.6	63.4	132	1.245	0.482	30	
1,1,2-Trichloroethane	1.09	0.0386	1.287	0	85.1	44.1	147	1.072	2.10	30	
1,3-Dichloropropane	1.18	0.0386	1.287	0	92.0	51.6	137	1.165	1.56	30	
Tetrachloroethene (PCE)	1.22	0.0643	1.287	0	94.4	53.1	134	1.204	0.948	30	
Dibromochloromethane	1.19	0.0257	1.287	0	92.7	35.6	158	1.186	0.668	30	
1,2-Dibromoethane (EDB)	1.11	0.0386	1.287	0	86.5	55.3	140	1.108	0.432	30	
	1.20	0.00643	1.287	0	92.9	50.4	136	1.165	2.57	30	



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705140-003BMSD	SamplType: MSD	Units: mg/Kg-dry	Prep Date: 5/15/2017	RunNo: 36204
Client ID: BATCH	Batch ID: 17056	Analysis Date: 5/16/2017	SeqNo: 693434	

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chlorobenzene	1.25	0.0257	1.287	0	96.8	60	133	1.252	0.438	30	
1,1,1,2-Tetrachloroethane	1.12	0.0386	1.287	0	87.3	53.1	142	1.145	1.89	30	
Ethylbenzene	1.25	0.0386	1.287	0	97.2	54.5	134	1.250	0.0296	30	
m,p-Xylene	2.51	0.0257	2.574	0	97.6	53.1	132	2.516	0.166	30	
o-Xylene	1.25	0.0257	1.287	0	96.9	53.3	139	1.235	0.890	30	
Styrene	1.23	0.0257	1.287	0	95.7	51.1	132	1.230	0.159	30	
Isopropylbenzene	1.25	0.103	1.287	0	97.4	58.9	138	1.238	1.27	30	
Bromoforn	0.908	0.0257	1.287	0	70.6	57.9	130	0.9304	2.39	30	
1,1,2,2-Tetrachloroethane	1.15	0.0257	1.287	0	89.6	51.9	131	1.148	0.407	30	
n-Propylbenzene	1.23	0.0257	1.287	0	95.9	53.6	140	1.221	1.01	30	
Bromobenzene	1.22	0.0386	1.287	0	94.6	54.2	140	1.226	0.698	30	
1,3,5-Trimethylbenzene	1.22	0.0257	1.287	0	94.5	51.8	136	1.220	0.316	30	
2-Chlorotoluene	1.23	0.0257	1.287	0	95.2	51.6	136	1.225	0.0954	30	
4-Chlorotoluene	1.23	0.0257	1.287	0	95.2	50.1	139	1.231	0.460	30	
tert-Butylbenzene	1.23	0.0257	1.287	0	95.8	50.5	135	1.225	0.580	30	
1,2,3-Trichloropropane	1.22	0.0257	1.287	0	94.7	50.5	131	1.134	7.19	30	
1,2,4-Trichlorobenzene	1.29	0.0643	1.287	0	100	50.8	130	1.265	1.72	30	
sec-Butylbenzene	1.28	0.0257	1.287	0	99.4	52.6	141	1.265	1.13	30	
4-Isopropyltoluene	1.23	0.0257	1.287	0	95.6	52.9	134	1.229	0.0302	30	
1,3-Dichlorobenzene	1.28	0.0257	1.287	0	99.8	52.6	131	1.279	0.368	30	
1,4-Dichlorobenzene	1.27	0.0257	1.287	0	98.4	52.9	129	1.274	0.580	30	
n-Butylbenzene	1.29	0.0257	1.287	0	101	52.6	130	1.264	2.42	30	
1,2-Dichlorobenzene	1.27	0.0257	1.287	0	99.0	55.8	129	1.281	0.532	30	
1,2-Dibromo-3-chloropropane	0.980	0.643	1.287	0	76.1	40.5	131	0.9400	4.15	30	
1,2,4-Trimethylbenzene	1.18	0.0257	1.287	0	91.5	50.6	137	1.188	0.881	30	
Hexachlorobutadiene	1.29	0.129	1.287	0	100	40.6	158	1.273	1.41	30	
Naphthalene	1.41	0.0386	1.287	0	110	52.3	124	1.350	4.56	30	
1,2,3-Trichlorobenzene	1.29	0.0257	1.287	0	100	54.4	124	1.296	0.259	30	
Surr: Dibromofluoromethane	1.58		1.609		98.2	56.5	129		0		
Surr: Toluene-d8	1.63		1.609		101	64.5	151		0		
Surr: 1-Bromo-4-fluorobenzene	1.71		1.609		106	63.1	141		0		



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1705140-003BMSD	SamprType:	MSD	Units:	mg/Kg-dry	Prep Date:	5/15/2017	RunNo:	36204				
Client ID:	BATCH	Batch ID:	17056	Analysis Date:	5/16/2017	SeqNo:	693434						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17040	SamptType	LCS	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132
Client ID:	LCSW	Batch ID:	17040	Analysis Date:	5/12/2017	SeqNo:	692023		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD RPDLimit Qual

Dichlorodifluoromethane (CFC-12)	13.7	1.00	20.00	0	68.6	18.7	171		
Chloromethane	21.3	1.00	20.00	0	107	38.5	171		
Vinyl chloride	21.2	0.200	20.00	0	106	48	145		
Bromomethane	20.1	1.00	20.00	0	100	32.5	184		
Trichlorofluoromethane (CFC-11)	19.9	1.00	20.00	0	99.5	43.5	149		
Chloroethane	20.7	1.00	20.00	0	103	43.8	168		
1,1-Dichloroethene	17.3	1.00	20.00	0	86.6	57.5	150		
Methylene chloride	18.6	1.00	20.00	0	92.9	67.1	131		
trans-1,2-Dichloroethene	19.6	1.00	20.00	0	97.9	71.7	129		
Methyl tert-butyl ether (MTBE)	21.5	1.00	20.00	0	108	58	138		
1,1-Dichloroethane	19.0	1.00	20.00	0	95.0	67.9	134		
2,2-Dichloropropane	35.8	2.00	20.00	0	179	26.5	185		
cis-1,2-Dichloroethene	18.7	1.00	20.00	0	93.6	70.2	139		
Chloroform	18.2	1.00	20.00	0	90.8	66.3	131		
1,1,1-Trichloroethane (TCA)	21.2	1.00	20.00	0	106	71	131		
1,1-Dichloropropene	20.4	1.00	20.00	0	102	69.9	124		
Carbon tetrachloride	18.8	1.00	20.00	0	93.9	66.2	134		
1,2-Dichloroethane (EDC)	19.3	1.00	20.00	0	96.4	67	126		
Benzene	19.8	1.00	20.00	0	98.9	69.3	132		
Trichloroethene (TCE)	19.9	0.500	20.00	0	99.4	65.2	136		
1,2-Dichloropropane	19.9	1.00	20.00	0	99.7	70.5	130		
Bromodichloromethane	19.1	1.00	20.00	0	95.7	67.2	137		
Dibromomethane	20.2	1.00	20.00	0	101	69.3	143		
cis-1,3-Dichloropropene	23.0	1.00	20.00	0	115	62.6	137		
Toluene	19.6	1.00	20.00	0	98.0	61.3	145		
trans-1,3-Dichloropropylene	21.9	1.00	20.00	0	110	56.5	163		
1,1,2-Trichloroethane	20.6	1.00	20.00	0	103	71.7	131		
1,3-Dichloropropane	20.8	1.00	20.00	0	104	73.5	127		
Tetrachloroethene (PCE)	19.8	1.00	20.00	0	99.2	47.5	147		
Dibromochloromethane	20.1	1.00	20.00	0	101	67.2	134		
1,2-Dibromoethane (EDB)	21.3	0.0600	20.00	0	106	73.6	125		



Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: LCS-17040	SamplType: LCS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: LCSW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692023							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chlorobenzene	20.0	1.00	20.00	0	99.9	73.9	126				
1,1,1,2-Tetrachloroethane	19.8	1.00	20.00	0	99.2	76.8	124				
Ethylbenzene	20.6	1.00	20.00	0	103	72	130				
m,p-Xylene	41.2	1.00	40.00	0	103	70.3	134				
o-Xylene	20.0	1.00	20.00	0	100	72.1	131				
Styrene	20.3	1.00	20.00	0	102	64.3	140				
Isopropylbenzene	20.3	1.00	20.00	0	101	73.9	128				
Bromoforn	20.5	1.00	20.00	0	102	55.3	141				
1,1,2,2-Tetrachloroethane	20.9	1.00	20.00	0	104	62.9	132				
n-Propylbenzene	20.2	1.00	20.00	0	101	74.5	127				
Bromobenzene	20.1	1.00	20.00	0	101	71	131				
1,3,5-Trimethylbenzene	19.8	1.00	20.00	0	99.1	73.1	128				
2-Chlorotoluene	20.2	1.00	20.00	0	101	70.8	130				
4-Chlorotoluene	20.2	1.00	20.00	0	101	70.1	131				
tert-Butylbenzene	19.8	1.00	20.00	0	98.9	68.2	131				
1,2,3-Trichloropropane	21.5	1.00	20.00	0	108	67.7	131				
1,2,4-Trichlorobenzene	26.0	2.00	20.00	0	130	51.8	152				
sec-Butylbenzene	20.2	1.00	20.00	0	101	72	129				
4-Isopropyltoluene	20.2	1.00	20.00	0	101	69.2	130				
1,3-Dichlorobenzene	20.9	1.00	20.00	0	105	80.4	124				
1,4-Dichlorobenzene	20.9	1.00	20.00	0	105	66.8	119				
n-Butylbenzene	23.8	1.00	20.00	0	119	73.8	127				
1,2-Dichlorobenzene	22.1	1.00	20.00	0	111	69.7	119				
1,2-Dibromo-3-chloropropane	23.4	1.00	20.00	0	117	63.1	136				
1,2,4-Trimethylbenzene	20.4	1.00	20.00	0	102	73.4	127				
Hexachloro-1,3-butadiene	22.1	4.00	20.00	0	110	58.6	138				
Naphthalene	26.8	1.00	20.00	0	134	41.8	165				
1,2,3-Trichlorobenzene	26.1	4.00	20.00	0	131	48.7	156				
Surr: Dibromofluoromethane	21.8		25.00		87.1	45.4	152				
Surr: Toluene-d8	25.4		25.00		102	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	26.8		25.00		107	64.2	128				



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	LCS-17040	SamptType:	LCS	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132				
Client ID:	LCSW	Batch ID:	17040			Analysis Date:	5/12/2017	SeqNo:	692023				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID	MB-17040	SamptType:	MBLK	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132				
Client ID:	MBLKW	Batch ID:	17040			Analysis Date:	5/12/2017	SeqNo:	692024				
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	1.00											Q
Chloromethane	ND	1.00											
Vinyl chloride	ND	0.200											
Bromomethane	ND	1.00											
Trichlorofluoromethane (CFC-11)	ND	1.00											
Chloroethane	ND	1.00											
1,1-Dichloroethene	ND	1.00											
Methylene chloride	ND	1.00											
trans-1,2-Dichloroethene	ND	1.00											
Methyl tert-butyl ether (MTBE)	ND	1.00											
1,1-Dichloroethane	ND	1.00											
2,2-Dichloropropane	ND	2.00											
cis-1,2-Dichloroethene	ND	1.00											
Chloroform	ND	1.00											
1,1,1-Trichloroethane (TCA)	ND	1.00											
1,1-Dichloropropene	ND	1.00											
Carbon tetrachloride	ND	1.00											
1,2-Dichloroethane (EDC)	ND	1.00											
Benzene	ND	1.00											
Trichloroethene (TCE)	ND	0.500											
1,2-Dichloropropane	ND	1.00											
Bromodichloromethane	ND	1.00											
Dibromomethane	ND	1.00											
cis-1,3-Dichloropropene	ND	1.00											
Toluene	ND	1.00											



Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	MB-17040	SamprType	MBLK	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132	
Client ID:	MBLKW	Batch ID:	17040	Analysis Date:	5/12/2017	SeqNo:	692024			
Analyte		Result		%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
trans-1,3-Dichloropropylene	ND	1.00									
1,1,2-Trichloroethane	ND	1.00									
1,3-Dichloropropane	ND	1.00									
Tetrachloroethene (PCE)	ND	1.00									
Dibromochloromethane	ND	1.00									
1,2-Dibromoethane (EDB)	ND	1.00									
Chlorobenzene	ND	0.0600									
1,1,1,2-Tetrachloroethane	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Styrene	ND	1.00									
Isopropylbenzene	ND	1.00									
Bromoform	ND	1.00									
1,1,2,2-Tetrachloroethane	ND	1.00									
n-Propylbenzene	ND	1.00									
Bromobenzene	ND	1.00									
1,3,5-Trimethylbenzene	ND	1.00									
2-Chlorotoluene	ND	1.00									
4-Chlorotoluene	ND	1.00									
tert-Butylbenzene	ND	1.00									
1,2,3-Trichloropropane	ND	1.00									
1,2,4-Trichlorobenzene	ND	2.00									
sec-Butylbenzene	ND	1.00									
4-Isopropyltoluene	ND	1.00									
1,3-Dichlorobenzene	ND	1.00									
1,4-Dichlorobenzene	ND	1.00									
n-Butylbenzene	ND	1.00									
1,2-Dichlorobenzene	ND	1.00									
1,2-Dibromo-3-chloropropane	ND	1.00									
1,2,4-Trimethylbenzene	ND	1.00									



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: MB-17040	SampleType: MBLK	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: MBLKW	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692024							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Hexachloro-1,3-butadiene	ND	4.00									
Naphthalene	ND	1.00									
1,2,3-Trichlorobenzene	ND	4.00									
Surr: Dibromofluoromethane	22.8		25.00		91.1	45.4	152				
Surr: Toluene-d8	23.7		25.00		94.9	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	21.3		25.00		85.3	64.2	128				

NOTES:
 Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID: 1705106-002DDUP	SampleType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692000							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Dichlorodifluoromethane (CFC-12)	ND	1.00								30	Q
Chloromethane	ND	1.00								30	
Vinyl chloride	ND	0.200								30	
Bromomethane	ND	1.00								30	
Trichlorofluoromethane (CFC-11)	ND	1.00								30	
Chloroethane	ND	1.00								30	
1,1-Dichloroethene	ND	1.00								30	Q
Methylene chloride	ND	1.00								30	
trans-1,2-Dichloroethene	ND	1.00								30	
Methyl tert-butyl ether (MTBE)	ND	1.00								30	
1,1-Dichloroethane	ND	1.00								30	
2,2-Dichloropropane	ND	2.00								30	
cis-1,2-Dichloroethene	ND	1.00								30	
Chloroform	ND	1.00								30	
1,1,1-Trichloroethane (TCA)	ND	1.00								30	
1,1-Dichloropropene	ND	1.00								30	
Carbon tetrachloride	ND	1.00								30	
1,2-Dichloroethane (EDC)	ND	1.00								30	



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705106-002DDUP

Units: µg/L

Prep Date: 5/12/2017

RunNo: 36132

Client ID: BATCH

Batch ID: 17040

Analysis Date: 5/12/2017

SeqNo: 692000

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.0600						0		30	
Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	2.67	1.00						1.938	31.6	30	
o-Xylene	1.61	1.00						1.325	19.2	30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoform	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705106-002DDUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692000

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
4-Isopropyltoluene	ND	1.00								30	
1,3-Dichlorobenzene	ND	1.00								30	
1,4-Dichlorobenzene	ND	1.00								30	
n-Butylbenzene	ND	1.00								30	
1,2-Dichlorobenzene	ND	1.00								30	
1,2-Dibromo-3-chloropropane	ND	1.00								30	
1,2,4-Trimethylbenzene	1.40	1.00						1.220	13.8	30	
Hexachloro-1,3-butadiene	ND	4.00								30	
Naphthalene	ND	1.00								30	
1,2,3-Trichlorobenzene	ND	4.00								30	
Surr: Dibromofluoromethane	22.5		25.00		90.0	45.4	152		0		
Surr: Toluene-d8	23.4		25.00		93.5	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	23.1		25.00		92.2	64.2	128		0		

NOTES:
 Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).

Sample ID: 1705155-001AMS	SamptType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692017

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	16.4	1.00	20.00	0	81.9	33.3	122				
Chloromethane	22.4	1.00	20.00	0	112	39.7	143				
Vinyl chloride	24.2	0.200	20.00	0	121	41	165				
Bromomethane	23.1	1.00	20.00	0	116	31.5	135				
Trichlorofluoromethane (CFC-11)	24.1	1.00	20.00	0	121	54.7	138				
Chloroethane	23.0	1.00	20.00	0	115	49.9	143				
1,1-Dichloroethene	20.7	1.00	20.00	0	103	51.6	164				
Methylene chloride	20.9	1.00	20.00	11.29	47.9	61.6	135				S
trans-1,2-Dichloroethene	22.1	1.00	20.00	0	111	63.5	138				
Methyl tert-butyl ether (MTBE)	23.0	1.00	20.00	0	115	60.9	132				
1,1-Dichloroethane	21.8	1.00	20.00	0	109	55.7	151				



Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMS	SamplType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692017							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,2-Dichloropropane	33.8	2.00	20.00	0	169	37.7	150				S
cis-1,2-Dichloroethene	21.3	1.00	20.00	0	106	60	154				
Chloroform	21.7	1.00	20.00	0	109	48.1	140				
1,1,1-Trichloroethane (TCA)	26.9	1.00	20.00	0	135	64.2	146				
1,1-Dichloropropene	26.6	1.00	20.00	0	133	73.8	136				
Carbon tetrachloride	25.5	1.00	20.00	0	128	62.7	146				
1,2-Dichloroethane (EDC)	22.2	1.00	20.00	0	111	63.4	137				
Benzene	21.5	1.00	20.00	0	107	65.4	138				
Trichloroethene (TCE)	20.9	0.500	20.00	0	105	60.4	134				
1,2-Dichloropropane	20.8	1.00	20.00	0	104	62.6	138				
Bromodichloromethane	19.1	1.00	20.00	0	95.5	59.4	139				
Dibromomethane	20.5	1.00	20.00	0	102	58.7	148				
cis-1,3-Dichloropropene	21.3	1.00	20.00	0	107	63.8	132				
Toluene	18.2	1.00	20.00	0	90.8	52	147				
trans-1,3-Dichloropropylene	20.4	1.00	20.00	0	102	57.7	125				
1,1,2-Trichloroethane	19.7	1.00	20.00	0	98.3	57.5	153				
1,3-Dichloropropane	19.7	1.00	20.00	0	98.5	54.1	157				
Tetrachloroethene (PCE)	18.7	1.00	20.00	0	93.6	50.3	133				
Dibromochloromethane	19.1	1.00	20.00	0	95.3	61.6	139				
1,2-Dibromoethane (EDB)	19.9	0.0600	20.00	0	99.7	63.2	134				
Chlorobenzene	23.0	1.00	20.00	0	115	65.8	134				
1,1,1,2-Tetrachloroethane	23.6	1.00	20.00	0	118	65.4	135				
Ethylbenzene	22.4	1.00	20.00	0	112	64.5	136				
m,p-Xylene	43.2	1.00	40.00	0	108	63.3	135				
o-Xylene	20.4	1.00	20.00	0	102	64.8	150				
Styrene	21.7	1.00	20.00	0	108	52.9	163				
Isopropylbenzene	18.2	1.00	20.00	0	91.0	56	147				
Bromoform	25.2	1.00	20.00	0	126	57.7	139				
1,1,2,2-Tetrachloroethane	27.4	1.00	20.00	0	137	59.8	146				
n-Propylbenzene	20.2	1.00	20.00	0	101	57.6	142				
Bromobenzene	22.9	1.00	20.00	0	114	69.3	157				



Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMS	SampleType: MS	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/12/2017	SeqNo: 692017

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,3,5-Trimethylbenzene	20.0	1.00	20.00	0	100	59.9	136				
2-Chlorotoluene	22.1	1.00	20.00	0	111	61.7	134				
4-Chlorotoluene	22.2	1.00	20.00	0	111	58.4	134				
tert-Butylbenzene	19.4	1.00	20.00	0	96.8	66.8	141				
1,2,3-Trichloropropane	32.0	1.00	20.00	0	160	62.4	129				S
1,2,4-Trichlorobenzene	25.3	2.00	20.00	0	127	50.9	133				
sec-Butylbenzene	21.5	1.00	20.00	0	107	56	146				
4-Isopropyltoluene	20.8	1.00	20.00	0	104	56.4	136				
1,3-Dichlorobenzene	12.4	1.00	20.00	0	61.8	58.2	128				
1,4-Dichlorobenzene	20.1	1.00	20.00	0	101	60.1	123				
n-Butylbenzene	20.4	1.00	20.00	0	102	54.6	135				
1,2-Dichlorobenzene	21.7	1.00	20.00	0	109	65.4	133				
1,2-Dibromo-3-chloropropane	28.5	1.00	20.00	0	143	51.8	142				S
1,2,4-Trimethylbenzene	21.1	1.00	20.00	0	105	63.7	132				
Hexachlor-1,3-butadiene	18.7	4.00	20.00	0	93.3	58.1	130				S
Naphthalene	36.2	1.00	20.00	0	181	50.7	154				S
1,2,3-Trichlorobenzene	26.9	4.00	20.00	0	134	57	131				S
Surr: Dibromofluoromethane	24.9		25.00		99.6	45.4	152				
Surr: Toluene-d8	23.0		25.00		91.9	40.1	139				
Surr: 1-Bromo-4-fluorobenzene	29.5		25.00		118	64.2	128				

NOTES:
 S - Outlying spike recoveries were observed.

Sample ID: 1705155-001AMS	SampleType: MSD	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692018

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	22.7	1.00	20.00	0	114	33.3	122	16.37	32.6	30	R
Chloromethane	23.1	1.00	20.00	0	116	39.7	143	22.38	3.23	30	
Vinyl chloride	24.0	0.200	20.00	0	120	41	165	24.16	0.680	30	
Bromomethane	21.8	1.00	20.00	0	109	31.5	135	23.12	5.78	30	



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMSD	SamptType: MSD	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692018							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Trichlorofluoromethane (CFC-11)	23.9	1.00	20.00	0	120	54.7	138	24.14	0.953	30	
Chloroethane	22.8	1.00	20.00	0	114	49.9	143	22.98	0.619	30	
1,1-Dichloroethene	20.7	1.00	20.00	0	104	51.6	164	20.68	0.272	30	
Methylene chloride	20.0	1.00	20.00	11.29	43.8	61.6	135	20.86	4.01	30	S
trans-1,2-Dichloroethene	21.8	1.00	20.00	0	109	63.5	138	22.12	1.55	30	
Methyl tert-butyl ether (MTBE)	18.5	1.00	20.00	0	92.4	60.9	132	22.98	21.7	30	
1,1-Dichloroethane	20.9	1.00	20.00	0	105	55.7	151	21.78	3.98	30	
2,2-Dichloropropane	31.5	2.00	20.00	0	158	37.7	150	33.76	6.85	30	S
cis-1,2-Dichloroethene	21.2	1.00	20.00	0	106	60	154	21.30	0.557	30	
Chloroform	20.4	1.00	20.00	0	102	48.1	140	21.71	6.12	30	
1,1,1-Trichloroethane (TCA)	23.5	1.00	20.00	0	118	64.2	146	26.94	13.5	30	
1,1-Dichloropropene	23.4	1.00	20.00	0	117	73.8	136	26.63	12.9	30	
Carbon tetrachloride	23.0	1.00	20.00	0	115	62.7	146	25.54	10.6	30	
1,2-Dichloroethane (EDC)	20.1	1.00	20.00	0	100	63.4	137	22.19	9.98	30	
Benzene	21.9	1.00	20.00	0	110	65.4	138	21.46	2.04	30	
Trichloroethene (TCE)	20.8	0.500	20.00	0	104	60.4	134	20.93	0.874	30	
1,2-Dichloropropane	19.5	1.00	20.00	0	97.6	62.6	138	20.77	6.18	30	
Bromodichloromethane	19.7	1.00	20.00	0	98.7	59.4	139	19.09	3.37	30	
Dibromomethane	20.5	1.00	20.00	0	103	58.7	148	20.49	0.182	30	
cis-1,3-Dichloropropene	20.9	1.00	20.00	0	105	63.8	132	21.33	1.92	30	
Toluene	21.1	1.00	20.00	0	106	52	147	18.15	15.0	30	
trans-1,3-Dichloropropylene	20.9	1.00	20.00	0	104	57.7	125	20.43	2.13	30	
1,1,2-Trichloroethane	21.3	1.00	20.00	0	107	57.5	153	19.66	8.09	30	
1,3-Dichloropropane	21.1	1.00	20.00	0	106	54.1	157	19.71	6.88	30	
Tetrachloroethene (PCE)	22.0	1.00	20.00	0	110	50.3	133	18.73	15.9	30	
Dibromochloromethane	20.6	1.00	20.00	0	103	61.6	139	19.05	7.74	30	
1,2-Dibromoethane (EDB)	21.1	0.0600	20.00	0	105	63.2	134	19.94	5.40	30	
Chlorobenzene	21.4	1.00	20.00	0	107	65.8	134	23.02	7.38	30	
1,1,1,2-Tetrachloroethane	21.1	1.00	20.00	0	105	65.4	135	23.59	11.3	30	
Ethylbenzene	21.9	1.00	20.00	0	110	64.5	136	22.44	2.35	30	
m,p-Xylene	44.5	1.00	40.00	0	111	63.3	135	43.24	2.88	30	



Date: 5/19/2017

Work Order: 1705152
CLIENT: Shannon & Wilson
Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705155-001AMS D	SamplType: MSD	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040	Analysis Date: 5/13/2017	SeqNo: 692018								
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

o-Xylene	20.9	1.00	20.00	0	105	64.8	150	20.39	2.70	30	
Styrene	21.2	1.00	20.00	0	106	52.9	163	21.67	2.27	30	
Isopropylbenzene	21.6	1.00	20.00	0	108	56	147	18.21	17.0	30	
Bromoforn	21.1	1.00	20.00	0	105	57.7	139	25.19	17.7	30	
1,1,2,2-Tetrachloroethane	21.8	1.00	20.00	0	109	59.8	146	27.42	22.8	30	
n-Propylbenzene	22.4	1.00	20.00	0	112	57.6	142	20.22	10.4	30	
Bromobenzene	21.5	1.00	20.00	0	107	69.3	157	22.87	6.36	30	
1,3,5-Trimethylbenzene	21.4	1.00	20.00	0	107	59.9	136	20.03	6.68	30	
2-Chlorotoluene	21.8	1.00	20.00	0	109	61.7	134	22.13	1.73	30	
4-Chlorotoluene	19.9	1.00	20.00	0	99.6	58.4	134	22.23	11.0	30	
tert-Butylbenzene	21.6	1.00	20.00	0	108	66.8	141	19.36	10.8	30	
1,2,3-Trichloropropane	22.3	1.00	20.00	0	111	62.4	129	32.04	36.0	30	R
1,2,4-Trichlorobenzene	26.7	2.00	20.00	0	134	50.9	133	25.34	5.24	30	S
sec-Butylbenzene	22.5	1.00	20.00	0	113	56	146	21.50	4.70	30	
4-Isopropyltoluene	22.5	1.00	20.00	0	113	56.4	136	20.81	7.95	30	
1,3-Dichlorobenzene	21.9	1.00	20.00	0	110	58.2	128	12.36	55.7	30	R
1,4-Dichlorobenzene	22.2	1.00	20.00	0	111	60.1	123	20.14	9.66	30	
n-Butylbenzene	26.5	1.00	20.00	0	132	54.6	135	20.42	25.7	30	
1,2-Dichlorobenzene	22.8	1.00	20.00	0	114	65.4	133	21.70	4.92	30	
1,2-Dibromo-3-chloropropane	23.8	1.00	20.00	0	119	51.8	142	28.51	17.9	30	
1,2,4-Trimethylbenzene	22.1	1.00	20.00	0	111	63.7	132	21.07	4.98	30	
Hexachloro-1,3-butadiene	24.4	4.00	20.00	0	122	58.1	130	18.67	26.5	30	
Naphthalene	28.1	1.00	20.00	0	140	50.7	154	36.17	25.2	30	
1,2,3-Trichlorobenzene	28.0	4.00	20.00	0	140	57	131	26.86	4.32	30	S
Surr: Dibromofluoromethane	23.0		25.00		91.9	45.4	152		0		
Surr: Toluene-d8	25.8		25.00		103	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	27.2		25.00		109	64.2	128		0		

NOTES:

S - Outlying spike recoveries were observed.
 R - High RPD observed.



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705151-022ADUP

Units: µg/L

Prep Date: 5/12/2017

RunNo: 36132

Client ID: BATCH

Batch ID: 17040

Analysis Date: 5/13/2017

SeqNo: 692010

Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Dichlorodifluoromethane (CFC-12)	ND	1.00						0		30	Q
Chloromethane	ND	1.00						0		30	
Vinyl chloride	ND	0.200						0		30	
Bromomethane	ND	1.00						0		30	
Trichlorofluoromethane (CFC-11)	ND	1.00						0		30	
Chloroethane	ND	1.00						0		30	
1,1-Dichloroethene	ND	1.00						0		30	
Methylene chloride	ND	1.00						0		30	
trans-1,2-Dichloroethene	ND	1.00						0		30	
Methyl tert-butyl ether (MTBE)	ND	1.00						0		30	
1,1-Dichloroethane	ND	1.00						0		30	
2,2-Dichloropropane	ND	2.00						0		30	
cis-1,2-Dichloroethene	ND	1.00						0		30	
Chloroform	ND	1.00						0		30	
1,1,1-Trichloroethane (TCA)	ND	1.00						0		30	
1,1-Dichloropropene	ND	1.00						0		30	
Carbon tetrachloride	ND	1.00						0		30	
1,2-Dichloroethane (EDC)	ND	1.00						0		30	
Benzene	ND	1.00						0		30	
Trichloroethene (TCE)	ND	0.500						0		30	
1,2-Dichloropropane	ND	1.00						0		30	
Bromodichloromethane	ND	1.00						0		30	
Dibromomethane	ND	1.00						0		30	
cis-1,3-Dichloropropene	ND	1.00						0		30	
Toluene	ND	1.00						0		30	
trans-1,3-Dichloropropylene	ND	1.00						0		30	
1,1,2-Trichloroethane	ND	1.00						0		30	
1,3-Dichloropropane	ND	1.00						0		30	
Tetrachloroethene (PCE)	ND	1.00						0		30	
Dibromochloromethane	ND	1.00						0		30	
1,2-Dibromoethane (EDB)	ND	0.0600						0		30	



Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID: 1705151-022ADUP	SamptType: DUP	Units: µg/L	Prep Date: 5/12/2017	RunNo: 36132							
Client ID: BATCH	Batch ID: 17040		Analysis Date: 5/13/2017	SeqNo: 692010							
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Chlorobenzene	ND	1.00						0		30	
1,1,1,2-Tetrachloroethane	ND	1.00						0		30	
Ethylbenzene	ND	1.00						0		30	
m,p-Xylene	ND	1.00						0		30	
o-Xylene	ND	1.00						0		30	
Styrene	ND	1.00						0		30	
Isopropylbenzene	ND	1.00						0		30	
Bromoforn	ND	1.00						0		30	
1,1,2,2-Tetrachloroethane	ND	1.00						0		30	
n-Propylbenzene	ND	1.00						0		30	
Bromobenzene	ND	1.00						0		30	
1,3,5-Trimethylbenzene	ND	1.00						0		30	
2-Chlorotoluene	ND	1.00						0		30	
4-Chlorotoluene	ND	1.00						0		30	
tert-Butylbenzene	ND	1.00						0		30	
1,2,3-Trichloropropane	ND	1.00						0		30	
1,2,4-Trichlorobenzene	ND	2.00						0		30	
sec-Butylbenzene	ND	1.00						0		30	
4-Isopropyltoluene	ND	1.00						0		30	
1,3-Dichlorobenzene	ND	1.00						0		30	
1,4-Dichlorobenzene	ND	1.00						0		30	
n-Butylbenzene	ND	1.00						0		30	
1,2-Dichlorobenzene	ND	1.00						0		30	
1,2-Dibromo-3-chloropropane	ND	1.00						0		30	
1,2,4-Trimethylbenzene	ND	1.00						0		30	
Hexachloro-1,3-butadiene	ND	4.00						0		30	
Naphthalene	ND	1.00						0		30	
1,2,3-Trichlorobenzene	ND	4.00						0		30	
Surr: Dibromofluoromethane	22.6		25.00		90.4	45.4	152		0		
Surr: Toluene-d8	23.9		25.00		95.7	40.1	139		0		
Surr: 1-Bromo-4-fluorobenzene	22.8		25.00		91.3	64.2	128		0		



Date: 5/19/2017

Work Order: 1705152

CLIENT: Shannon & Wilson

Project: Broad Megablock Phase II

QC SUMMARY REPORT
Volatile Organic Compounds by EPA Method 8260C

Sample ID	1705151-022ADUP	SamptType:	DUP	Units:	µg/L	Prep Date:	5/12/2017	RunNo:	36132				
Client ID:	BATCH	Batch ID:	17040	Analysis Date:	5/13/2017	SeqNo:	692010						
Analyte		Result		RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

NOTES:

Q - Indicates an analyte with a continuing calibration that does not meet established acceptance criteria (<20%RSD, <20% Drift or minimum RRF).



Sample Log-In Check List

Client Name: SW	Work Order Number: 1705152
Logged by: Chelsea Ward	Date Received: 5/12/2017 2:02:00 PM

Chain of Custody

1. Is Chain of Custody complete? Yes No Not Present
2. How was the sample delivered? Client

Log In

3. Coolers are present? Yes No NA
4. Shipping container/cooler in good condition? Yes No
5. Custody Seals present on shipping container/cooler?
(Refer to comments for Custody Seals not intact) Yes No Not Required
6. Was an attempt made to cool the samples? Yes No NA
7. Were all items received at a temperature of >0°C to 10.0°C* Yes No NA
8. Sample(s) in proper container(s)? Yes No
9. Sufficient sample volume for indicated test(s)? Yes No
10. Are samples properly preserved? Yes No
11. Was preservative added to bottles? Yes No NA
12. Is there headspace in the VOA vials? Yes No NA
13. Did all samples containers arrive in good condition(unbroken)? Yes No
14. Does paperwork match bottle labels? Yes No
15. Are matrices correctly identified on Chain of Custody? Yes No
16. Is it clear what analyses were requested? Yes No
17. Were all holding times able to be met? Yes No

Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes No NA

Person Notified:	<input type="text" value="Blaine Nesbit/Aqnes Tirao"/>	Date:	<input type="text" value="5/12/2017"/>
By Whom:	<input type="text" value="Chelsea Ward"/>	Via:	<input checked="" type="checkbox"/> eMail <input type="checkbox"/> Phone <input type="checkbox"/> Fax <input type="checkbox"/> In Person
Regarding:	<input type="text" value="NWTPH-Dx in water"/>		
Client Instructions:	<input type="text" value="Use VOA for Dx analysis for sample -008."/>		

19. Additional remarks:

Item Information

Item #	Temp °C
Cooler	3.1
Sample	4.9
Temp Blank	2.4

* Note: DoD/ELAP and TNI require items to be received at 4°C +/- 2°C



3600 Fremont Ave N.
Seattle, WA 98103
Tel: 206-352-3790
Fax: 206-352-7178

Chain of Custody Record & Laboratory Services Agreement

Client: Shannon & Wilson
Address: 900 N 39th St Seattle WA
City, State, zip: Seattle, WA
Telephone: 206-695-6690
Fax: _____

Date: 5/12/17 Page: _____ of: _____
Project Name: Broad Megablock Phase II
Project No: 21-1-21917
Collected by: BON
Location: Megablock
Report To (PM): BON, ACT
PM Email: BON@shawi.com, Act@shawi.com

Laboratory Project No (Internal): 1705152
Special Remarks: Not Field Filtered
Sample Disposal: Return to client Disposal by lab (after 30 days)

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOCs (EPA 8260 / 624)	GX/BTEX	BTEX	Gasoline Range Organics (GX)	Hydrocarbon Identification (HCID)	Diesel/Heavy Oil Range Organics (DH)	SVOCs (EPA 8270 / 625)	PAHs (EPA 8270 - SIM)	PCBs (EPA 8082 / 608)	Metals** (EPA 6020 / 200.8)	Total (T) Dissolved (D)	Anions (IC)***	EDB (8011)	Comments
1 21417-MB1:9	5/12	1200	S	X	X	X	X	X	X	X	X	X	X	X	X	X	MTCA 5
2 21417-MB2:10	5/12	1130	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
3 21417-MB3:20	5/12	955	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
4 21417-MB5:9	5/12	910	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
5 21417-MB4:24	5/12	1030	S	X	X	X	X	X	X	X	X	X	X	X	X	X	PCPA 8
6 21417-MB2:1	5/12	1120	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
7 21417-MB3:1	5/12	920	S	X	X	X	X	X	X	X	X	X	X	X	X	X	
8 21417-MB4:GW	5/12	1045	GW	X	X	X	X	X	X	X	X	X	X	X	X	X	only 2 VOCs
9																	
10																	

*Matrix: A = Air, AQ = Aqueous, B = Bulk, O = Other, P = Product, S = Soil, SD = Sediment, SL = Solid, W = Water, DW = Drinking Water, GW = Ground Water, SW = Storm Water, WW = Waste Water
 **Metals (Circle): MTCA-5 PCPA-8 see comments
 ***Anions (Circle): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate+Nitrite

I represent that I am authorized to enter into this Agreement with Fremont Analytical on behalf of the Client named above and that I have verified Client's agreement to each of the terms on the front and backside of this Agreement.

Relinquished [Signature] Date/Time 5/12/17 Received [Signature] Date/Time 5/12/17 14:02
 Relinquished [Signature] Date/Time 5/12/17 Received [Signature] Date/Time 5/12/17 14:02

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

May 7, 2010

Suzy Reilly, Project Manager
Sound Environmental Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Ms. Reilly:

Included are the results from the testing of material submitted on May 3, 2010 from the SOU_0700-002-02_20100503, F&BI 005010 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: John Funderburk
SOU0507R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 3, 2010 by Friedman & Bruya, Inc. from the Sound Environmental Strategies SOU_0700-002-02_20100503, F&BI 005010 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Sound Environmental Strategies</u>
005010-01	MW6-20100503
005010-02	BB-8-20100503
005010-03	BB-8A-20100503

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW6-20100503	Client:	Sound Environmental Strategies
Date Received:	05/03/10	Project:	SOU_0700-002-02_20100503, F&BI 005010
Date Extracted:	05/03/10	Lab ID:	005010-01
Date Analyzed:	05/03/10	Data File:	050315.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	101	69	127

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	2.8
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.2
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8-20100503	Client:	Sound Environmental Strategies
Date Received:	05/03/10	Project:	SOU_0700-002-02_20100503, F&BI 005010
Date Extracted:	05/03/10	Lab ID:	005010-02
Date Analyzed:	05/03/10	Data File:	050316.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	105	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	103	69	127

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.27
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	110
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	120
Tetrachloroethene	830 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8-20100503	Client:	Sound Environmental Strategies
Date Received:	05/03/10	Project:	SOU_0700-002-02_20100503, F&BI 005010
Date Extracted:	05/03/10	Lab ID:	005010-02 1/10
Date Analyzed:	05/04/10	Data File:	050350.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	63	127
Toluene-d8	104	65	127
4-Bromofluorobenzene	103	69	127

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<2
Chloroethane	<10
1,1-Dichloroethene	<10
Methylene chloride	<50
trans-1,2-Dichloroethene	<10
1,1-Dichloroethane	<10
cis-1,2-Dichloroethene	90
1,2-Dichloroethane (EDC)	<10
1,1,1-Trichloroethane	<10
Trichloroethene	100
Tetrachloroethene	510

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8A-20100503	Client:	Sound Environmental Strategies
Date Received:	05/03/10	Project:	SOU_0700-002-02_20100503, F&BI 005010
Date Extracted:	05/03/10	Lab ID:	005010-03
Date Analyzed:	05/03/10	Data File:	050317.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	100	69	127

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.78
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	1.6
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	220 ve
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	210 ve
Tetrachloroethene	1,800 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8A-20100503	Client:	Sound Environmental Strategies
Date Received:	05/03/10	Project:	SOU_0700-002-02_20100503, F&BI 005010
Date Extracted:	05/03/10	Lab ID:	005010-03 1/100
Date Analyzed:	05/04/10	Data File:	050351.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	100	69	127

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<20
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	140
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	180
Tetrachloroethene	810

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	Sound Environmental Strategies
Date Received:	Not Applicable	Project:	SOU_0700-002-02_20100503, F&BI 005010
Date Extracted:	05/03/10	Lab ID:	00619 mb
Date Analyzed:	05/03/10	Data File:	050308.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	63	127
Toluene-d8	105	65	127
4-Bromofluorobenzene	103	69	127

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/07/10

Date Received: 05/03/10

Project: SOU_0700-002-02_20100503, F&BI 005010

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 005003-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent
				Difference (Limit 20)
Vinyl chloride	ug/L (ppb)	<0.2	<0.2	nm
Chloroethane	ug/L (ppb)	<1	<1	nm
1,1-Dichloroethene	ug/L (ppb)	<1	<1	nm
Methylene chloride	ug/L (ppb)	<5	<5	nm
trans-1,2-Dichloroethene	ug/L (ppb)	<1	<1	nm
1,1-Dichloroethane	ug/L (ppb)	<1	<1	nm
cis-1,2-Dichloroethene	ug/L (ppb)	<1	<1	nm
1,2-Dichloroethane (EDC)	ug/L (ppb)	<1	<1	nm
1,1,1-Trichloroethane	ug/L (ppb)	<1	<1	nm
Trichloroethene	ug/L (ppb)	<1	<1	nm
Tetrachloroethene	ug/L (ppb)	<1	<1	nm

Laboratory Code: 005003-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	115	38-157
Chloroethane	ug/L (ppb)	50	<1	107	10-172
1,1-Dichloroethene	ug/L (ppb)	50	<1	110	35-149
Methylene chloride	ug/L (ppb)	50	<5	93	66-126
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	104	65-128
1,1-Dichloroethane	ug/L (ppb)	50	<1	105	67-127
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	111	71-129
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	101	68-132
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	109	63-135
Trichloroethene	ug/L (ppb)	50	<1	110	72-120
Tetrachloroethene	ug/L (ppb)	50	<1	108	71-126

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/07/10

Date Received: 05/03/10

Project: SOU_0700-002-02_20100503, F&BI 005010

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	122	116	53-131	5
Chloroethane	ug/L (ppb)	50	110	101	52-127	9
1,1-Dichloroethene	ug/L (ppb)	50	114	110	68-131	4
Methylene chloride	ug/L (ppb)	50	100	96	17-177	4
trans-1,2-Dichloroethene	ug/L (ppb)	50	108	103	71-128	5
1,1-Dichloroethane	ug/L (ppb)	50	107	104	74-118	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	111	108	74-126	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	102	100	77-118	2
1,1,1-Trichloroethane	ug/L (ppb)	50	108	106	77-123	2
Trichloroethene	ug/L (ppb)	50	108	106	74-119	2
Tetrachloroethene	ug/L (ppb)	50	110	107	86-121	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

005010

SAMPLE CHAIN OF CUSTODY ME 05 / 05/10

Page # 1 of 1

Send Report To: John E. Hubbard, 5029 Kelly
 Company: Sand Environmental Services
 Address: 2811 Fairview Ave E, Suite 1000
 City, State, ZIP: Seattle, WA 98102
 Phone #: 206-286-1900 Fax #: 206-286-1567

SAMPLERS (signature) <i>[Signature]</i>		PROJECT NAME/NO. 700 PERK	PO # 5200-002-002 Perk 700
REMARKS			

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH 24 hours TAT
 Rush charges authorized by: *[Signature]*

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Public Review Draft

RMW 6
88-8
88-8A

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED					Notes							
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270		HFS						
1A-10-0503	01A-C	05/09/10	1219	W	3													
2A-10-0503	02A-C	05/09/10	1203	W	3													
3A-10-0503	03A-C	05/09/10	1234	W	3													
Changes per 5/26/10																		
5/5/10 ms																		

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<i>[Signature]</i>		John Hubbard		Sand Environmental		5/4/10	1305
Received by: <i>[Signature]</i>		Shawn Prew		FE B T		5/3/10	1305
Relinquished by:							
Received by:							

Samples received at 11 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

June 20, 2011

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the additional results from the testing of material submitted on June 2, 2011 from the SOU_0797-001-01_20110602, F&BI 106038 project. There are 8 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Tom Cammarata, Otto Paris, Ryan Bixby
SOU0620R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 2, 2011 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797-001-01_20110602, F&BI 106038 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
106038-01	R-MW1-20110602
106038-02	R-MW2-20110602
106038-03	R-MW3-20110602
106038-04	R-MW5-20110602
106038-05	R-MW6-20110602
106038-06	G-MW2-20110602
106038-07	G-MW3-20110602
106038-08	BB-8-20110602
106038-09	BB-84-20110602
106038-10	MW9-20110602
106038-11	Trip Blank

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/20/11
Date Received: 06/02/11
Project: SOU_0797-001-01_20110602, F&BI 106038
Date Extracted: 06/15/11 and 06/16/11
Date Analyzed: 06/15/11 and 06/16/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Benzene</u>	<u>Toluene</u>	<u>Ethyl Benzene</u>	<u>Total Xylenes</u>	<u>Gasoline Range</u>	<u>Surrogate (% Recovery)</u> (Limit 52-124)
MW9-20110602 106038-10	<1	<1	<1	<3	<100	103
Method Blank 01-1095 MB	<1	<1	<1	<3	<100	79

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/20/11
Date Received: 06/02/11
Project: SOU_0797-001-01_20110602, F&BI 106038
Date Extracted: 06/16/11
Date Analyzed: 06/17/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Sample Extracts Passed Through a
Silica Gel Column Prior to Analysis**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 50-150)
MW9-20110602 106038-10	<50	<250	92
Method Blank 01-1097 MB	<50	<250	89

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/20/11
Date Received: 06/02/11
Project: SOU_0797-001-01_20110602, F&BI 106038
Date Extracted: 06/16/11
Date Analyzed: 06/17/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 47-140)
MW9-20110602 106038-10	150 x	<250	78
Method Blank 01-1097 MB	<50	<250	73

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/20/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR BENZENE, TOLUENE, ETHYLBENZENE,
XYLENES, AND TPH AS GASOLINE
USING EPA METHOD 8021B AND NWTPH-Gx**

Laboratory Code: 106186-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Benzene	ug/L (ppb)	<1	<1	nm
Toluene	ug/L (ppb)	2.1	2.7	25 a
Ethylbenzene	ug/L (ppb)	<1	<1	nm
Xylenes	ug/L (ppb)	<3	<3	nm
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Benzene	ug/L (ppb)	50	102	65-118
Toluene	ug/L (ppb)	50	100	72-122
Ethylbenzene	ug/L (ppb)	50	101	73-126
Xylenes	ug/L (ppb)	150	101	74-118
Gasoline	ug/L (ppb)	1,000	100	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/20/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample Silica Gel

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	108	112	63-142	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/20/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	99	98	61-133	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

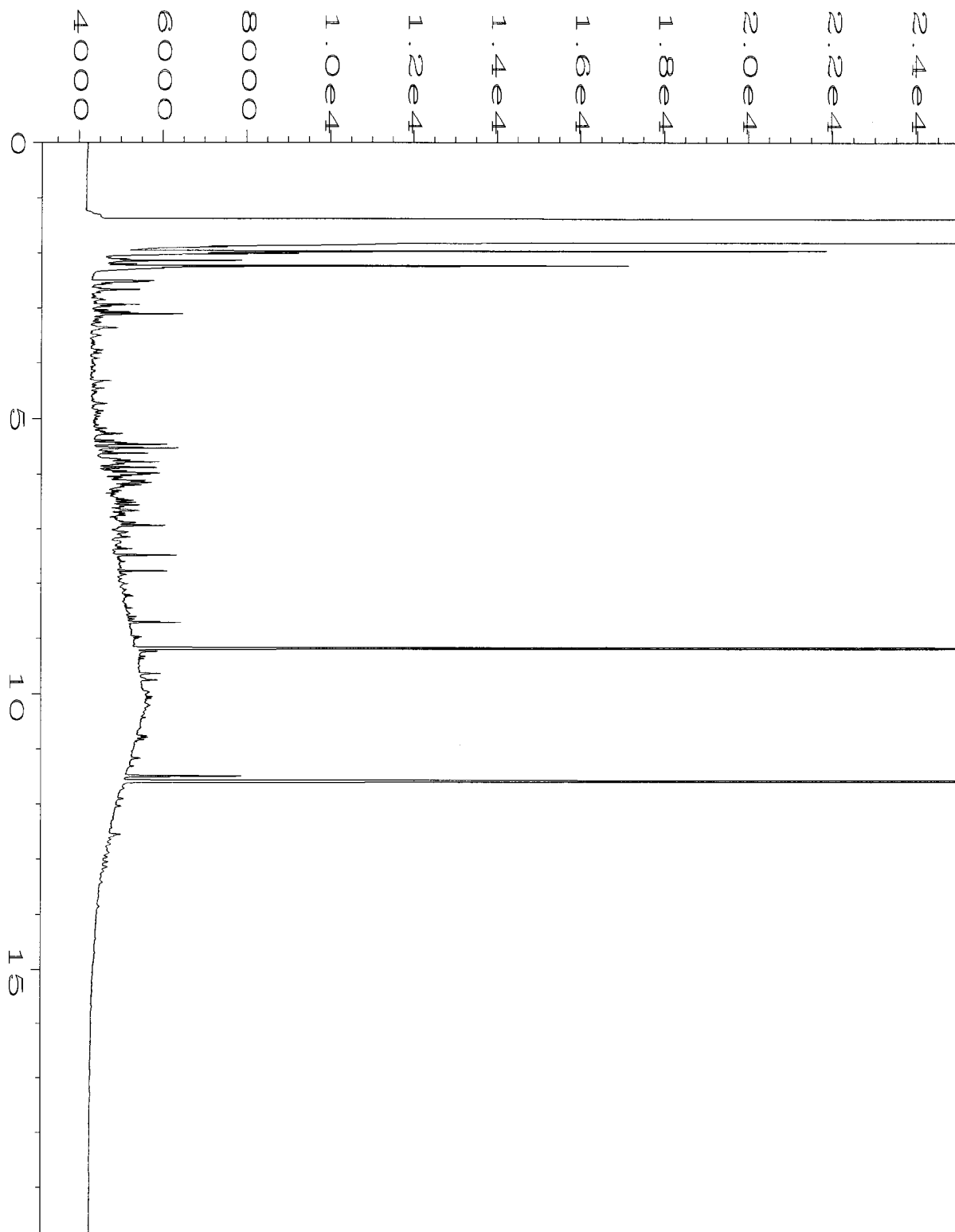
pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

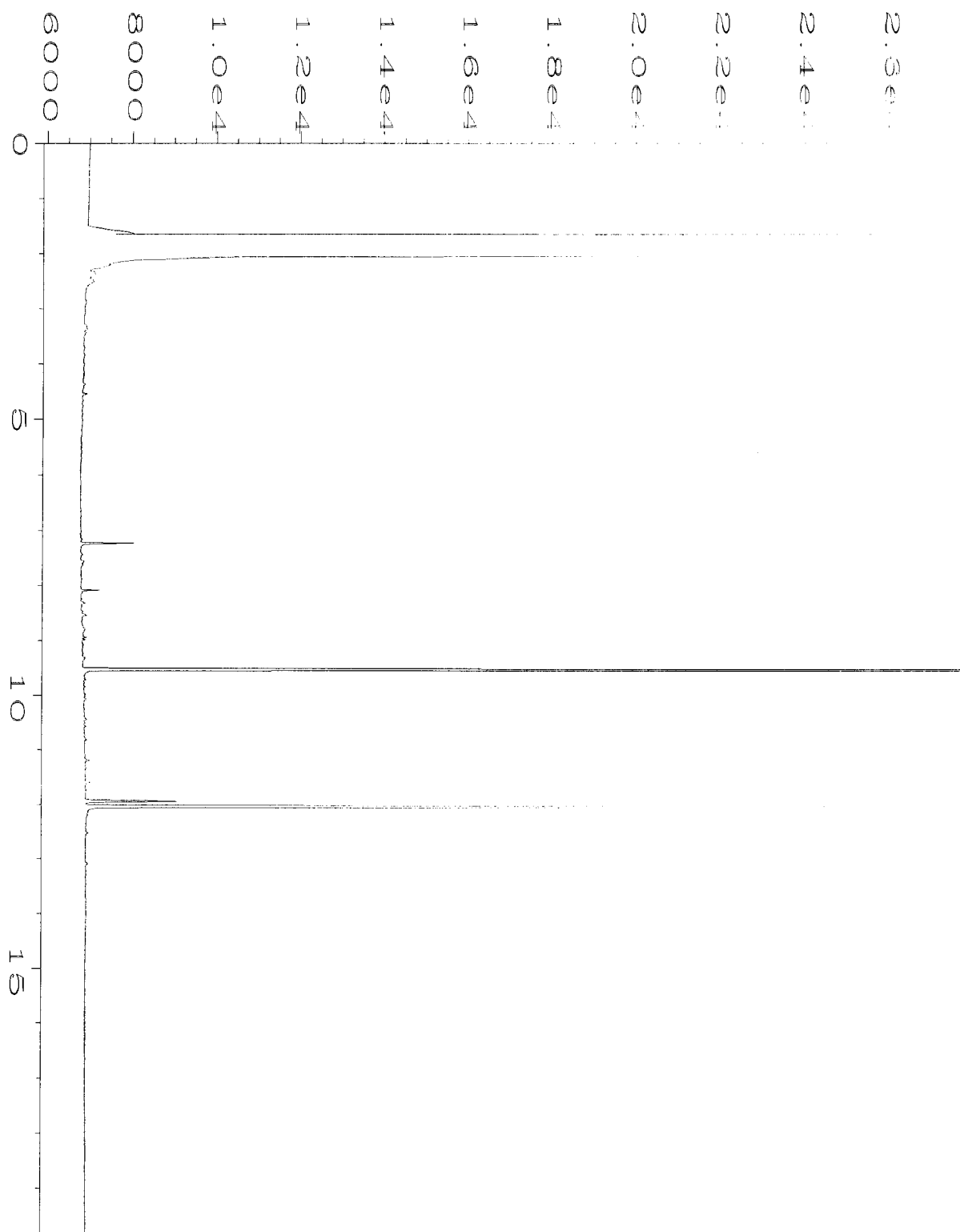
ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.



Data File Name	: C:\HPCHEM\4\DATA\06-17-11\006F0301.D	Page Number	: 1
Operator	: ML	Vial Number	: 6
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 106038-10	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	TPHD.MTH
Acquired on	: 17 Jun 11 09:23 AM	Analysis Method	: TPHD.MTH
Report Created on:	20 Jun 11 01:08 PM		



Data File Name	: C:\HPCHEM\1\DATA\06-17-11\013F0301.D	Page Number	: 1
Operator	: ML	Vial Number	: 13
Instrument	: GC1	Injection Number	: 1
Sample Name	: 106038-10 sg	Sequence Line	: 1
Run Time Bar Code:		Instrument Method	: HP689.MTH
Acquired on	: 17 Jun 11 12:30 PM	Analysis Method	: T9HD.MTH
Report Created on:	20 Jun 11 01:13 PM		

106038

SAMPLE CHAIN OF CUSTODY

ME 06/02/11 V4/104

Send Report To Chuck Beck, Regen 156 by
 Company Severestech Strategic Inc
 Address 2811 Fairview Ave E, Ste 2000
 City, State, ZIP Seattle, WA 98102
 Phone # 206 306 1700 Fax # 206 306 1707

SAMPLERS (signature)	PROJECT NAME/NO.	PO #
<i>[Signature]</i>	ALSCO Property / 0797-001-01	
REMARKS	GEMS Y / N	

Page # 1 of 1

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWIPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	ANALYSES REQUESTED	Notes
R-Mus1-Zenith02	R-Mus1	10.5	01 G	6/2/11	12:50	w	7	X	X	X	X	X	X		(X) - analyze per CC 6/15/11
R-Mus2-Zenith02	R-Mus2	13	02		12:15			X	X	X	X	X	X		
R-Mus3-Zenith02	R-Mus3	14	03		13:15			X	X	X	X	X	X		
R-Mus5-Zenith02	R-Mus5	23	04		13:02			X	X	X	X	X	X		analyze w/and w/ silica
R-Mus6-Zenith02	R-Mus6	19	05		13:48			X	X	X	X	X	X		
G-Mus2-Zenith02	G-Mus2	13	06		16:15			X	X	X	X	X	X		
G-Mus3-Zenith02	G-Mus3	31	07		16:32			X	X	X	X	X	X		
B-B-Zenith02	B-B	35	08		14:45			X	X	X	X	X	X		
B-B-Zenith02	B-B	35	09		15:05			X	X	X	X	X	X		
Mus9-Zenith02	Mus9	18.5	10		11:42			X	X	X	X	X	X		Hold up for 24 hrs
Trip Bank			11					X	X	X	X	X	X		Cooler # 1

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>[Signature]</i>	Andrew Leary	Severestech	6/2/11	17:18
<i>[Signature]</i>	Charles Beck	Severestech	6/2/11	17:18
<i>[Signature]</i>	Howard Verway	FBI	6/2/11	17:45

Received by: *[Signature]*
 Relinquished to: *[Signature]*

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Charlene Morrow, M.S.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
FAX: (206) 283-5044
e-mail: fbi@isomedia.com

June 14, 2011

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the amended results from the testing of material submitted on June 2, 2011 from the SOU_0797-001-01_20110602, F&BI 106038 project. The case narrative has been amended to provide further information regarding the nature of the material present in the samples G-MW2-20110602, G-MW3-20110602, BB-8-20110602, and BB-8A-20110602. In addition, the "x" flag has been removed from the NWTPH-Gx analysis of the sample R-MW2-20110602.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Otto Paris, Ryan Bixby
SOU0614R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
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3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
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e-mail: fbi@isomedia.com

June 14, 2011

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on June 2, 2011 from the SOU_0797-001-01_20110602, F&BI 106038 project. There are 23 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Otto Paris, Ryan Bixby
SOU0614R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on June 2, 2011 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797-001-01_20110602, F&BI 106038 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
106038-01	R-MW1-20110602
106038-02	R-MW2-20110602
106038-03	R-MW3-20110602
106038-04	R-MW5-20110602
106038-05	R-MW6-20110602
106038-06	G-MW2-20110602
106038-07	G-MW3-20110602
106038-08	BB-8-20110602
106038-09	BB-8A-20110602
106038-10	MW9-20110602
106038-11	Trip Blank

For the NWTPH-Gx analysis, the gasoline range material present in the samples G-MW2-20110602, G-MW3-20110602, BB-8-20110602, and BB-8A-20110602 is not indicative of gasoline. The material present in these samples elutes as one or two peaks at approximately 5 and 7.5 minutes. This information in conjunction with the results from the 8260C analysis indicates that the gasoline range material present in these samples is due to chlorinated solvents and not gasoline.

The 8260C calibration standard failed the acceptance criteria for hexachlorobutadiene in several samples. The data were flagged accordingly.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/14/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

Date Extracted: 06/03/11

Date Analyzed: 06/03/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**

Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-134)
R-MW1-20110602 106038-01	<100	79
R-MW2-20110602 106038-02	1,700	78
R-MW3-20110602 106038-03	<100	83
R-MW5-20110602 106038-04	<100	87
R-MW6-20110602 106038-05	<100	85
G-MW2-20110602 106038-06 1/100	59,000 x	70
G-MW3-20110602 106038-07 1/100	19,000 x	87
BB-8-20110602 106038-08	130 x	69
BB-8A-20110602 106038-09	380 x	87
Method Blank 01-992 MB	<100	77

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/14/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

Date Extracted: 06/03/11

Date Analyzed: 06/06/11

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx
Results Reported as ug/L (ppb)**

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> (% Recovery) (Limit 51-134)
R-MW1-20110602 106038-01	1,000 x	740	103
R-MW2-20110602 106038-02	3,100	290 x	97
R-MW3-20110602 106038-03	240 x	<250	104
R-MW5-20110602 106038-04	<50	<250	102
R-MW6-20110602 106038-05	120 x	<250	105
G-MW2-20110602 106038-06	200	<250	94
G-MW3-20110602 106038-07	210 x	<250	97
BB-8-20110602 106038-08	<50	<250	104
BB-8A-20110602 106038-09	<50	<250	101
Method Blank 01-1044 MB	<50	<250	87

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	R-MW1-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-01
Date Analyzed:	06/10/11	Data File:	061010.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	104	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	7.9
Vinyl chloride	0.68	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	1.9	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	2.7	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	R-MW2-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-02
Date Analyzed:	06/10/11	Data File:	061011.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	63	127
Toluene-d8	102	65	127
4-Bromofluorobenzene	99	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	21
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	34
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	19	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	5.6
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	R-MW3-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-03
Date Analyzed:	06/10/11	Data File:	061012.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	63	127
Toluene-d8	99	65	127
4-Bromofluorobenzene	96	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	R-MW5-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-04
Date Analyzed:	06/10/11	Data File:	061013.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	63	127
Toluene-d8	102	65	127
4-Bromofluorobenzene	102	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	R-MW6-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-05
Date Analyzed:	06/10/11	Data File:	061014.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	63	127
Toluene-d8	102	65	127
4-Bromofluorobenzene	101	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	2.1	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	G-MW2-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/09/11	Lab ID:	106038-06 1/1000
Date Analyzed:	06/09/11	Data File:	060926.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	105	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1,000	1,3-Dichloropropane	<1,000
Chloromethane	<10,000 ca	Tetrachloroethene	150,000 ve
Vinyl chloride	<200	Dibromochloromethane	<1,000
Bromomethane	<1,000	1,2-Dibromoethane (EDB)	<1,000
Chloroethane	<1,000	Chlorobenzene	<1,000
Trichlorofluoromethane	<1,000	Ethylbenzene	<1,000
Acetone	<10,000	1,1,1,2-Tetrachloroethane	<1,000
1,1-Dichloroethene	<1,000	m,p-Xylene	<2,000
Methylene chloride	<5,000	o-Xylene	<1,000
Methyl t-butyl ether (MTBE)	<1,000	Styrene	<1,000
trans-1,2-Dichloroethene	<1,000	Isopropylbenzene	<1,000
1,1-Dichloroethane	<1,000	Bromoform	<1,000
2,2-Dichloropropane	<1,000	n-Propylbenzene	<1,000
cis-1,2-Dichloroethene	<1,000	Bromobenzene	<1,000
Chloroform	<1,000	1,3,5-Trimethylbenzene	<1,000
2-Butanone (MEK)	<10,000	1,1,2,2-Tetrachloroethane	<1,000
1,2-Dichloroethane (EDC)	<1,000	1,2,3-Trichloropropane	<1,000
1,1,1-Trichloroethane	<1,000	2-Chlorotoluene	<1,000
1,1-Dichloropropene	<1,000	4-Chlorotoluene	<1,000
Carbon tetrachloride	<1,000	tert-Butylbenzene	<1,000
Benzene	<350	1,2,4-Trimethylbenzene	<1,000
Trichloroethene	<1,000	sec-Butylbenzene	<1,000
1,2-Dichloropropane	<1,000	p-Isopropyltoluene	<1,000
Bromodichloromethane	<1,000	1,3-Dichlorobenzene	<1,000
Dibromomethane	<1,000	1,4-Dichlorobenzene	<1,000
4-Methyl-2-pentanone	<10,000	1,2-Dichlorobenzene	<1,000
cis-1,3-Dichloropropene	<1,000	1,2-Dibromo-3-chloropropane	<10,000
Toluene	<1,000	1,2,4-Trichlorobenzene	<1,000
trans-1,3-Dichloropropene	<1,000	Hexachlorobutadiene	<1,000 ca
1,1,2-Trichloroethane	<1,000	Naphthalene	<1,000
2-Hexanone	<10,000	1,2,3-Trichlorobenzene	<1,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	G-MW2-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-06 1/10000
Date Analyzed:	06/10/11	Data File:	061009.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	63	127
Toluene-d8	107	65	127
4-Bromofluorobenzene	108	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<10,000	1,3-Dichloropropane	<10,000
Chloromethane	<100,000	Tetrachloroethene	150,000
Vinyl chloride	<2,000	Dibromochloromethane	<10,000
Bromomethane	<10,000	1,2-Dibromoethane (EDB)	<10,000
Chloroethane	<10,000	Chlorobenzene	<10,000
Trichlorofluoromethane	<10,000	Ethylbenzene	<10,000
Acetone	<100,000	1,1,1,2-Tetrachloroethane	<10,000
1,1-Dichloroethene	<10,000	m,p-Xylene	<20,000
Methylene chloride	<50,000	o-Xylene	<10,000
Methyl t-butyl ether (MTBE)	<10,000	Styrene	<10,000
trans-1,2-Dichloroethene	<10,000	Isopropylbenzene	<10,000
1,1-Dichloroethane	<10,000	Bromoform	<10,000
2,2-Dichloropropane	<10,000	n-Propylbenzene	<10,000
cis-1,2-Dichloroethene	<10,000	Bromobenzene	<10,000
Chloroform	<10,000	1,3,5-Trimethylbenzene	<10,000
2-Butanone (MEK)	<100,000	1,1,2,2-Tetrachloroethane	<10,000
1,2-Dichloroethane (EDC)	<10,000	1,2,3-Trichloropropane	<10,000
1,1,1-Trichloroethane	<10,000	2-Chlorotoluene	<10,000
1,1-Dichloropropene	<10,000	4-Chlorotoluene	<10,000
Carbon tetrachloride	<10,000	tert-Butylbenzene	<10,000
Benzene	<3,500	1,2,4-Trimethylbenzene	<10,000
Trichloroethene	<10,000	sec-Butylbenzene	<10,000
1,2-Dichloropropane	<10,000	p-Isopropyltoluene	<10,000
Bromodichloromethane	<10,000	1,3-Dichlorobenzene	<10,000
Dibromomethane	<10,000	1,4-Dichlorobenzene	<10,000
4-Methyl-2-pentanone	<100,000	1,2-Dichlorobenzene	<10,000
cis-1,3-Dichloropropene	<10,000	1,2-Dibromo-3-chloropropane	<100,000
Toluene	<10,000	1,2,4-Trichlorobenzene	<10,000
trans-1,3-Dichloropropene	<10,000	Hexachlorobutadiene	<10,000
1,1,2-Trichloroethane	<10,000	Naphthalene	<10,000
2-Hexanone	<100,000	1,2,3-Trichlorobenzene	<10,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	G-MW3-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/09/11	Lab ID:	106038-07 1/1000
Date Analyzed:	06/09/11	Data File:	060927.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	63	127
Toluene-d8	102	65	127
4-Bromofluorobenzene	100	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1,000	1,3-Dichloropropane	<1,000
Chloromethane	<10,000 ca	Tetrachloroethene	33,000
Vinyl chloride	290	Dibromochloromethane	<1,000
Bromomethane	<1,000	1,2-Dibromoethane (EDB)	<1,000
Chloroethane	<1,000	Chlorobenzene	<1,000
Trichlorofluoromethane	<1,000	Ethylbenzene	<1,000
Acetone	<10,000	1,1,1,2-Tetrachloroethane	<1,000
1,1-Dichloroethene	<1,000	m,p-Xylene	<2,000
Methylene chloride	<5,000	o-Xylene	<1,000
Methyl t-butyl ether (MTBE)	<1,000	Styrene	<1,000
trans-1,2-Dichloroethene	<1,000	Isopropylbenzene	<1,000
1,1-Dichloroethane	<1,000	Bromoform	<1,000
2,2-Dichloropropane	<1,000	n-Propylbenzene	<1,000
cis-1,2-Dichloroethene	1,500	Bromobenzene	<1,000
Chloroform	<1,000	1,3,5-Trimethylbenzene	<1,000
2-Butanone (MEK)	<10,000	1,1,2,2-Tetrachloroethane	<1,000
1,2-Dichloroethane (EDC)	<1,000	1,2,3-Trichloropropane	<1,000
1,1,1-Trichloroethane	<1,000	2-Chlorotoluene	<1,000
1,1-Dichloropropene	<1,000	4-Chlorotoluene	<1,000
Carbon tetrachloride	<1,000	tert-Butylbenzene	<1,000
Benzene	<350	1,2,4-Trimethylbenzene	<1,000
Trichloroethene	1,400	sec-Butylbenzene	<1,000
1,2-Dichloropropane	<1,000	p-Isopropyltoluene	<1,000
Bromodichloromethane	<1,000	1,3-Dichlorobenzene	<1,000
Dibromomethane	<1,000	1,4-Dichlorobenzene	<1,000
4-Methyl-2-pentanone	<10,000	1,2-Dichlorobenzene	<1,000
cis-1,3-Dichloropropene	<1,000	1,2-Dibromo-3-chloropropane	<10,000
Toluene	<1,000	1,2,4-Trichlorobenzene	<1,000
trans-1,3-Dichloropropene	<1,000	Hexachlorobutadiene	<1,000 ca
1,1,2-Trichloroethane	<1,000	Naphthalene	<1,000
2-Hexanone	<10,000	1,2,3-Trichlorobenzene	<1,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-08
Date Analyzed:	06/11/11	Data File:	061034.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	63	127
Toluene-d8	101	65	127
4-Bromofluorobenzene	100	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	240 ve
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	44	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	59	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/09/11	Lab ID:	106038-08 1/100
Date Analyzed:	06/09/11	Data File:	060923.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	106	63	127
Toluene-d8	101	65	127
4-Bromofluorobenzene	105	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<100	1,3-Dichloropropane	<100
Chloromethane	<1,000 ca	Tetrachloroethene	170
Vinyl chloride	<20	Dibromochloromethane	<100
Bromomethane	<100	1,2-Dibromoethane (EDB)	<100
Chloroethane	<100	Chlorobenzene	<100
Trichlorofluoromethane	<100	Ethylbenzene	<100
Acetone	<1,000	1,1,1,2-Tetrachloroethane	<100
1,1-Dichloroethene	<100	m,p-Xylene	<200
Methylene chloride	<500	o-Xylene	<100
Methyl t-butyl ether (MTBE)	<100	Styrene	<100
trans-1,2-Dichloroethene	<100	Isopropylbenzene	<100
1,1-Dichloroethane	<100	Bromoform	<100
2,2-Dichloropropane	<100	n-Propylbenzene	<100
cis-1,2-Dichloroethene	<100	Bromobenzene	<100
Chloroform	<100	1,3,5-Trimethylbenzene	<100
2-Butanone (MEK)	<1,000	1,1,2,2-Tetrachloroethane	<100
1,2-Dichloroethane (EDC)	<100	1,2,3-Trichloropropane	<100
1,1,1-Trichloroethane	<100	2-Chlorotoluene	<100
1,1-Dichloropropene	<100	4-Chlorotoluene	<100
Carbon tetrachloride	<100	tert-Butylbenzene	<100
Benzene	<35	1,2,4-Trimethylbenzene	<100
Trichloroethene	<100	sec-Butylbenzene	<100
1,2-Dichloropropane	<100	p-Isopropyltoluene	<100
Bromodichloromethane	<100	1,3-Dichlorobenzene	<100
Dibromomethane	<100	1,4-Dichlorobenzene	<100
4-Methyl-2-pentanone	<1,000	1,2-Dichlorobenzene	<100
cis-1,3-Dichloropropene	<100	1,2-Dibromo-3-chloropropane	<1,000
Toluene	<100	1,2,4-Trichlorobenzene	<100
trans-1,3-Dichloropropene	<100	Hexachlorobutadiene	<100 ca
1,1,2-Trichloroethane	<100	Naphthalene	<100
2-Hexanone	<1,000	1,2,3-Trichlorobenzene	<100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8A-20110602	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-09 1/10
Date Analyzed:	06/10/11	Data File:	061008.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	107	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	106	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<10	1,3-Dichloropropane	<10
Chloromethane	<100	Tetrachloroethene	710
Vinyl chloride	<2	Dibromochloromethane	<10
Bromomethane	<10	1,2-Dibromoethane (EDB)	<10
Chloroethane	<10	Chlorobenzene	<10
Trichlorofluoromethane	<10	Ethylbenzene	<10
Acetone	<100	1,1,1,2-Tetrachloroethane	<10
1,1-Dichloroethene	<10	m,p-Xylene	<20
Methylene chloride	<50	o-Xylene	<10
Methyl t-butyl ether (MTBE)	<10	Styrene	<10
trans-1,2-Dichloroethene	<10	Isopropylbenzene	<10
1,1-Dichloroethane	<10	Bromoform	<10
2,2-Dichloropropane	<10	n-Propylbenzene	<10
cis-1,2-Dichloroethene	170	Bromobenzene	<10
Chloroform	<10	1,3,5-Trimethylbenzene	<10
2-Butanone (MEK)	<100	1,1,2,2-Tetrachloroethane	<10
1,2-Dichloroethane (EDC)	<10	1,2,3-Trichloropropane	<10
1,1,1-Trichloroethane	<10	2-Chlorotoluene	<10
1,1-Dichloropropene	<10	4-Chlorotoluene	<10
Carbon tetrachloride	<10	tert-Butylbenzene	<10
Benzene	<3.5	1,2,4-Trimethylbenzene	<10
Trichloroethene	170	sec-Butylbenzene	<10
1,2-Dichloropropane	<10	p-Isopropyltoluene	<10
Bromodichloromethane	<10	1,3-Dichlorobenzene	<10
Dibromomethane	<10	1,4-Dichlorobenzene	<10
4-Methyl-2-pentanone	<100	1,2-Dichlorobenzene	<10
cis-1,3-Dichloropropene	<10	1,2-Dibromo-3-chloropropane	<100
Toluene	<10	1,2,4-Trichlorobenzene	<10
trans-1,3-Dichloropropene	<10	Hexachlorobutadiene	<10
1,1,2-Trichloroethane	<10	Naphthalene	<10
2-Hexanone	<100	1,2,3-Trichlorobenzene	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Trip Blank	Client:	SoundEarth Strategies
Date Received:	06/02/11	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	106038-11
Date Analyzed:	06/10/11	Data File:	061007.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	63	127
Toluene-d8	100	65	127
4-Bromofluorobenzene	106	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/09/11	Lab ID:	01-1002 mb
Date Analyzed:	06/09/11	Data File:	060912.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	63	127
Toluene-d8	99	65	127
4-Bromofluorobenzene	98	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10 ca	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1 ca
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0797-001-01_20110602, F&BI 106038
Date Extracted:	06/10/11	Lab ID:	01-1003 mb
Date Analyzed:	06/10/11	Data File:	061006.D
Matrix:	Water	Instrument:	GCMS5
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	63	127
Toluene-d8	103	65	127
4-Bromofluorobenzene	106	40	157

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/14/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TPH AS GASOLINE
USING METHOD NWTPH-Gx**

Laboratory Code: 106020-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	Relative Percent Difference (Limit 20)
Gasoline	ug/L (ppb)	<100	<100	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Gasoline	ug/L (ppb)	1,000	103	69-134

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/14/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	91	93	58-134	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/14/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	109	99	27-138	10
Chloromethane	ug/L (ppb)	50	100	92	49-125	8
Vinyl chloride	ug/L (ppb)	50	105	96	53-131	9
Bromomethane	ug/L (ppb)	50	101	96	62-148	5
Chloroethane	ug/L (ppb)	50	107	103	30-176	4
Trichlorofluoromethane	ug/L (ppb)	50	111	102	65-172	8
Acetone	ug/L (ppb)	250	95	93	32-177	2
1,1-Dichloroethene	ug/L (ppb)	50	103	95	65-157	8
Methylene chloride	ug/L (ppb)	50	92	88	17-177	4
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	103	98	54-156	5
trans-1,2-Dichloroethene	ug/L (ppb)	50	98	94	71-128	4
1,1-Dichloroethane	ug/L (ppb)	50	98	96	74-118	2
2,2-Dichloropropane	ug/L (ppb)	50	112	105	65-150	6
cis-1,2-Dichloroethene	ug/L (ppb)	50	96	91	74-126	5
Chloroform	ug/L (ppb)	50	102	99	76-118	3
2-Butanone (MEK)	ug/L (ppb)	250	96	99	52-152	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	107	106	71-135	1
1,1,1-Trichloroethane	ug/L (ppb)	50	110	104	77-123	6
1,1-Dichloropropene	ug/L (ppb)	50	100	101	75-122	1
Carbon tetrachloride	ug/L (ppb)	50	109	104	73-126	5
Benzene	ug/L (ppb)	50	91	92	77-121	1
Trichloroethene	ug/L (ppb)	50	100	101	74-119	1
1,2-Dichloropropane	ug/L (ppb)	50	92	96	77-121	4
Bromodichloromethane	ug/L (ppb)	50	104	104	77-129	0
Dibromomethane	ug/L (ppb)	50	98	99	79-121	1
4-Methyl-2-pentanone	ug/L (ppb)	250	93	94	65-135	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	97	103	79-129	6
Toluene	ug/L (ppb)	50	89	91	81-113	2
trans-1,3-Dichloropropene	ug/L (ppb)	50	101	102	80-128	1
1,1,2-Trichloroethane	ug/L (ppb)	50	90	94	85-116	4
2-Hexanone	ug/L (ppb)	250	95	97	58-160	2
1,3-Dichloropropane	ug/L (ppb)	50	92	95	88-115	3
Tetrachloroethene	ug/L (ppb)	50	92	94	83-113	2
Dibromochloromethane	ug/L (ppb)	50	100	102	89-128	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	95	96	88-122	1
Chlorobenzene	ug/L (ppb)	50	91	92	84-116	1
Ethylbenzene	ug/L (ppb)	50	94	94	83-116	0
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	100	97	86-124	3
m,p-Xylene	ug/L (ppb)	100	90	93	84-120	3
o-Xylene	ug/L (ppb)	50	95	94	83-120	1
Styrene	ug/L (ppb)	50	95	96	87-119	1
Isopropylbenzene	ug/L (ppb)	50	98	95	83-120	3
Bromoform	ug/L (ppb)	50	102	103	77-119	1
n-Propylbenzene	ug/L (ppb)	50	90	94	83-118	4
Bromobenzene	ug/L (ppb)	50	89	93	88-117	4
1,3,5-Trimethylbenzene	ug/L (ppb)	50	92	95	85-121	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	87	90	81-120	3
1,2,3-Trichloropropane	ug/L (ppb)	50	89	95	77-123	7
2-Chlorotoluene	ug/L (ppb)	50	91	94	81-116	3
4-Chlorotoluene	ug/L (ppb)	50	91	96	83-117	5
tert-Butylbenzene	ug/L (ppb)	50	91	95	84-118	4
1,2,4-Trimethylbenzene	ug/L (ppb)	50	91	94	86-119	3
sec-Butylbenzene	ug/L (ppb)	50	91	92	84-121	1
p-Isopropyltoluene	ug/L (ppb)	50	93	95	85-118	2
1,3-Dichlorobenzene	ug/L (ppb)	50	90	91	85-118	1
1,4-Dichlorobenzene	ug/L (ppb)	50	89	92	85-119	3
1,2-Dichlorobenzene	ug/L (ppb)	50	93	94	81-117	1
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	106	103	62-136	3
1,2,4-Trichlorobenzene	ug/L (ppb)	50	101	99	75-129	2
Hexachlorobutadiene	ug/L (ppb)	50	89	87	72-138	2
Naphthalene	ug/L (ppb)	50	99	95	66-135	4
1,2,3-Trichlorobenzene	ug/L (ppb)	50	102	100	70-133	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/14/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 106038-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	110	10-185
Chloromethane	ug/L (ppb)	50	<10	99	26-167
Vinyl chloride	ug/L (ppb)	50	<0.2	111	10-185
Bromomethane	ug/L (ppb)	50	<1	111	24-165
Chloroethane	ug/L (ppb)	50	<1	118	10-172
Trichlorofluoromethane	ug/L (ppb)	50	<1	117	30-199
Acetone	ug/L (ppb)	250	<10	102	19-168
1,1-Dichloroethene	ug/L (ppb)	50	<1	115	35-149
Methylene chloride	ug/L (ppb)	50	<5	100	61-138
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	110	49-139
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	105	65-128
1,1-Dichloroethane	ug/L (ppb)	50	<1	107	67-127
2,2-Dichloropropane	ug/L (ppb)	50	<1	106	23-163
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	101	65-139
Chloroform	ug/L (ppb)	50	<1	109	71-127
2-Butanone (MEK)	ug/L (ppb)	250	<10	101	47-162
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	118	68-132
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	115	63-135
1,1-Dichloropropene	ug/L (ppb)	50	<1	106	65-127
Carbon tetrachloride	ug/L (ppb)	50	<1	115	55-139
Benzene	ug/L (ppb)	50	<0.35	97	62-144
Trichloroethene	ug/L (ppb)	50	<1	107	66-121
1,2-Dichloropropane	ug/L (ppb)	50	<1	97	73-130
Bromodichloromethane	ug/L (ppb)	50	<1	111	65-135
Dibromomethane	ug/L (ppb)	50	<1	105	65-135
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	98	56-143
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	100	55-146
Toluene	ug/L (ppb)	50	<1	94	68-131
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	104	63-147
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	96	63-143
2-Hexanone	ug/L (ppb)	250	<10	103	51-149
1,3-Dichloropropane	ug/L (ppb)	50	<1	97	72-126
Tetrachloroethene	ug/L (ppb)	50	<1	96	64-132
Dibromochloromethane	ug/L (ppb)	50	<1	107	65-135
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	100	77-127
Chlorobenzene	ug/L (ppb)	50	<1	96	72-118
Ethylbenzene	ug/L (ppb)	50	<1	99	51-150
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	104	72-129
m,p-Xylene	ug/L (ppb)	100	<2	96	72-137
o-Xylene	ug/L (ppb)	50	<1	99	67-133
Styrene	ug/L (ppb)	50	<1	100	73-126
Isopropylbenzene	ug/L (ppb)	50	<1	102	65-135
Bromoform	ug/L (ppb)	50	<1	108	60-136
n-Propylbenzene	ug/L (ppb)	50	<1	92	66-133
Bromobenzene	ug/L (ppb)	50	<1	95	70-129
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	95	72-130
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	92	65-137
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	97	66-135
2-Chlorotoluene	ug/L (ppb)	50	<1	96	62-131
4-Chlorotoluene	ug/L (ppb)	50	<1	97	62-132
tert-Butylbenzene	ug/L (ppb)	50	<1	96	64-135
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	96	69-139
sec-Butylbenzene	ug/L (ppb)	50	<1	94	64-134
p-Isopropyltoluene	ug/L (ppb)	50	<1	94	69-134
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	93	65-126
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	93	65-121
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	96	64-128
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	113	54-133
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	102	63-141
Hexachlorobutadiene	ug/L (ppb)	50	<1	89	53-140
Naphthalene	ug/L (ppb)	50	<1	101	40-166
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	106	55-148

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/14/11

Date Received: 06/02/11

Project: SOU_0797-001-01_20110602, F&BI 106038

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	109	113	27-138	4
Chloromethane	ug/L (ppb)	50	98	97	49-125	1
Vinyl chloride	ug/L (ppb)	50	105	113	53-131	7
Bromomethane	ug/L (ppb)	50	108	113	62-148	5
Chloroethane	ug/L (ppb)	50	113	121	30-176	7
Trichlorofluoromethane	ug/L (ppb)	50	120	123	65-172	2
Acetone	ug/L (ppb)	250	106	106	32-177	0
1,1-Dichloroethene	ug/L (ppb)	50	109	115	65-157	5
Methylene chloride	ug/L (ppb)	50	96	104	17-177	8
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	108	111	54-156	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	103	107	71-128	4
1,1-Dichloroethane	ug/L (ppb)	50	105	109	74-118	4
2,2-Dichloropropane	ug/L (ppb)	50	112	122	65-150	9
cis-1,2-Dichloroethene	ug/L (ppb)	50	97	105	74-126	8
Chloroform	ug/L (ppb)	50	108	112	76-118	4
2-Butanone (MEK)	ug/L (ppb)	250	107	105	52-152	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	121	121	71-135	0
1,1,1-Trichloroethane	ug/L (ppb)	50	116	119	77-123	3
1,1-Dichloropropene	ug/L (ppb)	50	110	111	75-122	1
Carbon tetrachloride	ug/L (ppb)	50	120	123	73-126	2
Benzene	ug/L (ppb)	50	99	99	77-121	0
Trichloroethene	ug/L (ppb)	50	111	111	74-119	0
1,2-Dichloropropane	ug/L (ppb)	50	102	102	77-121	0
Bromodichloromethane	ug/L (ppb)	50	119	117	77-129	2
Dibromomethane	ug/L (ppb)	50	109	108	79-121	1
4-Methyl-2-pentanone	ug/L (ppb)	250	102	101	65-135	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	112	111	79-129	1
Toluene	ug/L (ppb)	50	101	97	81-113	4
trans-1,3-Dichloropropene	ug/L (ppb)	50	115	112	90-128	3
1,1,2-Trichloroethane	ug/L (ppb)	50	102	102	85-116	0
2-Hexanone	ug/L (ppb)	250	109	109	58-160	0
1,3-Dichloropropane	ug/L (ppb)	50	104	102	88-115	2
Tetrachloroethene	ug/L (ppb)	50	102	100	83-113	2
Dibromochloromethane	ug/L (ppb)	50	115	113	89-128	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	107	104	88-122	3
Chlorobenzene	ug/L (ppb)	50	99	100	84-116	1
Ethylbenzene	ug/L (ppb)	50	104	103	83-116	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	108	111	86-124	3
m,p-Xylene	ug/L (ppb)	100	101	100	84-120	1
o-Xylene	ug/L (ppb)	50	101	103	83-120	2
Styrene	ug/L (ppb)	50	104	104	87-119	0
Isopropylbenzene	ug/L (ppb)	50	105	107	83-120	2
Bromoform	ug/L (ppb)	50	118	115	77-119	3
n-Propylbenzene	ug/L (ppb)	50	101	102	83-118	1
Bromobenzene	ug/L (ppb)	50	100	102	88-117	2
1,3,5-Trimethylbenzene	ug/L (ppb)	50	102	105	85-121	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	97	98	81-120	1
1,2,3-Trichloropropane	ug/L (ppb)	50	103	102	77-123	1
2-Chlorotoluene	ug/L (ppb)	50	102	102	81-116	0
4-Chlorotoluene	ug/L (ppb)	50	103	103	83-117	0
tert-Butylbenzene	ug/L (ppb)	50	102	104	84-118	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	102	104	86-119	2
sec-Butylbenzene	ug/L (ppb)	50	98	101	84-121	3
p-Isopropyltoluene	ug/L (ppb)	50	102	104	85-118	2
1,3-Dichlorobenzene	ug/L (ppb)	50	100	101	85-118	1
1,4-Dichlorobenzene	ug/L (ppb)	50	100	98	85-119	2
1,2-Dichlorobenzene	ug/L (ppb)	50	99	102	81-117	3
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	117	120	62-136	3
1,2,4-Trichlorobenzene	ug/L (ppb)	50	103	111	75-129	7
Hexachlorobutadiene	ug/L (ppb)	50	95	101	72-138	6
Naphthalene	ug/L (ppb)	50	99	107	66-135	8
1,2,3-Trichlorobenzene	ug/L (ppb)	50	104	112	70-133	7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

106038

SAMPLE CHAIN OF CUSTODY

ME 06/02/11 V4/104

Send Report To Chuck Beck, Regen 156 by
 Company Severest & Strafford Inc
 Address 2811 Fairview Ave E, Ste 2000
 City, State, ZIP Seattle, WA 98102
 Phone # 206 306-1700 Fax # 206 306-1707

SAMPLERS (signature)	PROJECT NAME/NO.	PO #
<i>[Signature]</i>	ALSCO Property / 0797-001-01	
REMARKS	GEMS Y / N	

Page # 1 of 1

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWIPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	ANALYSES REQUESTED	Notes
R-Mus1-Zenith02	R-Mus1	10.5	01	6/2/11	12:50	w	7	X	X	X	X	X	X		(X) - analyze per CC 6/15/11
R-Mus2-Zenith02	R-Mus2	13	02		12:15			X	X	X	X	X	X		
R-Mus3-Zenith02	R-Mus3	14	03		13:15			X	X	X	X	X	X		
R-Mus5-Zenith02	R-Mus5	23	04		13:02			X	X	X	X	X	X		analyze w/and w/ silica
R-Mus6-Zenith02	R-Mus6	19	05		13:48			X	X	X	X	X	X		
G-Mus2-Zenith02	G-Mus2	13	06		16:15			X	X	X	X	X	X		
G-Mus3-Zenith02	G-Mus3	31	07		16:32			X	X	X	X	X	X		
B-B-Zenith02	B-B	35	08		14:45			X	X	X	X	X	X		
B-B-Zenith02	B-B	35	09		15:05			X	X	X	X	X	X		
Mus9-Zenith02	Mus9	18.5	10		11:42			X	X	X	X	X	X		Hold up for analysis
Trip Bank															Cooler # 1

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119.
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\STSGEMSR1.DOC (Revision 1)

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>[Signature]</i>	Andrew LeMay	Severest & Strafford	6/2/11	17:18
<i>[Signature]</i>	Charles Paces	Severest & Strafford	6/2/11	17:18
<i>[Signature]</i>	Howard Verway	FBI	6/2/11	17:45

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 7, 2012 from the SOU_0797_20120807 F&BI 208077 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 7, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120807 F&BI 208077 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208077-01	B105-10
208077-02	B105-20
208077-03	B105-30

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-10	Client:	SoundEarth Strategies
Date Received:	08/07/12	Project:	SOU_0797_20120807 F&BI 208077
Date Extracted:	08/08/12	Lab ID:	208077-01
Date Analyzed:	08/10/12	Data File:	080945.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-20	Client:	SoundEarth Strategies
Date Received:	08/07/12	Project:	SOU_0797_20120807 F&BI 208077
Date Extracted:	08/08/12	Lab ID:	208077-02
Date Analyzed:	08/10/12	Data File:	080946.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	101	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-30	Client:	SoundEarth Strategies
Date Received:	08/07/12	Project:	SOU_0797_20120807 F&BI 208077
Date Extracted:	08/08/12	Lab ID:	208077-03
Date Analyzed:	08/10/12	Data File:	080947.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.086
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.16
Tetrachloroethene	1.3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120807 F&BI 208077
Date Extracted:	08/08/12	Lab ID:	02-1374 mb
Date Analyzed:	08/09/12	Data File:	080904.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	98	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/07/12

Project: SOU_0797_20120807 F&BI 208077

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208100-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance
				Recovery MS	Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	43	10-138
Chloroethane	mg/kg (ppm)	2.5	<0.5	63	10-176
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	64	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	69	10-156
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	70	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	75	19-140
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	79	25-135
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	81	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	85	10-156
Trichloroethene	mg/kg (ppm)	2.5	<0.03	101	21-139
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	81	20-133

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	59	59	22-139	0
Chloroethane	mg/kg (ppm)	2.5	80	87	20-153	8
1,1-Dichloroethene	mg/kg (ppm)	2.5	74	78	47-128	5
Methylene chloride	mg/kg (ppm)	2.5	76	78	42-132	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	77	80	67-127	4
1,1-Dichloroethane	mg/kg (ppm)	2.5	82	96	68-115	16
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	83	96	72-113	15
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	87	103	56-135	17
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	92	110	62-131	18
Trichloroethene	mg/kg (ppm)	2.5	76	89	68-114	16
Tetrachloroethene	mg/kg (ppm)	2.5	85	102	72-114	18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208077

SAMPLE CHAIN OF CUSTODY

ME 08/07/12

Page # 1 of 1

Send Report To Cmuck Cacek
 Company SoundEarth Strategies
 Address 9811 Fairview Ave E Suite 200
 City, State, ZIP Seattle, WA 98108
 Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature)	PROJECT NAME/NO.	PO #
<i>[Signature]</i>	0797/700 Dexter	
REMARKS	GEMSY / N	

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	CUOC's	Notes
B105-10	B105	10	014b	8/6/12	0800	Soil	4							XXXX	
B105-30		30	021a		0835									XXXX	
B105-30		30	03A		0925									XXXX	

Friedman & Bruga, Inc.
 3012 16th Avenue West
 Seattle, WA 98119
 Ph (206) 285-8282
 Fax (206) 283-5044

Relinquished by: <i>[Signature]</i>	SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Received by: <i>[Signature]</i>		Blf A. Henderson	SES	8-7-12	0805
Relinquished by: <i>[Signature]</i>		Nhan Phan	F&B	8/7/12	0805
Received by:					

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 9, 2012 from the SOU_0797_20120809, F&BI 208118 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 9, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120809, F&BI 208118 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208118-01	B105-40
208118-02	B105-50

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-40	Client:	SoundEarth Strategies
Date Received:	08/09/12	Project:	SOU_0797_20120809, F&BI 208118
Date Extracted:	08/09/12	Lab ID:	208118-01
Date Analyzed:	08/10/12	Data File:	080951.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	98	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.22
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-50	Client:	SoundEarth Strategies
Date Received:	08/09/12	Project:	SOU_0797_20120809, F&BI 208118
Date Extracted:	08/09/12	Lab ID:	208118-02
Date Analyzed:	08/10/12	Data File:	080952.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	62	142
Toluene-d8	98	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.040
Tetrachloroethene	0.18

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120809, F&BI 208118
Date Extracted:	08/09/12	Lab ID:	02-1375 mb
Date Analyzed:	08/09/12	Data File:	080924.D
Matrix:	Soil	Instrument:	GCMS4
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	62	142
Toluene-d8	97	55	145
4-Bromofluorobenzene	100	65	139

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/09/12

Project: SOU_0797_20120809, F&BI 208118

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208116-07 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	30	10-138
Chloroethane	mg/kg (ppm)	2.5	<0.5	49	10-176
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	51	10-160
Methylene chloride	mg/kg (ppm)	2.5	<0.5	61	10-156
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	61	14-137
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	62	19-140
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	66	25-135
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	68	12-160
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	66	10-156
Trichloroethene	mg/kg (ppm)	2.5	<0.03	65	21-139
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	71	20-133

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	57	58	22-139	2
Chloroethane	mg/kg (ppm)	2.5	81	74	20-153	9
1,1-Dichloroethene	mg/kg (ppm)	2.5	74	72	47-128	3
Methylene chloride	mg/kg (ppm)	2.5	72	69	42-132	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	79	77	67-127	3
1,1-Dichloroethane	mg/kg (ppm)	2.5	83	80	68-115	4
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	85	82	72-113	4
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	88	83	56-135	6
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	94	91	62-131	3
Trichloroethene	mg/kg (ppm)	2.5	81	77	68-114	5
Tetrachloroethene	mg/kg (ppm)	2.5	89	85	72-114	5

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208118

SAMPLE CHAIN OF CUSTODY

ME 08-09-12

Page # 1 of 1 VSI

Send Report To Chuck Cacek
 Company SoundEarth Strategies
 Address 2811 Fairview Ave E Suite 2000
 City, State, ZIP Seattle, WA 98102
 Phone # 206.306.1900 Fax # 206.306.1997

SAMPLERS (signature)		PROJECT NAME/NO.	PO #
		700 Dexter/0797	
REMARKS		GEMSY / N	

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED					Notes					
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270		RCRA-8 Metals				
BUS-40	BUS	40	61A-D	8-8-12	1405	S:1	4											
BUS-50	BUS	50		8-8-12	1520	S:1	4											

Friedman & Bruja, Inc.
 3012 16th Avenue West
 Seattle, WA 98119
 Ph: (206) 285-8282
 Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>[Signature]</u>		David Mink		SES		8/19/12	0805
Received by: <u>[Signature]</u>		S. Johnson		PTB, Inc		8/19/12	0805
Relinquished by:							
Received by:				Samples received at		12	°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 10, 2012 from the SOU_0797_20120810, F&BI 208133 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 10, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120810, F&BI 208133 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208133-01	B105-60
208133-02	B105-70
208133-03	B105-80

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-60	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208133
Date Extracted:	08/13/12	Lab ID:	208133-01
Date Analyzed:	08/13/12	Data File:	081310.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-70	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208133
Date Extracted:	08/13/12	Lab ID:	208133-02
Date Analyzed:	08/13/12	Data File:	081311.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-80	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208133
Date Extracted:	08/13/12	Lab ID:	208133-03
Date Analyzed:	08/14/12	Data File:	081425.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120810, F&BI 208133
Date Extracted:	08/13/12	Lab ID:	02-1378 mb
Date Analyzed:	08/13/12	Data File:	081309.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/10/12

Project: SOU_0797_20120810, F&BI 208133

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208157-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	51	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	62	10-97
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	67	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	70	34-108
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	75	37-97
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	79	41-101
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	80	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	80	35-102
Trichloroethene	mg/kg (ppm)	2.5	<0.03	81	38-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	79	38-102

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery		Acceptance Criteria	RPD (Limit 20)
			LCS	LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	75	74	51-102	1
Chloroethane	mg/kg (ppm)	2.5	79	79	53-113	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	87	88	67-116	1
Methylene chloride	mg/kg (ppm)	2.5	87	86	62-130	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	94	93	70-116	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	94	92	79-109	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	96	76-113	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	95	94	79-114	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	99	98	73-119	1
Trichloroethene	mg/kg (ppm)	2.5	97	95	70-113	2
Tetrachloroethene	mg/kg (ppm)	2.5	99	96	73-117	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208133

SAMPLE CHAIN OF CUSTODY

ME 08-10-12

1/51

Page # 1 of 1

Send Report To Charles Cack

Company SIS

Address 2811 Fernview Ave B Suite 2000

City, State, ZIP Seattle WA 98102

Phone # 206-306-1400 Fax # 206-306-1407

SAMPLERS (signature) <u>[Signature]</u>	
PROJECT NAME/NO. <u>700 Decker</u>	PO #
<u>0797</u>	
REMARKS	GEMS Y / N

TURNAROUND TIME <input checked="" type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH
Rush charges authorized by:
SAMPLE DISPOSAL <input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED					Notes					
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270		RCRA-8 Metals				
B105-60	B105	60	D1AC	8-4-12	0930	S.S.I	4											
B105-70		70	02T		1100													
B105-80		80	03T		1200													

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	<u>W. A. Heller</u>	<u>SIS</u>	<u>8-10-12</u>	<u>0755</u>
<u>[Signature]</u>	<u>S. DeBarn</u>	<u>Field Service</u>	<u>8/10/12</u>	<u>07:58</u>
Received by:				
Relinquished by:				
Received by:				
				Samples received at <u>19</u> °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 16, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 10, 2012 from the SOU_0797_20120810, F&BI 208138 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0816R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 10, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120810, F&BI 208138 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208138-01	B105-80-20120809
208138-02	B105-80-20120809-F

The 8260C laboratory control sample and laboratory control sample duplicate failed the relative percent difference for chloroethane. The analyte was not detected therefore the data were acceptable.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-80-20120809-F	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208138
Date Extracted:	08/10/12	Lab ID:	208138-02
Date Analyzed:	08/10/12	Data File:	081008.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	97	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120810, F&BI 208138
Date Extracted:	08/10/12	Lab ID:	02-1377 mb
Date Analyzed:	08/10/12	Data File:	081006.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	97	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/12

Date Received: 08/10/12

Project: SOU_0797_20120810, F&BI 208138

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208145-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	94	36-166
Chloroethane	ug/L (ppb)	50	<1	113	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	93	60-136
Methylene chloride	ug/L (ppb)	50	<5	92	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	96	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	99	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	107	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	113	60-146
Trichloroethene	ug/L (ppb)	50	<1	89	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	99	73-129

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	92	91	50-154	1
Chloroethane	ug/L (ppb)	50	110	141	58-146	25 vo
1,1-Dichloroethene	ug/L (ppb)	50	94	92	67-136	2
Methylene chloride	ug/L (ppb)	50	94	89	39-148	5
trans-1,2-Dichloroethene	ug/L (ppb)	50	98	97	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	97	96	79-121	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	104	102	80-123	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	98	98	73-132	0
1,1,1-Trichloroethane	ug/L (ppb)	50	108	108	83-130	0
Trichloroethene	ug/L (ppb)	50	92	91	80-120	1
Tetrachloroethene	ug/L (ppb)	50	108	106	76-121	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208188

SAMPLE CHAIN OF CUSTODY ME 08-10-12

1/1

Send Report To Chuck Cack

Company SES

Address 2811 - Pioneer Ave E Suite 2000

City, State, ZIP Seattle WA 98108

Phone # 206-306-1500 Fax # 206-306-1907

Page # 1 of 1

TURNAROUND TIME
R. Standard (2 Weeks)

RUSH
Rush charges authorized by:

SAMPLE DISPOSAL

- Dispose after 30 days
- Return samples
- Will call with instructions

SAMPLERS (signature) <u>[Signature]</u>		PO #
PROJECT NAME/NO. <u>700 DASH</u>	<u>0747</u>	
REMARKS	GEMS Y / N	

ANALYSES REQUESTED

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	CVOCs	Notes
005-80-2019009	B105	80	01A-D	8/9/12	1330	H2O	4							<input checked="" type="checkbox"/>	- hold per cc 8/10/12
005-80-2019011-F	B105	80	02A-B	8/9/12	1330	H2O	2							<input checked="" type="checkbox"/>	- hold per cc 8/10/12
Run per cc 8/10/12															

Friedman & Bruja, Inc.
3012 16th Avenue West
Seattle, WA 98119
Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\SESGEMSRI.DOC (Revision 1)

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	<u>Alt A Kelly</u>	<u>SES</u>	<u>8-10-12</u>	<u>0755</u>
Received by: <u>[Signature]</u>	<u>S. O'Brien</u>	<u>FTB, Inc</u>	<u>8/10/12</u>	<u>07:55</u>
Relinquished by:				
Received by:		Samples received at	<u>10</u>	<u>oc</u>

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 10, 2012 from the SOU_0797_20120810, F&BI 208157 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 10, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120810, F&BI 208157 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208157-01	B105-90
208157-02	B105-100
208157-03	B105-110
208157-04	B105-120
208157-05	B105-130
208157-06	B105-138

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-90	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208157
Date Extracted:	08/13/12	Lab ID:	208157-01
Date Analyzed:	08/16/12	Data File:	081611.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-100	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208157
Date Extracted:	08/13/12	Lab ID:	208157-02
Date Analyzed:	08/13/12	Data File:	081330.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-110	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208157
Date Extracted:	08/13/12	Lab ID:	208157-03
Date Analyzed:	08/14/12	Data File:	081331.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-120	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208157
Date Extracted:	08/13/12	Lab ID:	208157-04
Date Analyzed:	08/14/12	Data File:	081332.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-130	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208157
Date Extracted:	08/13/12	Lab ID:	208157-05
Date Analyzed:	08/14/12	Data File:	081333.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-138	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208157
Date Extracted:	08/13/12	Lab ID:	208157-06
Date Analyzed:	08/14/12	Data File:	081428.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120810, F&BI 208157
Date Extracted:	08/13/12	Lab ID:	02-1378 mb
Date Analyzed:	08/13/12	Data File:	081309.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/10/12

Project: SOU_0797_20120810, F&BI 208157

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208157-06 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	51	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	62	10-97
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	67	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	70	34-108
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	75	37-97
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	79	41-101
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	80	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	80	35-102
Trichloroethene	mg/kg (ppm)	2.5	<0.03	81	38-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	79	38-102

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery		Acceptance Criteria	RPD (Limit 20)
			LCS	LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	75	74	51-102	1
Chloroethane	mg/kg (ppm)	2.5	79	79	53-113	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	87	88	67-116	1
Methylene chloride	mg/kg (ppm)	2.5	87	86	62-130	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	94	93	70-116	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	94	92	79-109	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	99	96	76-113	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	95	94	79-114	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	99	98	73-119	1
Trichloroethene	mg/kg (ppm)	2.5	97	95	70-113	2
Tetrachloroethene	mg/kg (ppm)	2.5	99	96	73-117	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208157

SAMPLE CHAIN OF CUSTODY

ME 08-10-12

1 of 1 VS2

Send Report To Chuck Cacak
 Company SandEarth Strategies
 Address 2811 Fairview Ave E Suite 2000
 City, State, ZIP Seattle, WA 98109
 Phone # 206.346.1900 Fax # 206.346.1907

SAMPLERS (Signature) <u>[Signature]</u>	
PROJECT NAME/NO. <u>700 De Vries / 0797</u>	PO #
REMARKS	GEMS Y / N

Page # 1 of 1

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED						Notes			
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals		CUA's		
B105-90	B105	90	01A-D	8-10-12	0850	S.L.	4										
B105-100		100	02T		0945		1										
B105-110		110	03		1055		1										
B105-120		120	04		1145		4										
B105-130		130	05		1250		4										
B105-138		138	06		1400		4										

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>[Signature]</u>		<u>R.J. A. Henderson</u>		<u>SES</u>		8-10-12	1425
Received by: <u>[Signature]</u>		<u>D. V. [Signature]</u>		<u>FT SI</u>		11	11
Relinquished by:							
Received by:							

Samples received at 5°C

Friedman & Bruja, Inc.
 3012 16th Avenue West
 Seattle, WA 98119.
 Ph (206) 285-8282
 Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 16, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 10, 2012 from the SOU_0797_20120810, F&BI 208158 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0816R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 10, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120810, F&BI 208158 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208158-01	B105-100-20120810
208158-02	B105-100-20120810-F

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B105-100-20120810-F	Client:	SoundEarth Strategies
Date Received:	08/10/12	Project:	SOU_0797_20120810, F&BI 208158
Date Extracted:	08/13/12	Lab ID:	208158-02
Date Analyzed:	08/13/12	Data File:	081323.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120810, F&BI 208158
Date Extracted:	08/13/12	Lab ID:	02-1379 mb
Date Analyzed:	08/13/12	Data File:	081320.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/16/12

Date Received: 08/10/12

Project: SOU_0797_20120810, F&BI 208158

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208103-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent		Acceptance Criteria
				Recovery MS		
Vinyl chloride	ug/L (ppb)	50	<0.2	92		76-124
Chloroethane	ug/L (ppb)	50	<1	87		69-123
1,1-Dichloroethene	ug/L (ppb)	50	<1	90		75-118
Methylene chloride	ug/L (ppb)	50	<5	93		64-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	90		75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	94		82-109
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	91		83-109
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	90		76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	95		77-116
Trichloroethene	ug/L (ppb)	50	<1	83		79-105
Tetrachloroethene	ug/L (ppb)	50	<1	92		69-114

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent		Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	94	93	73-126	1
Chloroethane	ug/L (ppb)	50	87	84	69-125	4
1,1-Dichloroethene	ug/L (ppb)	50	90	91	72-122	1
Methylene chloride	ug/L (ppb)	50	95	93	56-128	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	91	88	74-122	3
1,1-Dichloroethane	ug/L (ppb)	50	96	94	85-107	2
cis-1,2-Dichloroethene	ug/L (ppb)	50	93	92	85-105	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	92	91	85-107	1
1,1,1-Trichloroethane	ug/L (ppb)	50	96	94	81-114	2
Trichloroethene	ug/L (ppb)	50	86	84	80-104	2
Tetrachloroethene	ug/L (ppb)	50	95	96	81-106	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208158

SAMPLE CHAIN OF CUSTODY

ME 08-10-12

Page # 1 of 1

Send Report To Check Circle

Company SES

Address 2811 Financier Ave E Suite 2000

City, State, ZIP Seattle WA 98102

Phone # 206-306-1400 Fax # 206-306-1407

SAMPLERS (Signature) <u>[Signature]</u>	
PROJECT NAME/NO. <u>0797</u>	PO #
REMARKS	GEMS Y / N

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED						Notes	
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals		CVOL'S
BOS-100-2012-010	B105	100	01A-D	8-10-12	1010	water	4								-hold per <u>[initials]</u>
BOS-100-2012-010-2	B105	100	02A-D	8-10-12	1010	water	4								-hold per <u>[initials]</u>
_____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____ _____															

Priedman & Bruga, Inc.
 3012 16th Avenue West
 Seattle, WA 98119
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>[Signature]</u>	<u>[Signature]</u>	<u>Robert H. Hunsberger</u>		<u>SES</u>		<u>8-10-12</u>	<u>1425</u>
<u>[Signature]</u>	<u>[Signature]</u>	<u>DAWB</u>		<u>FE&E</u>		<u>"</u>	<u>"</u>
Received by:						Samples received at	<u>S.C.</u>

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 15, 2012 from the SOU_0797_20120815, F&BI 208196 project. There are 12 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 15, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120815, F&BI 208196 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208196-01	B106-10
208196-02	B106-20
208196-03	B106-30
208196-04	B106-40
208196-05	B106-50
208196-06	B106-60
208196-07	B106-70
208196-08	B106-80

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-10	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-01
Date Analyzed:	08/15/12	Data File:	081527.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-20	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-02
Date Analyzed:	08/15/12	Data File:	081528.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-30	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-03
Date Analyzed:	08/15/12	Data File:	081529.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	0.038

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-40	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-04
Date Analyzed:	08/16/12	Data File:	081530.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.15
Tetrachloroethene	3.1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-50	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-05
Date Analyzed:	08/16/12	Data File:	081531.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.11
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.17
Tetrachloroethene	0.73

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-60	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-06
Date Analyzed:	08/16/12	Data File:	081532.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-70	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-07
Date Analyzed:	08/16/12	Data File:	081609.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-80	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	208196-08
Date Analyzed:	08/16/12	Data File:	081610.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	95	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120815, F&BI 208196
Date Extracted:	08/15/12	Lab ID:	02-1385 mb
Date Analyzed:	08/16/12	Data File:	081604.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/15/12

Project: SOU_0797_20120815, F&BI 208196

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208196-07 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	35	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	44	10-97
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	50	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	63	34-108
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	59	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	62	37-97
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	68	41-101
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	66	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	65	35-102
Trichloroethene	mg/kg (ppm)	2.5	<0.03	70	38-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	68	38-102

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent		Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	65	59	51-102	10
Chloroethane	mg/kg (ppm)	2.5	67	64	53-113	5
1,1-Dichloroethene	mg/kg (ppm)	2.5	77	73	67-116	5
Methylene chloride	mg/kg (ppm)	2.5	80	75	62-130	6
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	85	78	70-116	9
1,1-Dichloroethane	mg/kg (ppm)	2.5	86	80	79-109	7
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	90	86	76-113	5
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	91	84	79-114	8
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	91	83	73-119	9
Trichloroethene	mg/kg (ppm)	2.5	90	85	70-113	6
Tetrachloroethene	mg/kg (ppm)	2.5	91	83	73-117	9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208196

SAMPLE CHAIN OF CUSTODY

ME 08-15-12

Page # 1 of 1 US2

Send Report To Chuck Carlin

Company Sand Earth Strategies

Address 2811 Rainier Ave E Suite 200

City, State, ZIP Seattle, WA 98102

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) <u>[Signature]</u>		PROJECT NAME/NO. <u>700 Dwyer/0797</u>	PO #
REMARKS		GEMS Y / N	

TURNDOWN TIME	Standard (2 weeks)
<input type="checkbox"/> RUSH	Rush charges authorized by:
SAMPLE DISPOSAL	
<input checked="" type="checkbox"/> Dispose after 30 days	
<input type="checkbox"/> Return samples	
<input type="checkbox"/> Will call with instructions	

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED						Notes			
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals		Cu/Cs		
B06-10	B06	10	01A-D	8-14-12	1000	S..1	4										
B06-20		20	02T		1000	S..1	4										
B06-30		30	03		1150	S..1	4										
B06-40		40	04		1325	S..1	4										
B06-50		50	05		1350	S..1	4										
B06-60		60	06		1545	S..1	4										
B06-70		70	07	8-15-12	0830	S..1	4										
B06-80		80	08	1	1010	S..1	4										

Priedman & Bruja, Inc. 3012 16th Avenue West Seattle, WA 98119 Ph. (206) 985-2292 Fax (206) 985-5044		SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>[Signature]</u>		<u>[Signature]</u>		David Mondel		SES		8/15/12	1030
Received by: <u>[Signature]</u>		<u>[Signature]</u>		D. D. WA		FR&E		"	"
Relinquished by:									
Received by:									

Samples received at 6 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 27, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 15, 2012 from the SOU_0797_20120815, F&BI 208199 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0827R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 15, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120815, F&BI 208199 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208199-01	B106-35-20120814
208199-02	B106-35-20120814-F
208199-03	B106-50-20120814
208199-04	B106-50-20120814-F

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-35-20120814	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208199
Date Extracted:	08/16/12	Lab ID:	208199-01
Date Analyzed:	08/17/12	Data File:	081631.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.36
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	1.0
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	8.2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-50-20120814	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208199
Date Extracted:	08/16/12	Lab ID:	208199-03
Date Analyzed:	08/17/12	Data File:	081633.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	106	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	20
Chloroethane	<1
1,1-Dichloroethene	2.1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	220 ve
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	110
Tetrachloroethene	970 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-50-20120814	Client:	SoundEarth Strategies
Date Received:	08/15/12	Project:	SOU_0797_20120815, F&BI 208199
Date Extracted:	08/16/12	Lab ID:	208199-03 1/10
Date Analyzed:	08/20/12	Data File:	082026.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	108	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	9.3
Chloroethane	<10
1,1-Dichloroethene	<10
Methylene chloride	76 lc
trans-1,2-Dichloroethene	<10
1,1-Dichloroethane	<10
cis-1,2-Dichloroethene	210
1,2-Dichloroethane (EDC)	<10
1,1,1-Trichloroethane	<10
Trichloroethene	120
Tetrachloroethene	1,100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120815, F&BI 208199
Date Extracted:	08/16/12	Lab ID:	02-1386 mb
Date Analyzed:	08/16/12	Data File:	081619.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	95	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/27/12

Date Received: 08/15/12

Project: SOU_0797_20120815, F&BI 208199

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208199-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	6.7	133 vo	76-124
Chloroethane	ug/L (ppb)	50	<1	126 vo	69-123
1,1-Dichloroethene	ug/L (ppb)	50	<1	129 vo	75-118
Methylene chloride	ug/L (ppb)	50	<5	145 vo	64-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	127 vo	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	97	82-109
cis-1,2-Dichloroethene	ug/L (ppb)	50	32	46 b	83-109
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	90	76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	92	77-116
Trichloroethene	ug/L (ppb)	50	2.6	82	79-105
Tetrachloroethene	ug/L (ppb)	50	21	65 b	69-114

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent		Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	90	92	73-126	2
Chloroethane	ug/L (ppb)	50	85	84	69-125	1
1,1-Dichloroethene	ug/L (ppb)	50	88	90	72-122	2
Methylene chloride	ug/L (ppb)	50	95	92	56-128	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	87	86	74-122	1
1,1-Dichloroethane	ug/L (ppb)	50	94	94	85-107	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	92	92	85-105	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	91	91	85-107	0
1,1,1-Trichloroethane	ug/L (ppb)	50	94	94	81-114	0
Trichloroethene	ug/L (ppb)	50	84	87	80-104	4
Tetrachloroethene	ug/L (ppb)	50	91	93	81-106	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 16, 2012 from the SOU_0797_20120816, F&BI 208222 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 16, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120816, F&BI 208222 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208222-01	B106-90-20120815
208222-02	B106-90-20120815-F

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-90-20120815	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208222
Date Extracted:	08/16/12	Lab ID:	208222-01
Date Analyzed:	08/16/12	Data File:	081630.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.62
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	9.7
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2.3
Tetrachloroethene	19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120816, F&BI 208222
Date Extracted:	08/16/12	Lab ID:	02-1386 mb
Date Analyzed:	08/16/12	Data File:	081619.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	95	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/16/12

Project: SOU_0797_20120816, F&BI 208222

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208199-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Vinyl chloride	ug/L (ppb)	50	6.7	133 vo	76-124
Chloroethane	ug/L (ppb)	50	<1	126 vo	69-123
1,1-Dichloroethene	ug/L (ppb)	50	<1	129 vo	75-118
Methylene chloride	ug/L (ppb)	50	<5	145 vo	64-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	127 vo	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	97	82-109
cis-1,2-Dichloroethene	ug/L (ppb)	50	32	46 b	83-109
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	90	76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	92	77-116
Trichloroethene	ug/L (ppb)	50	2.6	82	79-105
Tetrachloroethene	ug/L (ppb)	50	21	65 b	69-114

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	90	92	73-126	2
Chloroethane	ug/L (ppb)	50	85	84	69-125	1
1,1-Dichloroethene	ug/L (ppb)	50	88	90	72-122	2
Methylene chloride	ug/L (ppb)	50	95	92	56-128	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	87	86	74-122	1
1,1-Dichloroethane	ug/L (ppb)	50	94	94	85-107	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	92	92	85-105	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	91	91	85-107	0
1,1,1-Trichloroethane	ug/L (ppb)	50	94	94	81-114	0
Trichloroethene	ug/L (ppb)	50	84	87	80-104	4
Tetrachloroethene	ug/L (ppb)	50	91	93	81-106	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208222

SAMPLE CHAIN OF CUSTODY

ME 08-16-12

V2

SAMPLERS (signature) *[Signature]*

Page # 1 of 1

TURNAROUND TIME

Standard (2 Weeks)

RUSH 5/8/12

Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

PROJECT NAME/NO. 700 Darts	PO #
0797	
REMARKS	GEMS Y / N

Send Report to Chad Cook
 Company SES
 Address 2811 Fairview ave E Side 2000
 City, State, ZIP Seattle WA 98102
 Phone # 206-306-1900 Fax # 206-306-1907

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED					Notes		
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270		RCRA-8 Metals	
R106-10-2010595	R106	90	QA-D	8-15-12	1300	water	5								
R106-90-2010595-F	R106	90	QA-T	8-15-12	1300	water	5								- Hold per CC's/16/12

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>[Signature]</i>	David Mendel	SES	8/16/12	1000
<i>[Signature]</i>	HONG N. TRAN	SES		
Received by:				
Relinquished by:				

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119
 Ph. (206) 285-8282
 Fax (206) 283-5044

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 16, 2012 from the SOU_0797_20120816, F&BI 208223 project. There are 7 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 16, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120816, F&BI 208223 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208223-01	MW102-20120816
208223-02	MW104-20120816
208223-03	MW105-20120816

Several 8260C compounds exceeded the acceptance criteria in the matrix spike samples. The laboratory control samples met the acceptance criteria, therefore the data were likely due to sample matrix effect.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW102-20120816	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208223
Date Extracted:	08/16/12	Lab ID:	208223-01
Date Analyzed:	08/16/12	Data File:	081627.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW104-20120816	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208223
Date Extracted:	08/16/12	Lab ID:	208223-02
Date Analyzed:	08/16/12	Data File:	081628.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW105-20120816	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208223
Date Extracted:	08/16/12	Lab ID:	208223-03
Date Analyzed:	08/16/12	Data File:	081629.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	0.32
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120816, F&BI 208223
Date Extracted:	08/16/12	Lab ID:	02-1386 mb
Date Analyzed:	08/16/12	Data File:	081619.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	95	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/16/12

Project: SOU_0797_20120816, F&BI 208223

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208199-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent		Acceptance Criteria
				Recovery MS		
Vinyl chloride	ug/L (ppb)	50	6.7	133	vo	76-124
Chloroethane	ug/L (ppb)	50	<1	126	vo	69-123
1,1-Dichloroethene	ug/L (ppb)	50	<1	129	vo	75-118
Methylene chloride	ug/L (ppb)	50	<5	145	vo	64-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	127	vo	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	97		82-109
cis-1,2-Dichloroethene	ug/L (ppb)	50	32	46	b	83-109
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	90		76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	92		77-116
Trichloroethene	ug/L (ppb)	50	2.6	82		79-105
Tetrachloroethene	ug/L (ppb)	50	21	65	b	69-114

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent		Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	90	92	73-126	2
Chloroethane	ug/L (ppb)	50	85	84	69-125	1
1,1-Dichloroethene	ug/L (ppb)	50	88	90	72-122	2
Methylene chloride	ug/L (ppb)	50	95	92	56-128	3
trans-1,2-Dichloroethene	ug/L (ppb)	50	87	86	74-122	1
1,1-Dichloroethane	ug/L (ppb)	50	94	94	85-107	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	92	92	85-105	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	91	91	85-107	0
1,1,1-Trichloroethane	ug/L (ppb)	50	94	94	81-114	0
Trichloroethene	ug/L (ppb)	50	84	87	80-104	4
Tetrachloroethene	ug/L (ppb)	50	91	93	81-106	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208223

SAMPLE CHAIN OF CUSTODY

ME 08-16-12

Page # 1 of 1

Send Report To Chuck Cack

Company SowdenEarth Strategies

Address 9811 Fairview Ave E Suite 2800

City, State, ZIP Seattle, WA 98109

Phone # 206.306.1900 Fax # 206.306.1907

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. 700 Dexter / 0797

REMARKS 48-hour turn

PO #

GEMS Y / N

TURNAROUND TIME

Standard (2 Weeks)

RUSH (48 hrs)

Rush charges authorized by: [Signature]

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

ANALYSES REQUESTED

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	Notes
MW103-20100516	MW103		Q1A-D	8/16/12	0935	H2O	4							
MW104-20100516	MW104		Q2 F		1040	H2O	4							
MW105-20100516	MW105		Q3 J		1133	H2O	4							
<i>[Handwritten diagonal line across the table]</i>														

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<u>[Signature]</u>	DAVID MOHBI	STS	8/16/12	1000
<u>[Signature]</u>	DAVID MOHBI	STS		

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 17, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 16, 2012 from the SOU_0797_20120816, F&BI 208224 project. There are 10 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0817R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 16, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120816, F&BI 208224 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
208224-01	B106-90
208224-02	B106-100
208224-03	B106-110
208224-04	B106-120
208224-05	B106-130
208224-06	B106-140

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-90	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208224
Date Extracted:	08/16/12	Lab ID:	208224-01
Date Analyzed:	08/16/12	Data File:	081621.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-100	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208224
Date Extracted:	08/16/12	Lab ID:	208224-02
Date Analyzed:	08/16/12	Data File:	081622.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-110	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208224
Date Extracted:	08/16/12	Lab ID:	208224-03
Date Analyzed:	08/16/12	Data File:	081623.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-120	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208224
Date Extracted:	08/16/12	Lab ID:	208224-04
Date Analyzed:	08/16/12	Data File:	081624.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-130	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208224
Date Extracted:	08/16/12	Lab ID:	208224-05
Date Analyzed:	08/16/12	Data File:	081625.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B106-140	Client:	SoundEarth Strategies
Date Received:	08/16/12	Project:	SOU_0797_20120816, F&BI 208224
Date Extracted:	08/16/12	Lab ID:	208224-06
Date Analyzed:	08/16/12	Data File:	081626.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	102	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120816, F&BI 208224
Date Extracted:	08/16/12	Lab ID:	02-1385 mb2
Date Analyzed:	08/16/12	Data File:	081620.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/17/12

Date Received: 08/16/12

Project: SOU_0797_20120816, F&BI 208224

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208214-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance
				Recovery MS	Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	44	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	52	10-97
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	60	16-100
Methylene chloride	mg/kg (ppm)	2.5	<0.5	68	34-108
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	67	19-102
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	71	37-97
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	75	41-101
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	75	43-98
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	73	35-102
Trichloroethene	mg/kg (ppm)	2.5	0.18	67	38-101
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	74	38-102

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	77	77	51-102	0
Chloroethane	mg/kg (ppm)	2.5	79	79	53-113	0
1,1-Dichloroethene	mg/kg (ppm)	2.5	89	90	67-116	1
Methylene chloride	mg/kg (ppm)	2.5	88	89	62-130	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	93	97	70-116	4
1,1-Dichloroethane	mg/kg (ppm)	2.5	93	95	79-109	2
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	97	100	76-113	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	95	97	79-114	2
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	97	100	73-119	3
Trichloroethene	mg/kg (ppm)	2.5	99	100	70-113	1
Tetrachloroethene	mg/kg (ppm)	2.5	98	97	73-117	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

2082224

SAMPLE CHAIN OF CUSTODY

08-16-12

Page # 1 of 1

US2

Send Report To Chuck Cook

Company SBS

Address 2811 Fairview Ave E Suite 2000

City, State, ZIP Seattle WA 98102

Phone # 206-506-1400 Fax # 206-506-1407

SAMPLERS (signature)	
PROJECT NAME/NO. <u>0747</u>	PO #
REMARKS	GEMS Y / N

TURNAROUND TIME
Standard (2 Weeks)
RUSH 48 hr.
Rush charges authorized by:

SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED					Notes						
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270		RCRA-8 Metals					
B106-40	B106	90	0147	8-15-12	1245	Soil	4												
B106-100	B106	100	027		1400	Soil	4												
B106-110	B106	110	03		1435	Soil	4												
B106-120	B106	120	04		1530	Soil	4												
B106-130	B106	130	05		1640	Soil	4												
B106-140	B106	140	06		1800	Soil	4												

Friedman & Bruja, Inc.
3012 16th Avenue West

Seattle, WA 98119

Ph. (206) 285-8282

Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
		David Mondel		SBS		8/16/12	1800
		HONIG NGUYEN		FBI			
Received by:							
Relinquished by:							

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

August 29, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on August 22, 2012 from the SOU_0797_20120822, F&BI 208316 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0829R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on August 22, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20120822, F&BI 208316 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID
208316-01

SoundEarth Strategies
MW106-20120822

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW106-20120822	Client:	SoundEarth Strategies
Date Received:	08/22/12	Project:	SOU_0797_20120822, F&BI 208316
Date Extracted:	08/22/12	Lab ID:	208316-01
Date Analyzed:	08/22/12	Data File:	082225.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20120822, F&BI 208316
Date Extracted:	08/22/12	Lab ID:	02-1481 mb
Date Analyzed:	08/22/12	Data File:	082218.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	108	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	101	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 08/29/12

Date Received: 08/22/12

Project: SOU_0797_20120822, F&BI 208316

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 208291-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	112	76-124
Chloroethane	ug/L (ppb)	50	<1	103	69-123
1,1-Dichloroethene	ug/L (ppb)	50	<1	108	75-118
Methylene chloride	ug/L (ppb)	50	<5	97	64-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	99	82-109
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	103	83-109
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	98	76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	106	77-116
Trichloroethene	ug/L (ppb)	50	<1	91	79-105
Tetrachloroethene	ug/L (ppb)	50	<1	101	69-114

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent		Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	112	108	73-126	4
Chloroethane	ug/L (ppb)	50	101	97	69-125	4
1,1-Dichloroethene	ug/L (ppb)	50	109	104	72-122	5
Methylene chloride	ug/L (ppb)	50	99	95	56-128	4
trans-1,2-Dichloroethene	ug/L (ppb)	50	102	97	74-122	5
1,1-Dichloroethane	ug/L (ppb)	50	98	95	85-107	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	102	97	85-105	5
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	97	93	85-107	4
1,1,1-Trichloroethane	ug/L (ppb)	50	106	103	81-114	3
Trichloroethene	ug/L (ppb)	50	91	88	80-104	3
Tetrachloroethene	ug/L (ppb)	50	100	97	81-106	3

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ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

208316

Send Report To Chuck Cack

Company SundBath Strategies

Address 8111 Firmin Ave E Suite 200

City, State, ZIP Seattle, WA 98109

Phone # 206-306-1900 Fax # 206-306-1907

SAMPLE CHAIN OF CUSTODY

ME 08/22/12

Page # 1 of 1

SAMPLERS (signature)	PROJECT NAME/NO.	PO #
<i>[Signature]</i>	700 Dexter / 0797	
REMARKS	GEMS Y / N	

TURNAROUND TIME	<input type="checkbox"/> Standard (2 Weeks) <input type="checkbox"/> RUSH Rush charges authorized by:
SAMPLE DISPOSAL	
<input checked="" type="checkbox"/> Dispose after 30 days <input type="checkbox"/> Return samples <input type="checkbox"/> Will call with instructions	

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED				Notes		
NW106-3000000	NW106	135	01AD-6782A19		1050	HBO	4	NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	

Friedman & Bruye, Inc.

3012 16th Avenue West

Seattle, WA 98119

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COC\SSSGEMSRI.DOC (Revision 1)

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>[Signature]</i>	David Mendel	SES	8/22/12	11:50
Received by:	S. Oborn	FBBI	8/22/12	11:50
Relinquished by:				

Samples received at 13 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

September 19, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on September 5, 2012 from the SOU_0797-001-02_20120905, F&BI 209044 project. There are 20 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0919R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on September 5, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797-001-02_20120905, F&BI 209044 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
209044-01	MW103-20120905
209044-02	MW105-20120905
209044-03	MW106-20120905
209044-04	W-MW-02-20120905
209044-05	RMW-1-20120905
209044-06	RMW-5-20120905
209044-07	RMW-6-20120905
209044-08	BB-8-20120905
209044-09	MW102-20120905
209044-10	MW99-20120905

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW103-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-01
Date Analyzed:	09/06/12	Data File:	090626.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	8.3
Vinyl chloride	110	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	80	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	22	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	1.6	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW105-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-02
Date Analyzed:	09/06/12	Data File:	090627.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	0.23	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW106-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-03
Date Analyzed:	09/06/12	Data File:	090628.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	W-MW-02-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-04
Date Analyzed:	09/06/12	Data File:	090629.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	2,900 ve
Vinyl chloride	69	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	10	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	5.0	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	3,000 ve	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	1,400 ve	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	1.4	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	W-MW-02-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-04 1/100
Date Analyzed:	09/10/12	Data File:	091024.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	94	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<100	1,3-Dichloropropane	<100
Chloromethane	<1,000	Tetrachloroethene	2,600
Vinyl chloride	63	Dibromochloromethane	<100
Bromomethane	<100	1,2-Dibromoethane (EDB)	<100
Chloroethane	<100	Chlorobenzene	<100
Trichlorofluoromethane	<100	Ethylbenzene	<100
Acetone	<1,000	1,1,1,2-Tetrachloroethane	<100
1,1-Dichloroethene	<100	m,p-Xylene	<200
Methylene chloride	<500	o-Xylene	<100
Methyl t-butyl ether (MTBE)	<100	Styrene	<100
trans-1,2-Dichloroethene	<100	Isopropylbenzene	<100
1,1-Dichloroethane	<100	Bromoform	<100
2,2-Dichloropropane	<100	n-Propylbenzene	<100
cis-1,2-Dichloroethene	2,800	Bromobenzene	<100
Chloroform	<100	1,3,5-Trimethylbenzene	<100
2-Butanone (MEK)	<1,000	1,1,2,2-Tetrachloroethane	<100
1,2-Dichloroethane (EDC)	<100	1,2,3-Trichloropropane	<100
1,1,1-Trichloroethane	<100	2-Chlorotoluene	<100
1,1-Dichloropropene	<100	4-Chlorotoluene	<100
Carbon tetrachloride	<100	tert-Butylbenzene	<100
Benzene	<35	1,2,4-Trimethylbenzene	<100
Trichloroethene	1,300	sec-Butylbenzene	<100
1,2-Dichloropropane	<100	p-Isopropyltoluene	<100
Bromodichloromethane	<100	1,3-Dichlorobenzene	<100
Dibromomethane	<100	1,4-Dichlorobenzene	<100
4-Methyl-2-pentanone	<1,000	1,2-Dichlorobenzene	<100
cis-1,3-Dichloropropene	<100	1,2-Dibromo-3-chloropropane	<1,000
Toluene	<100	1,2,4-Trichlorobenzene	<100
trans-1,3-Dichloropropene	<100	Hexachlorobutadiene	<100
1,1,2-Trichloroethane	<100	Naphthalene	<100
2-Hexanone	<1,000	1,2,3-Trichlorobenzene	<100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	RMW-1-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-05
Date Analyzed:	09/10/12	Data File:	091021.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	16
Vinyl chloride	2.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	2.1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	3.6	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	RMW-5-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-06
Date Analyzed:	09/06/12	Data File:	090631.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	93	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	RMW-6-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-07
Date Analyzed:	09/06/12	Data File:	090632.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-08
Date Analyzed:	09/06/12	Data File:	090633.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	210 ve
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	28	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	41	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	BB-8-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-08 1/10
Date Analyzed:	09/10/12	Data File:	091025.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<10	1,3-Dichloropropane	<10
Chloromethane	<100	Tetrachloroethene	200
Vinyl chloride	<2	Dibromochloromethane	<10
Bromomethane	<10	1,2-Dibromoethane (EDB)	<10
Chloroethane	<10	Chlorobenzene	<10
Trichlorofluoromethane	<10	Ethylbenzene	<10
Acetone	<100	1,1,1,2-Tetrachloroethane	<10
1,1-Dichloroethene	<10	m,p-Xylene	<20
Methylene chloride	<50	o-Xylene	<10
Methyl t-butyl ether (MTBE)	<10	Styrene	<10
trans-1,2-Dichloroethene	<10	Isopropylbenzene	<10
1,1-Dichloroethane	<10	Bromoform	<10
2,2-Dichloropropane	<10	n-Propylbenzene	<10
cis-1,2-Dichloroethene	29	Bromobenzene	<10
Chloroform	<10	1,3,5-Trimethylbenzene	<10
2-Butanone (MEK)	<100	1,1,2,2-Tetrachloroethane	<10
1,2-Dichloroethane (EDC)	<10	1,2,3-Trichloropropane	<10
1,1,1-Trichloroethane	<10	2-Chlorotoluene	<10
1,1-Dichloropropene	<10	4-Chlorotoluene	<10
Carbon tetrachloride	<10	tert-Butylbenzene	<10
Benzene	<3.5	1,2,4-Trimethylbenzene	<10
Trichloroethene	38	sec-Butylbenzene	<10
1,2-Dichloropropane	<10	p-Isopropyltoluene	<10
Bromodichloromethane	<10	1,3-Dichlorobenzene	<10
Dibromomethane	<10	1,4-Dichlorobenzene	<10
4-Methyl-2-pentanone	<100	1,2-Dichlorobenzene	<10
cis-1,3-Dichloropropene	<10	1,2-Dibromo-3-chloropropane	<100
Toluene	<10	1,2,4-Trichlorobenzene	<10
trans-1,3-Dichloropropene	<10	Hexachlorobutadiene	<10
1,1,2-Trichloroethane	<10	Naphthalene	<10
2-Hexanone	<100	1,2,3-Trichlorobenzene	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW102-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-09
Date Analyzed:	09/07/12	Data File:	090634.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	94	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	1.2	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW99-20120905	Client:	SoundEarth Strategies
Date Received:	09/05/12	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	209044-10
Date Analyzed:	09/07/12	Data File:	090635.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	102	50	150
4-Bromofluorobenzene	95	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	8.1
Vinyl chloride	120	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	85	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	22	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	1.6	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/06/12	Lab ID:	02-1590 mb
Date Analyzed:	09/06/12	Data File:	090612.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797-001-02_20120905, F&BI 209044
Date Extracted:	09/10/12	Lab ID:	02-1613 mb
Date Analyzed:	09/10/12	Data File:	091020.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)	Compounds:	Concentration ug/L (ppb)
Dichlorodifluoromethane	<1	1,3-Dichloropropane	<1
Chloromethane	<10	Tetrachloroethene	<1
Vinyl chloride	<0.2	Dibromochloromethane	<1
Bromomethane	<1	1,2-Dibromoethane (EDB)	<1
Chloroethane	<1	Chlorobenzene	<1
Trichlorofluoromethane	<1	Ethylbenzene	<1
Acetone	<10	1,1,1,2-Tetrachloroethane	<1
1,1-Dichloroethene	<1	m,p-Xylene	<2
Methylene chloride	<5	o-Xylene	<1
Methyl t-butyl ether (MTBE)	<1	Styrene	<1
trans-1,2-Dichloroethene	<1	Isopropylbenzene	<1
1,1-Dichloroethane	<1	Bromoform	<1
2,2-Dichloropropane	<1	n-Propylbenzene	<1
cis-1,2-Dichloroethene	<1	Bromobenzene	<1
Chloroform	<1	1,3,5-Trimethylbenzene	<1
2-Butanone (MEK)	<10	1,1,2,2-Tetrachloroethane	<1
1,2-Dichloroethane (EDC)	<1	1,2,3-Trichloropropane	<1
1,1,1-Trichloroethane	<1	2-Chlorotoluene	<1
1,1-Dichloropropene	<1	4-Chlorotoluene	<1
Carbon tetrachloride	<1	tert-Butylbenzene	<1
Benzene	<0.35	1,2,4-Trimethylbenzene	<1
Trichloroethene	<1	sec-Butylbenzene	<1
1,2-Dichloropropane	<1	p-Isopropyltoluene	<1
Bromodichloromethane	<1	1,3-Dichlorobenzene	<1
Dibromomethane	<1	1,4-Dichlorobenzene	<1
4-Methyl-2-pentanone	<10	1,2-Dichlorobenzene	<1
cis-1,3-Dichloropropene	<1	1,2-Dibromo-3-chloropropane	<10
Toluene	<1	1,2,4-Trichlorobenzene	<1
trans-1,3-Dichloropropene	<1	Hexachlorobutadiene	<1
1,1,2-Trichloroethane	<1	Naphthalene	<1
2-Hexanone	<10	1,2,3-Trichlorobenzene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/19/12

Date Received: 09/05/12

Project: SOU_0797-001-02_20120905, F&BI 209044

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 209046-04 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	97	62-131
Chloromethane	ug/L (ppb)	50	<10	98	68-127
Vinyl chloride	ug/L (ppb)	50	<0.2	109	76-124
Bromomethane	ug/L (ppb)	50	<1	104	67-127
Chloroethane	ug/L (ppb)	50	<1	103	69-123
Trichlorofluoromethane	ug/L (ppb)	50	<1	108	75-121
Acetone	ug/L (ppb)	250	<10	86	68-137
1,1-Dichloroethene	ug/L (ppb)	50	<1	98	75-118
Methylene chloride	ug/L (ppb)	50	<5	93	64-120
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	96	74-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	100	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	96	82-109
2,2-Dichloropropane	ug/L (ppb)	50	<1	95	62-124
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	83-109
Chloroform	ug/L (ppb)	50	<1	96	81-110
2-Butanone (MEK)	ug/L (ppb)	250	<10	84	75-122
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	97	76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	103	77-116
1,1-Dichloropropene	ug/L (ppb)	50	<1	92	81-110
Carbon tetrachloride	ug/L (ppb)	50	<1	105	74-119
Benzene	ug/L (ppb)	50	<0.35	96	79-108
Trichloroethene	ug/L (ppb)	50	<1	98	79-105
1,2-Dichloropropane	ug/L (ppb)	50	<1	97	83-110
Bromodichloromethane	ug/L (ppb)	50	<1	100	77-118
Dibromomethane	ug/L (ppb)	50	<1	101	82-109
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	97	78-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	97	76-120
Toluene	ug/L (ppb)	50	<1	91	82-108
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	88	77-118
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	94	83-110
2-Hexanone	ug/L (ppb)	250	<10	92	75-128
1,3-Dichloropropane	ug/L (ppb)	50	<1	93	84-109
Tetrachloroethene	ug/L (ppb)	50	<1	94	69-114
Dibromochloromethane	ug/L (ppb)	50	<1	101	66-133
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	99	85-110
Chlorobenzene	ug/L (ppb)	50	<1	95	82-107
Ethylbenzene	ug/L (ppb)	50	<1	93	79-112
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	100	78-118
m,p-Xylene	ug/L (ppb)	100	<2	96	81-111
o-Xylene	ug/L (ppb)	50	<1	95	82-110
Styrene	ug/L (ppb)	50	<1	98	73-116
Isopropylbenzene	ug/L (ppb)	50	<1	98	80-112
Bromoform	ug/L (ppb)	50	<1	88	45-151
n-Propylbenzene	ug/L (ppb)	50	<1	89	77-116
Bromobenzene	ug/L (ppb)	50	<1	93	84-110
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	96	78-114
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	95	82-117
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	87	77-116
2-Chlorotoluene	ug/L (ppb)	50	<1	88	79-112
4-Chlorotoluene	ug/L (ppb)	50	<1	90	80-112
tert-Butylbenzene	ug/L (ppb)	50	<1	96	81-114
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	95	76-115
sec-Butylbenzene	ug/L (ppb)	50	<1	94	80-115
p-Isopropyltoluene	ug/L (ppb)	50	<1	96	78-116
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	93	81-110
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	92	79-109
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	94	81-110
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	96	67-128
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	81	77-113
Hexachlorobutadiene	ug/L (ppb)	50	<1	83	66-122
Naphthalene	ug/L (ppb)	50	<1	98	79-120
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	91	78-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/19/12

Date Received: 09/05/12

Project: SOU_0797-001-02_20120905, F&BI 209044

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	134	133	56-138	1
Chloromethane	ug/L (ppb)	50	111	111	66-131	0
Vinyl chloride	ug/L (ppb)	50	119	119	73-126	0
Bromomethane	ug/L (ppb)	50	108	107	65-131	1
Chloroethane	ug/L (ppb)	50	111	111	69-125	0
Trichlorofluoromethane	ug/L (ppb)	50	111	110	75-124	1
Acetone	ug/L (ppb)	250	87	86	64-136	1
1,1-Dichloroethene	ug/L (ppb)	50	101	101	72-122	0
Methylene chloride	ug/L (ppb)	50	94	94	56-128	0
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	101	102	76-120	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	101	99	74-122	2
1,1-Dichloroethane	ug/L (ppb)	50	102	101	85-107	1
2,2-Dichloropropane	ug/L (ppb)	50	113	111	83-119	2
cis-1,2-Dichloroethene	ug/L (ppb)	50	101	101	85-105	0
Chloroform	ug/L (ppb)	50	99	99	83-107	0
2-Butanone (MEK)	ug/L (ppb)	250	88	88	75-118	0
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	97	97	85-107	0
1,1,1-Trichloroethane	ug/L (ppb)	50	104	104	81-114	0
1,1-Dichloropropene	ug/L (ppb)	50	100	100	85-107	0
Carbon tetrachloride	ug/L (ppb)	50	104	104	77-118	0
Benzene	ug/L (ppb)	50	100	100	81-107	0
Trichloroethene	ug/L (ppb)	50	99	99	80-104	0
1,2-Dichloropropane	ug/L (ppb)	50	100	100	86-106	0
Bromodichloromethane	ug/L (ppb)	50	103	102	76-117	1
Dibromomethane	ug/L (ppb)	50	100	100	86-106	0
4-Methyl-2-pentanone	ug/L (ppb)	250	97	96	85-113	1
cis-1,3-Dichloropropene	ug/L (ppb)	50	114	113	78-120	1
Toluene	ug/L (ppb)	50	99	99	86-105	0
trans-1,3-Dichloropropene	ug/L (ppb)	50	110	109	82-116	1
1,1,2-Trichloroethane	ug/L (ppb)	50	101	99	87-106	2
2-Hexanone	ug/L (ppb)	250	95	94	84-117	1
1,3-Dichloropropane	ug/L (ppb)	50	101	100	86-107	1
Tetrachloroethene	ug/L (ppb)	50	99	98	81-106	1
Dibromochloromethane	ug/L (ppb)	50	105	105	57-138	0
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	104	102	89-107	2
Chlorobenzene	ug/L (ppb)	50	98	98	86-104	0
Ethylbenzene	ug/L (ppb)	50	100	99	87-107	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	103	102	79-117	1
m,p-Xylene	ug/L (ppb)	100	101	100	87-107	1
o-Xylene	ug/L (ppb)	50	100	100	86-107	0
Styrene	ug/L (ppb)	50	106	105	87-110	1
Isopropylbenzene	ug/L (ppb)	50	103	102	87-108	1
Bromoform	ug/L (ppb)	50	98	99	27-167	1
n-Propylbenzene	ug/L (ppb)	50	101	99	87-109	2
Bromobenzene	ug/L (ppb)	50	97	96	86-108	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	104	103	88-108	1
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	106	104	82-116	2
1,2,3-Trichloropropane	ug/L (ppb)	50	97	96	75-117	1
2-Chlorotoluene	ug/L (ppb)	50	98	97	85-109	1
4-Chlorotoluene	ug/L (ppb)	50	100	98	87-107	2
tert-Butylbenzene	ug/L (ppb)	50	102	101	86-110	1
1,2,4-Trimethylbenzene	ug/L (ppb)	50	103	101	87-109	2
sec-Butylbenzene	ug/L (ppb)	50	102	101	88-110	1
p-Isopropyltoluene	ug/L (ppb)	50	103	102	87-112	1
1,3-Dichlorobenzene	ug/L (ppb)	50	98	97	88-105	1
1,4-Dichlorobenzene	ug/L (ppb)	50	97	95	87-104	2
1,2-Dichlorobenzene	ug/L (ppb)	50	99	97	86-107	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	105	104	65-126	1
1,2,4-Trichlorobenzene	ug/L (ppb)	50	94	94	86-109	0
Hexachlorobutadiene	ug/L (ppb)	50	102	102	78-116	0
Naphthalene	ug/L (ppb)	50	107	105	89-114	2
1,2,3-Trichlorobenzene	ug/L (ppb)	50	106	106	89-111	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/19/12

Date Received: 09/05/12

Project: SOU_0797-001-02_20120905, F&BI 209044

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 209075-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Dichlorodifluoromethane	ug/L (ppb)	50	<10	117	62-131
Chloromethane	ug/L (ppb)	50	<10	103	68-127
Vinyl chloride	ug/L (ppb)	50	1.6	114	76-124
Bromomethane	ug/L (ppb)	50	<1	99	67-127
Chloroethane	ug/L (ppb)	50	<1	103	69-123
Trichlorofluoromethane	ug/L (ppb)	50	<1	105	75-121
Acetone	ug/L (ppb)	250	<10	86	68-137
1,1-Dichloroethene	ug/L (ppb)	50	<1	96	75-118
Methylene chloride	ug/L (ppb)	50	<5	90	64-120
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	<1	97	74-120
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	95	75-119
1,1-Dichloroethane	ug/L (ppb)	50	<1	99	82-109
2,2-Dichloropropane	ug/L (ppb)	50	<1	95	62-124
cis-1,2-Dichloroethene	ug/L (ppb)	50	6.1	97	83-109
Chloroform	ug/L (ppb)	50	<1	96	81-110
2-Butanone (MEK)	ug/L (ppb)	250	<10	89	75-122
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	92	76-114
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	99	77-116
1,1-Dichloropropene	ug/L (ppb)	50	<1	96	81-110
Carbon tetrachloride	ug/L (ppb)	50	<1	100	74-119
Benzene	ug/L (ppb)	50	0.73	97	79-108
Trichloroethene	ug/L (ppb)	50	4.1	93	79-105
1,2-Dichloropropane	ug/L (ppb)	50	<1	99	83-110
Bromodichloromethane	ug/L (ppb)	50	<1	100	77-118
Dibromomethane	ug/L (ppb)	50	<1	96	82-109
4-Methyl-2-pentanone	ug/L (ppb)	250	<10	94	78-123
cis-1,3-Dichloropropene	ug/L (ppb)	50	<1	104	76-120
Toluene	ug/L (ppb)	50	<1	96	82-108
trans-1,3-Dichloropropene	ug/L (ppb)	50	<1	100	77-118
1,1,2-Trichloroethane	ug/L (ppb)	50	<1	98	83-110
2-Hexanone	ug/L (ppb)	250	<10	94	75-128
1,3-Dichloropropane	ug/L (ppb)	50	<1	97	84-109
Tetrachloroethene	ug/L (ppb)	50	22	97 b	69-114
Dibromochloromethane	ug/L (ppb)	50	<1	101	66-133
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	<1	98	85-110
Chlorobenzene	ug/L (ppb)	50	<1	94	82-107
Ethylbenzene	ug/L (ppb)	50	<1	95	79-112
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	<1	98	78-118
m,p-Xylene	ug/L (ppb)	100	<2	94	81-111
o-Xylene	ug/L (ppb)	50	<1	94	82-110
Styrene	ug/L (ppb)	50	<1	92	73-116
Isopropylbenzene	ug/L (ppb)	50	<1	98	80-112
Bromoform	ug/L (ppb)	50	<1	93	45-151
n-Propylbenzene	ug/L (ppb)	50	<1	95	77-116
Bromobenzene	ug/L (ppb)	50	<1	93	84-110
1,3,5-Trimethylbenzene	ug/L (ppb)	50	<1	94	78-114
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	<1	104	82-117
1,2,3-Trichloropropane	ug/L (ppb)	50	<1	95	77-116
2-Chlorotoluene	ug/L (ppb)	50	<1	94	79-112
4-Chlorotoluene	ug/L (ppb)	50	<1	93	80-112
tert-Butylbenzene	ug/L (ppb)	50	<1	96	81-114
1,2,4-Trimethylbenzene	ug/L (ppb)	50	<1	94	76-115
sec-Butylbenzene	ug/L (ppb)	50	<1	96	80-115
p-Isopropyltoluene	ug/L (ppb)	50	<1	96	78-116
1,3-Dichlorobenzene	ug/L (ppb)	50	<1	93	81-110
1,4-Dichlorobenzene	ug/L (ppb)	50	<1	92	79-109
1,2-Dichlorobenzene	ug/L (ppb)	50	<1	94	81-110
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	<10	102	67-128
1,2,4-Trichlorobenzene	ug/L (ppb)	50	<1	88	77-113
Hexachlorobutadiene	ug/L (ppb)	50	<1	94	66-122
Naphthalene	ug/L (ppb)	50	<1	97	79-120
1,2,3-Trichlorobenzene	ug/L (ppb)	50	<1	97	78-115

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 09/19/12

Date Received: 09/05/12

Project: SOU_0797-001-02_20120905, F&BI 209044

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Dichlorodifluoromethane	ug/L (ppb)	50	111	119	56-138	7
Chloromethane	ug/L (ppb)	50	102	103	66-131	1
Vinyl chloride	ug/L (ppb)	50	113	114	73-126	1
Bromomethane	ug/L (ppb)	50	100	102	65-131	2
Chloroethane	ug/L (ppb)	50	104	107	69-125	3
Trichlorofluoromethane	ug/L (ppb)	50	104	106	75-124	2
Acetone	ug/L (ppb)	250	81	83	64-136	2
1,1-Dichloroethene	ug/L (ppb)	50	97	99	72-122	2
Methylene chloride	ug/L (ppb)	50	90	93	56-128	3
Methyl t-butyl ether (MTBE)	ug/L (ppb)	50	98	100	76-120	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	94	98	74-122	4
1,1-Dichloroethane	ug/L (ppb)	50	97	99	85-107	2
2,2-Dichloropropane	ug/L (ppb)	50	105	108	83-119	3
cis-1,2-Dichloroethene	ug/L (ppb)	50	97	98	85-105	1
Chloroform	ug/L (ppb)	50	95	97	83-107	2
2-Butanone (MEK)	ug/L (ppb)	250	85	87	75-118	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	92	93	85-107	1
1,1,1-Trichloroethane	ug/L (ppb)	50	98	101	81-114	3
1,1-Dichloropropene	ug/L (ppb)	50	95	97	85-107	2
Carbon tetrachloride	ug/L (ppb)	50	100	103	77-118	3
Benzene	ug/L (ppb)	50	95	97	81-107	2
Trichloroethene	ug/L (ppb)	50	94	97	80-104	3
1,2-Dichloropropane	ug/L (ppb)	50	97	99	86-106	2
Bromodichloromethane	ug/L (ppb)	50	101	102	76-117	1
Dibromomethane	ug/L (ppb)	50	95	98	86-106	3
4-Methyl-2-pentanone	ug/L (ppb)	250	92	96	85-113	4
cis-1,3-Dichloropropene	ug/L (ppb)	50	112	114	78-120	2
Toluene	ug/L (ppb)	50	95	96	86-105	1
trans-1,3-Dichloropropene	ug/L (ppb)	50	110	112	82-116	2
1,1,2-Trichloroethane	ug/L (ppb)	50	97	98	87-106	1
2-Hexanone	ug/L (ppb)	250	90	91	84-117	1
1,3-Dichloropropane	ug/L (ppb)	50	97	98	86-107	1
Tetrachloroethene	ug/L (ppb)	50	97	97	81-106	0
Dibromochloromethane	ug/L (ppb)	50	107	109	57-138	2
1,2-Dibromoethane (EDB)	ug/L (ppb)	50	98	101	89-107	3
Chlorobenzene	ug/L (ppb)	50	94	96	86-104	2
Ethylbenzene	ug/L (ppb)	50	96	97	87-107	1
1,1,1,2-Tetrachloroethane	ug/L (ppb)	50	98	100	79-117	2
m,p-Xylene	ug/L (ppb)	100	97	98	87-107	1
o-Xylene	ug/L (ppb)	50	96	98	86-107	2
Styrene	ug/L (ppb)	50	102	103	87-110	1
Isopropylbenzene	ug/L (ppb)	50	99	101	87-108	2
Bromoform	ug/L (ppb)	50	107	107	27-167	0
n-Propylbenzene	ug/L (ppb)	50	97	99	87-109	2
Bromobenzene	ug/L (ppb)	50	96	97	86-108	1
1,3,5-Trimethylbenzene	ug/L (ppb)	50	100	103	88-108	3
1,1,2,2-Tetrachloroethane	ug/L (ppb)	50	103	104	82-116	1
1,2,3-Trichloropropane	ug/L (ppb)	50	94	97	75-117	3
2-Chlorotoluene	ug/L (ppb)	50	95	97	85-109	2
4-Chlorotoluene	ug/L (ppb)	50	95	97	87-107	2
tert-Butylbenzene	ug/L (ppb)	50	99	101	86-110	2
1,2,4-Trimethylbenzene	ug/L (ppb)	50	99	102	87-109	3
sec-Butylbenzene	ug/L (ppb)	50	99	101	88-110	2
p-Isopropyltoluene	ug/L (ppb)	50	100	101	87-112	1
1,3-Dichlorobenzene	ug/L (ppb)	50	95	97	88-105	2
1,4-Dichlorobenzene	ug/L (ppb)	50	92	95	87-104	3
1,2-Dichlorobenzene	ug/L (ppb)	50	96	98	86-107	2
1,2-Dibromo-3-chloropropane	ug/L (ppb)	50	102	106	65-126	4
1,2,4-Trichlorobenzene	ug/L (ppb)	50	94	96	86-109	2
Hexachlorobutadiene	ug/L (ppb)	50	101	101	78-116	0
Naphthalene	ug/L (ppb)	50	103	108	89-114	5
1,2,3-Trichlorobenzene	ug/L (ppb)	50	102	108	89-111	6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

209044

SAMPLE CHAIN OF CUSTODY ME 09/05/12

13

Send Report To Chuck Cacek, Brian Dixon
 Company SoundEarth Strategies
 Address 2811 Folimview Ave E, Suite 200
 City, State, ZIP Seattle, WA 98102
 Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature)	
PROJECT NAME/NO.	Asco Property (700 Dexter) 0797-001-02
PO #	1
REMARKS	GEMS Y / N

Page # 1 of 1

TURNAROUND TIME
 Standard (2 Weeks)
 RUSH
 Rush charges authorized by: _____

SAMPLE DISPOSAL
 X Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED				Notes	
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	VOC's by 8260		
MU103 - 20120905	MU103	108.5	DLAD	9/5/12	1046	H ₂ O	4						
MU105 - 20120905	MU105	135	09T		1507			X					
MU106 - 20120905	MU106	135	03		1218			X					
MU102 - 20120905	UW/MU102	75	04		0946			X					
MU101 - 20120905	0402/MU1	12	05A-C		1157			X					
MU105 - 20120905	R/MU105	25	06		1350			X					
MU106 - 20120905	R/MU106	21	07		1052			X					
BBB - 20120905	BBB	35	08		1506			X					
MU102 - 20120905	MU102	120	09		1353			X					
MU 99 - 20120905		108.5	10		1049			X					

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE		PRINT NAME	WILL CAMARDO	COMPANY	QES	DATE	9/5/12	TIME	1550
Received by:			VWA		FBI		9/5/12		1555
Relinquished by:									
Received by:									

Samples received at 7°C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

December 14, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on December 10, 2012 from the SOU_0797_20121210, F&BI 212138 project. There are 11 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU1214R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 10, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20121210, F&BI 212138 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
212138-01	B114-15
212138-02	B114-25
212138-03	B114-35
212138-04	B114-40
212138-05	B114-45

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B114-15	Client:	SoundEarth Strategies
Date Received:	12/10/12	Project:	SOU_0797_20121210, F&BI 212138
Date Extracted:	12/10/12	Lab ID:	212138-01
Date Analyzed:	12/11/12	Data File:	121038.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B114-25	Client:	SoundEarth Strategies
Date Received:	12/10/12	Project:	SOU_0797_20121210, F&BI 212138
Date Extracted:	12/10/12	Lab ID:	212138-02
Date Analyzed:	12/11/12	Data File:	121039.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B114-35	Client:	SoundEarth Strategies
Date Received:	12/10/12	Project:	SOU_0797_20121210, F&BI 212138
Date Extracted:	12/10/12	Lab ID:	212138-03
Date Analyzed:	12/11/12	Data File:	121041.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	0.11
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.45
Tetrachloroethene	8.8

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B114-40	Client:	SoundEarth Strategies
Date Received:	12/10/12	Project:	SOU_0797_20121210, F&BI 212138
Date Extracted:	12/10/12	Lab ID:	212138-04
Date Analyzed:	12/11/12	Data File:	121040.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	103	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	0.071
Tetrachloroethene	0.59

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B114-45	Client:	SoundEarth Strategies
Date Received:	12/10/12	Project:	SOU_0797_20121210, F&BI 212138
Date Extracted:	12/12/12	Lab ID:	212138-05
Date Analyzed:	12/12/12 18:10	Data File:	121222.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	96	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	0.25

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20121210, F&BI 212138
Date Extracted:	12/12/12	Lab ID:	02-2249 mb
Date Analyzed:	12/12/12 11:42	Data File:	121209.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20121210, F&BI 212138
Date Extracted:	12/10/12	Lab ID:	02-2244 mb
Date Analyzed:	12/10/12	Data File:	121015.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/14/12

Date Received: 12/10/12

Project: SOU_0797_20121210, F&BI 212138

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 212136-02 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	35	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	42	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	48	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	70	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	58	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	61	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	65	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	66	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	62	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.03	63	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.03	67	32-107

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent		Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	84	82	42-107	2
Chloroethane	mg/kg (ppm)	2.5	77	76	50-115	1
1,1-Dichloroethene	mg/kg (ppm)	2.5	96	93	65-110	3
Methylene chloride	mg/kg (ppm)	2.5	112	108	62-119	4
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	100	71-113	2
1,1-Dichloroethane	mg/kg (ppm)	2.5	99	98	76-109	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	102	101	77-110	1
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	99	98	80-109	1
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	105	105	72-116	0
Trichloroethene	mg/kg (ppm)	2.5	99	99	72-107	0
Tetrachloroethene	mg/kg (ppm)	2.5	106	102	77-110	4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/14/12

Date Received: 12/10/12

Project: SOU_0797_20121210, F&BI 212138

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 212170-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	
				Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	37	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	42	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	46	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	67	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	56	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	59	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	63	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	63	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	60	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.03	62	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.03	65	32-107

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent		Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	78	77	42-107	1
Chloroethane	mg/kg (ppm)	2.5	69	70	50-115	1
1,1-Dichloroethene	mg/kg (ppm)	2.5	87	85	65-110	2
Methylene chloride	mg/kg (ppm)	2.5	101	102	62-119	1
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	91	90	71-113	1
1,1-Dichloroethane	mg/kg (ppm)	2.5	88	89	76-109	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	91	91	77-110	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	88	88	80-109	0
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	95	96	72-116	1
Trichloroethene	mg/kg (ppm)	2.5	89	90	72-107	1
Tetrachloroethene	mg/kg (ppm)	2.5	93	94	77-110	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

279188 212138

SAMPLE CHAIN OF CUSTODY

ME 12-10-12

A03/152

Page # 1 of 1

Send Report To Clark Creek
 Company SES
 Address 2911 Fenwick Ave E S-L 2000
 City, State, ZIP Seattle WA 98102
 Phone # 206 306-1900 Fax # 206-306-1907

SAMPLERS (Signature) <u>[Signature]</u>	
PROJECT NAME/NO. <u>700-Duffin</u>	PO #
<u>0797</u>	
REMARKS	GEMMS Y / N

TURNAROUND TIME

Standard (2 Weeks)
 RUSH 48 hr per CC 12/10/12
 Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED								
								NWTPH-Dx	NWTPH-Gx	BTEX by 8021B	HVOC's by 8260	SVOC's by 8270	RCRA-8 Metals			
B114-15	B114	15	D/A-E	12-10-12	0955	Soil	5				X					X-Rin perc 12/10/12 Notes AK
B114-25	B114	25	087		1005	Soil	5				X					lead
B114-35	B114	35	08		1015	Soil	5				X					lead
B114-40	B114	40	04		1025	Soil	5				X					lead
B114-45	B114	45	05		1040	Soil	5				X					lead

Priedman & Bruja, Inc
 3012 16th Avenue West
 Seattle, WA 98119
 Ph. (206) 285-8282
 Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
<u>[Signature]</u>	<u>[Signature]</u>	David Mendel		SES		12/10/12	1315
<u>[Signature]</u>	<u>[Signature]</u>	Dhan Phun		F&BI		12/10/12	1315
Received by:							

Samples received at 5 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

April 8, 2013

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included is the amended report from the testing of material submitted on December 21, 2012 from the SOU_0797_20121221, F&BI 212393 project.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures

c: Brian Dixon, Audrey Hackett
SOU1228R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
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Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

December 28, 2012

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on December 21, 2012 from the SOU_0797_20121221, F&BI 212393 project. There are 29 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU1228R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on December 21, 2012 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20121221, F&BI 212393 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
212393-01	MW116-20121221
212393-02	MW112-20121221
212393-03	MW113-20121221
212393-04	MW108-20121221
212393-05	MW115-20121221
212393-06	MW109-20121221
212393-07	MW114-20121221
212393-08	MW107-20121221
212393-09	MW110-20121221
212393-10	MW99-20121221
212393-11	MW111-20121221

The tetrachloroethene detection in sample MW113-20121221 is due to carryover from a previous sample. The data were flagged accordingly.

Methylene chloride was detected in the 8260C analysis of sample MW111-20121221. The data were flagged as due to laboratory contamination.

The NWTPH-Gx result in sample MW107-20121221 is due to a pattern of peaks that is consistent with the chlorinated volatiles detected by the 8260C analysis.

All other quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/28/12
Date Received: 12/21/12
Project: SOU_0797_20121221, F&BI 212393
Date Extracted: 12/26/12
Date Analyzed: 12/26/12

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
USING METHOD NWTPH-Gx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Gasoline Range</u>	Surrogate (% Recovery) (Limit 50-150)
MW107-20121221 212393-08 1/10	240,000 x	91
Method Blank 02-2366 MB	<100	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/28/12
Date Received: 12/21/12
Project: SOU_0797_20121221, F&BI 212393
Date Extracted: 12/26/12
Date Analyzed: 12/26/12

**RESULTS FROM THE ANALYSIS OF WATER SAMPLES
FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL AND MOTOR OIL
USING METHOD NWTPH-Dx**
Results Reported as ug/L (ppb)

<u>Sample ID</u> Laboratory ID	<u>Diesel Range</u> (C ₁₀ -C ₂₅)	<u>Motor Oil Range</u> (C ₂₅ -C ₃₆)	<u>Surrogate</u> <u>(% Recovery)</u> (Limit 51-134)
MW107-20121221 212393-08	190 x	<250	106
Method Blank 02-2379 MB	<50	<250	87

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW116-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-01
Date Analyzed:	12/24/12	Data File:	122409.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	2.7

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW112-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-02
Date Analyzed:	12/24/12	Data File:	122410.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW113-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-03
Date Analyzed:	12/24/12	Data File:	122434.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	160 ve
Chloroethane	<1
1,1-Dichloroethene	3.7
Methylene chloride	<5
trans-1,2-Dichloroethene	4.1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	5,100 ve
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	460 ve
Tetrachloroethene	1.3 c

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW113-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-03 1/100
Date Analyzed:	12/26/12	Data File:	122614.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	150
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	5,500
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	440
Tetrachloroethene	<100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW108-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/26/12	Lab ID:	212393-04
Date Analyzed:	12/26/12	Data File:	122610.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	99	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	220 ve
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	2.1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	390 ve
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	1.8
Tetrachloroethene	3.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW108-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/26/12	Lab ID:	212393-04 1/10
Date Analyzed:	12/26/12	Data File:	122609.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	57	121
Toluene-d8	98	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	210 pr
Chloroethane	<10
1,1-Dichloroethene	<10
Methylene chloride	<50
trans-1,2-Dichloroethene	<10
1,1-Dichloroethane	<10
cis-1,2-Dichloroethene	400
1,2-Dichloroethane (EDC)	<10
1,1,1-Trichloroethane	<10
Trichloroethene	<10
Tetrachloroethene	<10

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW115-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/26/12	Lab ID:	212393-05
Date Analyzed:	12/26/12	Data File:	122608.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	16
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	38
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	3.0
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW109-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-06
Date Analyzed:	12/24/12	Data File:	122417.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.5
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	18
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	64
Tetrachloroethene	91

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW114-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-07
Date Analyzed:	12/24/12	Data File:	122421.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	110	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	14
Chloroethane	<1
1,1-Dichloroethene	3.0
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	270 ve
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	290 ve
Tetrachloroethene	1,200 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW114-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-07 1/100
Date Analyzed:	12/26/12	Data File:	122610.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	94	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	107	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<20
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	260
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	290
Tetrachloroethene	1,400

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW107-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-08 1/10
Date Analyzed:	12/24/12	Data File:	122422.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	111	50	150

Compounds:	Concentration ug/L (ppb)
Benzene	<3.5
Toluene	<10
Ethylbenzene	<10
m,p-Xylene	<20
o-Xylene	<10
Vinyl chloride	200
Chloroethane	<10
1,1-Dichloroethene	15
Methylene chloride	<50
trans-1,2-Dichloroethene	41
1,1-Dichloroethane	<10
cis-1,2-Dichloroethene	5,300 ve
1,2-Dichloroethane (EDC)	<10
1,1,1-Trichloroethane	<10
Trichloroethene	2,900 ve
Tetrachloroethene	34,000 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW107-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-08 1/1000
Date Analyzed:	12/26/12	Data File:	122612.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	109	50	150

Compounds:	Concentration ug/L (ppb)
Benzene	<350
Toluene	<1,000
Ethylbenzene	<1,000
m,p-Xylene	<2,000
o-Xylene	<1,000
Vinyl chloride	210
Chloroethane	<1,000
1,1-Dichloroethene	<1,000
Methylene chloride	<5,000
trans-1,2-Dichloroethene	<1,000
1,1-Dichloroethane	<1,000
cis-1,2-Dichloroethene	5,100
1,2-Dichloroethane (EDC)	<1,000
1,1,1-Trichloroethane	<1,000
Trichloroethene	2,800
Tetrachloroethene	47,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW110-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-09
Date Analyzed:	12/24/12	Data File:	122431.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	57	121
Toluene-d8	100	63	127
4-Bromofluorobenzene	103	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	33
Chloroethane	<1
1,1-Dichloroethene	1.7
Methylene chloride	<5
trans-1,2-Dichloroethene	3.0
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	500 ve
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	220 ve
Tetrachloroethene	1,300 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW110-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-09 1/100
Date Analyzed:	12/26/12	Data File:	122613.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	101	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	37
Chloroethane	<100
1,1-Dichloroethene	<100
Methylene chloride	<500
trans-1,2-Dichloroethene	<100
1,1-Dichloroethane	<100
cis-1,2-Dichloroethene	470
1,2-Dichloroethane (EDC)	<100
1,1,1-Trichloroethane	<100
Trichloroethene	220
Tetrachloroethene	1,100

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW99-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-10
Date Analyzed:	12/24/12	Data File:	122411.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	220 ve
Chloroethane	<1
1,1-Dichloroethene	16
Methylene chloride	<5
trans-1,2-Dichloroethene	44
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	4,100 ve
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	2,700 ve
Tetrachloroethene	9,600 ve

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW99-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-10 1/1000
Date Analyzed:	12/26/12	Data File:	122611.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	108	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	270
Chloroethane	<1,000
1,1-Dichloroethene	<1,000
Methylene chloride	<5,000
trans-1,2-Dichloroethene	<1,000
1,1-Dichloroethane	<1,000
cis-1,2-Dichloroethene	5,200
1,2-Dichloroethane (EDC)	<1,000
1,1,1-Trichloroethane	<1,000
Trichloroethene	3,000
Tetrachloroethene	50,000

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW111-20121221	Client:	SoundEarth Strategies
Date Received:	12/21/12	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	212393-11
Date Analyzed:	12/24/12	Data File:	122413.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	112	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	1.8
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	5.0 lc
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	37
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	32
Tetrachloroethene	110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	02-2310 mb
Date Analyzed:	12/24/12	Data File:	122408.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	102	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/24/12	Lab ID:	02-2311 mb
Date Analyzed:	12/24/12	Data File:	122408.D
Matrix:	Water	Instrument:	GCMS7
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	104	50	150

Compounds:	Concentration ug/L (ppb)
Benzene	<0.35
Toluene	<1
Ethylbenzene	<1
m,p-Xylene	<2
o-Xylene	<1
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	NA	Project:	SOU_0797_20121221, F&BI 212393
Date Extracted:	12/25/12	Lab ID:	02-2312 mb
Date Analyzed:	12/26/12	Data File:	122607.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	57	121
Toluene-d8	99	63	127
4-Bromofluorobenzene	100	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/28/12

Date Received: 12/21/12

Project: SOU_0797_20121221, F&BI 212393

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TPH AS GASOLINE
USING METHOD NWTPH-Gx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Gasoline	ug/L (ppb)	1,000	97	99	70-119	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/28/12

Date Received: 12/21/12

Project: SOU_0797_20121221, F&BI 212393

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR TOTAL PETROLEUM HYDROCARBONS AS
DIESEL EXTENDED USING METHOD NWTPH-Dx**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Diesel Extended	ug/L (ppb)	2,500	110	111	58-134	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/28/12

Date Received: 12/21/12

Project: SOU_0797_20121221, F&BI 212393

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 212393-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Vinyl chloride	ug/L (ppb)	50	<0.2	118	50-150
Chloroethane	ug/L (ppb)	50	<1	107	50-150
1,1-Dichloroethene	ug/L (ppb)	50	<1	101	50-150
Methylene chloride	ug/L (ppb)	50	<5	87	50-150
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	98	50-150
1,1-Dichloroethane	ug/L (ppb)	50	<1	100	50-150
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	98	50-150
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	96	50-150
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	97	50-150
Benzene	ug/L (ppb)	50	<0.35	95	50-150
Trichloroethene	ug/L (ppb)	50	<1	94	50-150
Toluene	ug/L (ppb)	50	<1	95	50-150
Tetrachloroethene	ug/L (ppb)	50	2.7	115	50-150
Ethylbenzene	ug/L (ppb)	50	<1	98	50-150
m,p-Xylene	ug/L (ppb)	100	<2	98	50-150
o-Xylene	ug/L (ppb)	50	<1	100	50-150

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	104	109	70-130	5
Chloroethane	ug/L (ppb)	50	103	101	70-130	2
1,1-Dichloroethene	ug/L (ppb)	50	100	99	70-130	1
Methylene chloride	ug/L (ppb)	50	89	87	70-130	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	97	98	70-130	1
1,1-Dichloroethane	ug/L (ppb)	50	99	99	70-130	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	98	99	70-130	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	96	94	70-130	2
1,1,1-Trichloroethane	ug/L (ppb)	50	101	101	70-130	0
Benzene	ug/L (ppb)	50	96	96	70-130	0
Trichloroethene	ug/L (ppb)	50	93	93	70-130	0
Toluene	ug/L (ppb)	50	95	93	70-130	2
Tetrachloroethene	ug/L (ppb)	50	94	93	70-130	1
Ethylbenzene	ug/L (ppb)	50	99	97	70-130	2
m,p-Xylene	ug/L (ppb)	100	99	97	70-130	2
o-Xylene	ug/L (ppb)	50	99	97	70-130	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/28/12

Date Received: 12/21/12

Project: SOU_0797_20121221, F&BI 212393

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 212361-09 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	107	36-166
Chloroethane	ug/L (ppb)	50	<1	106	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	100	60-136
Methylene chloride	ug/L (ppb)	50	<5	95	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	99	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	99	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	102	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	98	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	98	60-146
Trichloroethene	ug/L (ppb)	50	<1	92	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	91	73-129

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	108	105	50-154	3
Chloroethane	ug/L (ppb)	50	94	95	58-146	1
1,1-Dichloroethene	ug/L (ppb)	50	100	99	67-136	1
Methylene chloride	ug/L (ppb)	50	96	95	39-148	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	102	100	68-128	2
1,1-Dichloroethane	ug/L (ppb)	50	101	99	79-121	2
cis-1,2-Dichloroethene	ug/L (ppb)	50	101	98	80-123	3
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	98	96	73-132	2
1,1,1-Trichloroethane	ug/L (ppb)	50	101	101	83-130	0
Trichloroethene	ug/L (ppb)	50	95	95	80-120	0
Tetrachloroethene	ug/L (ppb)	50	97	97	76-121	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 12/28/12

Date Received: 12/21/12

Project: SOU_0797_20121221, F&BI 212393

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	95	96	50-154	1
Chloroethane	ug/L (ppb)	50	101	99	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	96	95	67-136	1
Methylene chloride	ug/L (ppb)	50	91	93	39-148	2
trans-1,2-Dichloroethene	ug/L (ppb)	50	96	98	68-128	2
1,1-Dichloroethane	ug/L (ppb)	50	97	98	79-121	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	96	97	80-123	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	95	95	73-132	0
1,1,1-Trichloroethane	ug/L (ppb)	50	99	99	83-130	0
Trichloroethene	ug/L (ppb)	50	92	92	80-120	0
Tetrachloroethene	ug/L (ppb)	50	94	93	76-121	1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

February 11, 2013

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included is the amended report from the testing of material submitted on February 4, 2013 from the SOU_0797_20130204, F&BI 302031 project. Per your request, the sample IDs have been amended to B117.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0208R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

February 8, 2013

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on February 4, 2013 from the SOU_0797_20130204, F&BI 302031 project. There are 9 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0208R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 4, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797_20130204, F&BI 302031 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
302031 -01	B117-10
302031 -02	B117-15
302031 -03	B117-20
302031 -04	B117-25
302031 -05	B117-30
302031 -06	B117-35
302031 -07	B117-40
302031 -08	B117-45
302031 -09	B117-50
302031 -10	B117-55

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B117-10	Client:	SoundEarth Strategies
Date Received:	02/04/13	Project:	SOU_0797_20130204, F&BI 302031
Date Extracted:	02/05/13	Lab ID:	302031-01
Date Analyzed:	02/05/13	Data File:	020511.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B117-20	Client:	SoundEarth Strategies
Date Received:	02/04/13	Project:	SOU_0797_20130204, F&BI 302031
Date Extracted:	02/05/13	Lab ID:	302031-03
Date Analyzed:	02/05/13	Data File:	020512.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	97	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B117-30	Client:	SoundEarth Strategies
Date Received:	02/04/13	Project:	SOU_0797_20130204, F&BI 302031
Date Extracted:	02/05/13	Lab ID:	302031-05
Date Analyzed:	02/05/13	Data File:	020513.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	106	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B117-40	Client:	SoundEarth Strategies
Date Received:	02/04/13	Project:	SOU_0797_20130204, F&BI 302031
Date Extracted:	02/05/13	Lab ID:	302031-07
Date Analyzed:	02/05/13	Data File:	020514.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	101	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	105	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B117-50	Client:	SoundEarth Strategies
Date Received:	02/04/13	Project:	SOU_0797_20130204, F&BI 302031
Date Extracted:	02/05/13	Lab ID:	302031-09
Date Analyzed:	02/05/13	Data File:	020515.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	96	50	150
4-Bromofluorobenzene	106	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797_20130204, F&BI 302031
Date Extracted:	02/05/13	Lab ID:	03-0126 mb2
Date Analyzed:	02/05/13	Data File:	020510.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	VM

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	94	50	150
4-Bromofluorobenzene	103	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/08/13

Date Received: 02/04/13

Project: SOU_0797_20130204, F&BI 302031

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 301327-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance Criteria
				Recovery MS	
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	60	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	64	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	74	11-103
Methylene chloride	mg/kg (ppm)	2.5	1.6	67 b	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	77	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	83	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	85	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	84	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	79	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.03	84	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.03	80	27-110

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	mg/kg (ppm)	2.5	84	85	42-107	1
Chloroethane	mg/kg (ppm)	2.5	82	85	47-115	4
1,1-Dichloroethene	mg/kg (ppm)	2.5	95	95	65-110	0
Methylene chloride	mg/kg (ppm)	2.5	99	97	62-119	2
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	92	92	71-113	0
1,1-Dichloroethane	mg/kg (ppm)	2.5	97	96	76-109	1
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	97	97	77-110	0
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	98	93	80-109	5
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	97	95	72-116	2
Trichloroethene	mg/kg (ppm)	2.5	98	97	72-107	1
Tetrachloroethene	mg/kg (ppm)	2.5	99	99	77-110	0

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

302031

Send Report to Chuck Cacek

Company SundEarth Strategies

Address 2811 E. Lincoln Ave E Suite 200

City, State, ZIP Seattle, WA 98108

Phone # 206.306.1900 Fax # 206.306.1901

SAMPLE CHAIN OF CUSTODY

DATE 02/04/13

PAGE 1 OF 2

SAMPLERS (signature) _____

PROJECT NAME/NO. 700 Dexter/0797

PO # _____

REMARKS _____

GEMS Y / N

TURNAROUND TIME _____

Standard (2 Weeks)

Rush charges authorized by: _____

Dispose after 30 days

Return samples

Will call with instructions

Sample ID per CC	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	NW1PH-Dx	NW1PH-Gx	BTEX by 802+B	VOC's by 8260	SVOC's by 8270	RCRA-8 Metals	ANALYSES REQUESTED	Notes
B118-10	B118	10	0/A	2-9-13	1055	Soil	5							X	X-per CC 2/4/13
B118-15	B118	15	02		1100	Soil	5							X	Hold
B118-20	B118	20	03		1110	Soil	5							X	Hold
B118-25	B118	25	04		1115	Soil	5							X	Hold
B118-30	B118	30	05		1125	Soil	5							X	Hold
B118-35	B118	35	06		1130	Soil	5							X	Hold
B118-40	B118	40	09		1140	Soil	5							X	Hold
B118-45	B118	45	08		1150	Soil	5							X	Hold
B118-50	B118	50	04		1200	Soil	5							X	Hold
B118-55	B118	55	10		1205	Soil	5							X	Hold

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119
Ph. (206) 285-8882
Fax: (206) 283-5044

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>[Signature]</i>	Duff A. Hershberger	SES	2-4-13	12:02
<i>[Signature]</i>	HONG NEWYEN	SES	2/4/13	12:45

Samples received at 5 00

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

February 12, 2013

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on February 8, 2013 from the SOU_0797-001-02_20130208, F&BI 302101 project. There are 5 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0212R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 8, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797-001-02_20130208, F&BI 302101 project. Samples were logged in under the laboratory ID's listed below.

Laboratory ID
302101 -01

SoundEarth Strategies
MW117-20130208

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW117-20130208	Client:	SoundEarth Strategies
Date Received:	02/08/13	Project:	SOU_0797-001-02_20130208, F&BI 302101
Date Extracted:	02/08/13	Lab ID:	302101-01
Date Analyzed:	02/08/13	Data File:	020811.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	104	57	121
Toluene-d8	101	63	127
4-Bromofluorobenzene	91	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797-001-02_20130208, F&BI 302101
Date Extracted:	02/08/13	Lab ID:	03-0131 MB
Date Analyzed:	02/08/13	Data File:	020810.D
Matrix:	Water	Instrument:	GCMS4
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	102	57	121
Toluene-d8	102	63	127
4-Bromofluorobenzene	91	60	133

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/12/13

Date Received: 02/08/13

Project: SOU_0797-001-02_20130208, F&BI 302101

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 302101-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	88	36-166
Chloroethane	ug/L (ppb)	50	<1	87	46-160
1,1-Dichloroethene	ug/L (ppb)	50	<1	91	60-136
Methylene chloride	ug/L (ppb)	50	<5	79	67-132
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	88	72-129
1,1-Dichloroethane	ug/L (ppb)	50	<1	86	70-128
cis-1,2-Dichloroethene	ug/L (ppb)	50	<1	87	71-127
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	85	69-133
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	90	60-146
Trichloroethene	ug/L (ppb)	50	<1	82	66-135
Tetrachloroethene	ug/L (ppb)	50	<1	89	73-129

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	ug/L (ppb)	50	92	93	50-154	1
Chloroethane	ug/L (ppb)	50	90	92	58-146	2
1,1-Dichloroethene	ug/L (ppb)	50	92	94	67-136	2
Methylene chloride	ug/L (ppb)	50	81	82	39-148	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	89	90	68-128	1
1,1-Dichloroethane	ug/L (ppb)	50	88	89	79-121	1
cis-1,2-Dichloroethene	ug/L (ppb)	50	89	90	80-123	1
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	87	87	73-132	0
1,1,1-Trichloroethane	ug/L (ppb)	50	93	94	83-130	1
Trichloroethene	ug/L (ppb)	50	83	84	80-120	1
Tetrachloroethene	ug/L (ppb)	50	91	93	76-121	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

30X101

SAMPLE CHAIN OF CUSTODY

ME 2/8/13 11/413

Send Report To Chuck Beck
 Company Sand Earth Strategies Inc
 Address 2811 Fairview Ave Et 2000
 City, State, ZIP Seattle WA 98109
 Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature) [Signature]
 PROJECT NAME/NO. 6797-001-02
 PO # 46500 Property
 REMARKS

Page # 1 of 1
 TURNAROUND TIME
 Standard (2 Weeks)
 RUSH 48 hr TAT
 Rush charges authorized by:
 SAMPLE DISPOSAL
 Dispose after 30 days
 Return samples
 Will call with instructions

Sample ID	Lab ID	Date	Time	Sample Type	# of containers	ANALYSES REQUESTED						Notes								
						TPH-Diesel	TPH-Gasoline	BTEX by 8021B	VOCs by 8260	SVOCs by 8270	HFS		HVOCs by 8260s							
117 MWD-20130208	01A-E	2/8/13	1054	us	5															
		2/8/13																		

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE
 Relinquished by: [Signature]
 PRINT NAME: Andrew L. Egner
 COMPANY: SE5
 DATE: 2/8/13
 TIME: 1140

Relinquished by: [Signature]
 PRINT NAME: James Polys
 COMPANY: F45
 DATE: 2/8/13
 TIME: 1140

Received by:

Samples received at 10 AC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

March 26, 2013

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on March 21, 2013 from the SOU_0797-001_20130321, F&BI 303307 project. There are 14 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
C: Brian Dixon
SOU0326R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 21, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797-001_20130321, F&BI 303307 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
303307 -01	B118-10
303307 -02	B118-20
303307 -03	B118-30
303307 -04	B118-40
303307 -05	B118-50
303307 -06	B119-10
303307 -07	B119-20
303307 -08	B119-30
303307 -09	B119-40

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B118-10	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-01
Date Analyzed:	03/22/13	Data File:	032227.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B118-20	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-02
Date Analyzed:	03/22/13	Data File:	032228.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B118-30	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-03
Date Analyzed:	03/22/13	Data File:	032229.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B118-40	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-04
Date Analyzed:	03/22/13	Data File:	032230.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B118-50	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-05
Date Analyzed:	03/22/13	Data File:	032231.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B119-10	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-06
Date Analyzed:	03/22/13	Data File:	032232.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	97	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B119-20	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-07
Date Analyzed:	03/22/13	Data File:	032233.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	99	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B119-30	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-08
Date Analyzed:	03/22/13	Data File:	032234.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	B119-40	Client:	SoundEarth Strategies
Date Received:	03/21/13	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	303307-09
Date Analyzed:	03/24/13	Data File:	032405.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	98	50	150
Toluene-d8	98	50	150
4-Bromofluorobenzene	97	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797-001_20130321
Date Extracted:	03/22/13	Lab ID:	03-0477 mb
Date Analyzed:	03/22/13	Data File:	032209.D
Matrix:	Soil	Instrument:	GCMS9
Units:	mg/kg (ppm)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	100	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration mg/kg (ppm)
Vinyl chloride	<0.05
Chloroethane	<0.5
1,1-Dichloroethene	<0.05
Methylene chloride	<0.5
trans-1,2-Dichloroethene	<0.05
1,1-Dichloroethane	<0.05
cis-1,2-Dichloroethene	<0.05
1,2-Dichloroethane (EDC)	<0.05
1,1,1-Trichloroethane	<0.05
Trichloroethene	<0.03
Tetrachloroethene	<0.025

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/26/13

Date Received: 03/21/13

Project: SOU_0797-001_20130321, F&BI 303307

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 303126-03 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result (Wet wt)	Percent Recovery MS	Acceptance Criteria
Vinyl chloride	mg/kg (ppm)	2.5	<0.05	45	10-91
Chloroethane	mg/kg (ppm)	2.5	<0.5	50	10-101
1,1-Dichloroethene	mg/kg (ppm)	2.5	<0.05	62	11-103
Methylene chloride	mg/kg (ppm)	2.5	<0.5	90	14-128
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	73	13-112
1,1-Dichloroethane	mg/kg (ppm)	2.5	<0.05	78	23-115
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	<0.05	79	25-120
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	<0.05	80	22-124
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	<0.05	75	27-112
Trichloroethene	mg/kg (ppm)	2.5	<0.03	79	30-112
Tetrachloroethene	mg/kg (ppm)	2.5	<0.025	83	27-110

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/26/13

Date Received: 03/21/13

Project: SOU_0797-001_20130321, F&BI 303307

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF SOIL SAMPLES
FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Percent Recovery LCSD	Acceptance Criteria	RPD (Limit 20)
Vinyl chloride	mg/kg (ppm)	2.5	69	77	42-107	11
Chloroethane	mg/kg (ppm)	2.5	64	66	47-115	3
1,1-Dichloroethene	mg/kg (ppm)	2.5	85	91	65-110	7
Methylene chloride	mg/kg (ppm)	2.5	97	100	62-119	3
trans-1,2-Dichloroethene	mg/kg (ppm)	2.5	93	97	71-113	4
1,1-Dichloroethane	mg/kg (ppm)	2.5	96	100	76-109	4
cis-1,2-Dichloroethene	mg/kg (ppm)	2.5	95	98	77-110	3
1,2-Dichloroethane (EDC)	mg/kg (ppm)	2.5	95	99	80-109	4
1,1,1-Trichloroethane	mg/kg (ppm)	2.5	104	103	72-116	1
Trichloroethene	mg/kg (ppm)	2.5	95	99	72-107	4
Tetrachloroethene	mg/kg (ppm)	2.5	100	103	77-110	3

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

303307

SAMPLE CHAIN OF CUSTODY

WE 03-21-13

Page # 2736

208 / 403

Send Report To Chuck Cack, Brian Dixon

Company Sand Earth Systems

Address 2611 Fairview Ave E

City, State, ZIP Seattle, WA

Phone # 206-346-1900 Fax # _____

SAMPLERS (signature) [Signature]

PROJECT NAME/NO. 0797-001

REMARKS

GEMS Y / N

PO #

TURNAROUND TIME

Standard (2 Weeks)

RUSH

Rush charges authorized by: _____

SAMPLE DISPOSAL

Dispose after 30 days

Return samples

Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of jars	ANALYSES REQUESTED						Notes		
								NWPH-Dx	NWPH-Gx	BTEX by 8021B	SVOCs by 8270	RCRA-8 Metals	HVOCs		SVOCs by 8260C	
B118-10	B118	10	DIA-E	3/21/13	1005	Soil	5									
B118-20	B118	20	02-7		1025		5									
B118-30	B118	30	03		1030		5									
B118-40	B118	40	04		1045		5									
B118-50	B118	50	05		1055		5									
B119-10	B119	10	06		1400		5									
B119-20		20	07		1410		5									
B119-30		30	08		1420		5									
B119-40		40	09		1440		5									

Friedman & Bruya, Inc.
3012 16th Avenue West
Seattle, WA 98119.
Ph. (206) 285-8282
Fax (206) 283-5044

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Reinquished by: <u>[Signature]</u>		<u>Wiz Park</u>		<u>SEI</u>		<u>3/21/13</u>	<u>1530</u>
Received by: <u>[Signature]</u>		<u>Nhan Phan</u>		<u>FE BI</u>		<u>3/21/13</u>	<u>1520</u>
Reinquished by:							
Received by:							

Samples received at 1 °C

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Bradley T. Benson, B.S.
Kurt Johnson, B.S.

3012 16th Avenue West
Seattle, WA 98119-2029
TEL: (206) 285-8282
e-mail: fbi@isomedia.com

March 28, 2013

Chuck Cacek, Project Manager
SoundEarth Strategies
2811 Fairview Ave. East, Suite 2000
Seattle, WA 98102

Dear Mr. Cacek:

Included are the results from the testing of material submitted on March 25, 2013 from the SOU_0797-001_20130325, F&BI 303352 project. There are 6 pages included in this report. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Brian Dixon
SOU0328R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on March 25, 2013 by Friedman & Bruya, Inc. from the SoundEarth Strategies SOU_0797-001_20130325, F&BI 303352 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>SoundEarth Strategies</u>
303352 -01	MW118-20130325
303352 -02	MW119-20130325

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW118-20130325	Client:	SoundEarth Strategies
Date Received:	03/25/13	Project:	SOU_0797-001_20130325, F&BI 303352
Date Extracted:	03/25/13	Lab ID:	303352-01
Date Analyzed:	03/26/13	Data File:	032615.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	96	50	150
Toluene-d8	101	50	150
4-Bromofluorobenzene	100	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	MW119-20130325	Client:	SoundEarth Strategies
Date Received:	03/25/13	Project:	SOU_0797-001_20130325, F&BI 303352
Date Extracted:	03/25/13	Lab ID:	303352-02
Date Analyzed:	03/26/13	Data File:	032616.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	103	50	150
4-Bromofluorobenzene	99	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	3.3
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By EPA Method 8260C

Client Sample ID:	Method Blank	Client:	SoundEarth Strategies
Date Received:	Not Applicable	Project:	SOU_0797-001_20130325, F&BI 303352
Date Extracted:	03/25/13	Lab ID:	03-0516 mb
Date Analyzed:	03/25/13	Data File:	032525.D
Matrix:	Water	Instrument:	GCMS9
Units:	ug/L (ppb)	Operator:	JS

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
1,2-Dichloroethane-d4	99	50	150
Toluene-d8	100	50	150
4-Bromofluorobenzene	98	50	150

Compounds:	Concentration ug/L (ppb)
Vinyl chloride	<0.2
Chloroethane	<1
1,1-Dichloroethene	<1
Methylene chloride	<5
trans-1,2-Dichloroethene	<1
1,1-Dichloroethane	<1
cis-1,2-Dichloroethene	<1
1,2-Dichloroethane (EDC)	<1
1,1,1-Trichloroethane	<1
Trichloroethene	<1
Tetrachloroethene	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 03/28/13

Date Received: 03/25/13

Project: SOU_0797-001_20130325, F&BI 303352

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF WATER
SAMPLES FOR VOLATILES BY EPA METHOD 8260C**

Laboratory Code: 303350-01 (Matrix Spike)

Analyte	Reporting Units	Spike Level	Sample Result	Percent	Acceptance
				Recovery MS	Criteria
Vinyl chloride	ug/L (ppb)	50	<0.2	98	61-139
Chloroethane	ug/L (ppb)	50	<1	117	68-126
1,1-Dichloroethene	ug/L (ppb)	50	<1	106	71-123
Methylene chloride	ug/L (ppb)	50	<5	102	61-126
trans-1,2-Dichloroethene	ug/L (ppb)	50	<1	104	72-122
1,1-Dichloroethane	ug/L (ppb)	50	<1	102	79-113
cis-1,2-Dichloroethene	ug/L (ppb)	50	5.0	101	73-119
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	<1	97	78-113
1,1,1-Trichloroethane	ug/L (ppb)	50	<1	114	79-116
Trichloroethene	ug/L (ppb)	50	4.4	100	75-109
Tetrachloroethene	ug/L (ppb)	50	200 ve	99 b	72-113

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Percent	Acceptance Criteria	RPD (Limit 20)
			Recovery LCS	Recovery LCSD		
Vinyl chloride	ug/L (ppb)	50	93	94	73-132	1
Chloroethane	ug/L (ppb)	50	113	116	68-126	3
1,1-Dichloroethene	ug/L (ppb)	50	95	97	75-119	2
Methylene chloride	ug/L (ppb)	50	93	94	63-132	1
trans-1,2-Dichloroethene	ug/L (ppb)	50	95	96	76-118	1
1,1-Dichloroethane	ug/L (ppb)	50	95	95	80-116	0
cis-1,2-Dichloroethene	ug/L (ppb)	50	92	94	81-111	2
1,2-Dichloroethane (EDC)	ug/L (ppb)	50	93	92	79-109	1
1,1,1-Trichloroethane	ug/L (ppb)	50	106	109	80-116	3
Trichloroethene	ug/L (ppb)	50	92	94	77-108	2
Tetrachloroethene	ug/L (ppb)	50	95	97	78-109	2

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

A1 - More than one compound of similar molecule structure was identified with equal probability.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for this range fell outside of acceptance criteria. The value reported is an estimate.

c - The presence of the analyte indicated may be due to carryover from previous sample injections.

d - The sample was diluted. Detection limits may be raised due to dilution.

ds - The sample was diluted. Detection limits are raised due to dilution and surrogate recoveries may not be meaningful.

dv - Insufficient sample was available to achieve normal reporting limits and limits are raised accordingly.

fb - Analyte present in the blank and the sample.

fc - The compound is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. The variability is attributed to sample inhomogeneity.

ht - Analysis performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of normal control limits. Compounds in the sample matrix interfered with the quantitation of the analyte.

j - The result is below normal reporting limits. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The analyte result in the laboratory control sample is out of control limits. The reported concentration should be considered an estimate.

jr - The rpd result in laboratory control sample associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

lc - The presence of the compound indicated is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received in a container not approved by the method. The value reported should be considered an estimate.

pr - The sample was received with incorrect preservation. The value reported should be considered an estimate.

ve - Estimated concentration calculated for an analyte response above the valid instrument calibration range. A dilution is required to obtain an accurate quantification of the analyte.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

303 852 ✓

SAMPLE CHAIN OF CUSTODY WE 03-25-13

✓2

Send Report to Chuck Cole
 Company SoundEarth Strategies, Inc.
 Address 2811 Fairview Avenue E, Suite 2000
 City, State, ZIP Seattle, WA 98102
 Phone # 206-306-1900 Fax # 206-306-1907

SAMPLERS (signature) Russ Grew
 PROJECT NAME/NO. 700 Dexter / 0797-001
 PO #
 REMARKS

Page # 1 of 1
 TURNAROUND TIME
 Standard (2 Weeks)
 ✓ RUSH 48 hr TAT
 Rush charges authorized by:
 SAMPLE DISPOSAL
 ✓ Dispose after 30 days
 Return sample
 Will call with instructions

Sample ID	Sample Location	Sample Depth	Lab ID	Date Sampled	Time Sampled	Matrix	# of Jars	ANALYSES REQUESTED						Notes		
								HVOCs by 8260C	Methane, Ethane, Ethene by RSK175	Sulfate by 375.4/SM4500B04	Nitrate by 363.2/SM4500N03	Ferrous Iron and Manganese by 200.8	Total Organic Carbon by 415.1		Total Alkalinity by 310.1/SM2320B	pH by 9040C
MU118-20130325	MU118	45	O.A.F	03/25/13	1330	H ₂ O	6	X								
MU119-20130325	MU119	25	02T	03/25/13	1200	H ₂ O	6	X								

Friedman & Bruya, Inc.
 3012 16th Avenue West
 Seattle, WA 98119-2029
 Ph. (206) 285-8282
 Fax (206) 283-5044
 FORMS\COC\COC.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>Russ Grew</u>		RELINQUISHED BY: <u>Russ Grew</u>		RECEIVED BY: <u>Phan Phan</u>	SES	03/25/13	1430
Relinquished by: _____		RECEIVED BY: _____		SAMPLES RECEIVED AT: _____		_____	_____



ANALYTICAL REPORT

November 06, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L1038867
Samples Received: 10/27/2018
Project Number: 1413.001.05.601
Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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Sc: Sample Chain of Custody	26	



MW-134-102518 L1038867-01 GW

Collected by Ben Hecht
 Collected date/time 10/25/18 12:00
 Received date/time 10/27/18 08:45

1 Cp

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 17:54	11/01/18 17:54	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 22:11	10/29/18 22:11	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 15:29	11/05/18 15:29	JHH

2 Tc

3 Ss

MW-141-102518 L1038867-02 GW

Collected by Ben Hecht
 Collected date/time 10/25/18 13:20
 Received date/time 10/27/18 08:45

4 Cn

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 18:17	11/01/18 18:17	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 22:31	10/29/18 22:31	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 15:50	11/05/18 15:50	JHH

5 Sr

6 Qc

7 Gl

MW-104-102618 L1038867-03 GW

Collected by Ben Hecht
 Collected date/time 10/26/18 08:45
 Received date/time 10/27/18 08:45

8 Al

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 18:39	11/01/18 18:39	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 22:50	10/29/18 22:50	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 16:10	11/05/18 16:10	JHH

9 Sc

MW-133-102618 L1038867-04 GW

Collected by Ben Hecht
 Collected date/time 10/26/18 11:05
 Received date/time 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 19:02	11/01/18 19:02	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 23:10	10/29/18 23:10	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 16:30	11/05/18 16:30	JHH

MW-137-102618 L1038867-05 GW

Collected by Ben Hecht
 Collected date/time 10/26/18 13:30
 Received date/time 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 19:25	11/01/18 19:25	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 23:29	10/29/18 23:29	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 16:51	11/05/18 16:51	JHH

RINSATE L1038867-06 GW

Collected by Ben Hecht
 Collected date/time 10/26/18 12:15
 Received date/time 10/27/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1189621	1	11/01/18 19:47	11/01/18 19:47	LRL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188131	1	10/29/18 23:48	10/29/18 23:48	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1191602	1	11/05/18 17:11	11/05/18 17:11	JHH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Collected date/time: 10/25/18 12:00

L1038867

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.2	<u>B</u> J	31.6	100	1	11/01/2018 17:54	WG189621
(S) a,a,a-Trifluorotoluene(FID)	96.7			78.0-120		11/01/2018 17:54	WG189621

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/29/2018 22:11	WG188131
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/29/2018 22:11	WG188131
Benzene	U		0.0896	0.500	1	11/05/2018 15:29	WG191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 22:11	WG188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 22:11	WG188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 22:11	WG188131
Bromoform	U		0.186	0.500	1	10/29/2018 22:11	WG188131
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/29/2018 22:11	WG188131
n-Butylbenzene	U	<u>JO</u>	0.143	0.500	1	10/29/2018 22:11	WG188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 22:11	WG188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 22:11	WG188131
Carbon disulfide	U		0.101	0.500	1	10/29/2018 22:11	WG188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 22:11	WG188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 22:11	WG188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 22:11	WG188131
Chloroethane	U	<u>JO</u>	0.141	2.50	1	10/29/2018 22:11	WG188131
Chloroform	U		0.0860	0.500	1	10/29/2018 22:11	WG188131
Chloromethane	U		0.153	1.25	1	11/05/2018 15:29	WG191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 22:11	WG188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 22:11	WG188131
1,2-Dibromo-3-Chloropropane	U	<u>JO</u>	0.325	2.50	1	10/29/2018 22:11	WG188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 22:11	WG188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 22:11	WG188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 22:11	WG188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 22:11	WG188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 22:11	WG188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 15:29	WG191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 22:11	WG188131
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	10/29/2018 22:11	WG188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 22:11	WG188131
cis-1,2-Dichloroethene	U		0.0933	0.500	1	11/05/2018 15:29	WG191602
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 22:11	WG188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 22:11	WG188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 22:11	WG188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 22:11	WG188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 22:11	WG188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 22:11	WG188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 15:29	WG191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 22:11	WG188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 22:11	WG188131
Ethylbenzene	U		0.158	0.500	1	11/05/2018 15:29	WG191602
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 22:11	WG188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 22:11	WG188131
n-Hexane	U		0.305	5.00	1	10/29/2018 22:11	WG188131
Iodomethane	U		0.377	10.0	1	10/29/2018 22:11	WG188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 22:11	WG188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 22:11	WG188131
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/29/2018 22:11	WG188131

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/25/18 12:00

L1038867

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/29/2018 22:11	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 22:11	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 22:11	WG1188131
Naphthalene	U	JO	0.174	2.50	1	11/05/2018 15:29	WG1191602
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 22:11	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 22:11	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 22:11	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 22:11	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 22:11	WG1188131
Tetrachloroethene	U		0.199	0.500	1	11/05/2018 15:29	WG1191602
Toluene	U		0.412	0.500	1	11/05/2018 15:29	WG1191602
1,2,3-Trichlorobenzene	U	JO	0.164	0.500	1	10/29/2018 22:11	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 22:11	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 22:11	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 22:11	WG1188131
Trichloroethene	U		0.153	0.500	1	11/05/2018 15:29	WG1191602
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 22:11	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 22:11	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/05/2018 15:29	WG1191602
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	11/05/2018 15:29	WG1191602
1,3,5-Trimethylbenzene	U		0.124	0.500	1	11/05/2018 15:29	WG1191602
Vinyl acetate	U		0.645	5.00	1	10/29/2018 22:11	WG1188131
Vinyl chloride	20.9		0.118	0.500	1	10/29/2018 22:11	WG1188131
Xylenes, Total	U		0.316	1.50	1	11/05/2018 15:29	WG1191602
(S) Toluene-d8	103			80.0-120		10/29/2018 22:11	WG1188131
(S) Toluene-d8	105			80.0-120		11/05/2018 15:29	WG1191602
(S) Dibromofluoromethane	90.8			75.0-120		10/29/2018 22:11	WG1188131
(S) Dibromofluoromethane	105			75.0-120		11/05/2018 15:29	WG1191602
(S) 4-Bromofluorobenzene	97.8			77.0-126		10/29/2018 22:11	WG1188131
(S) 4-Bromofluorobenzene	104			77.0-126		11/05/2018 15:29	WG1191602

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/25/18 13:20

L1038867

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	11/01/2018 18:17	WG1189621
(S) a,a,a-Trifluorotoluene(FID)	96.7			78.0-120		11/01/2018 18:17	WG1189621

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	<u>JO</u>	1.05	25.0	1	10/29/2018 22:31	WG1188131
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/29/2018 22:31	WG1188131
Benzene	U		0.0896	0.500	1	11/05/2018 15:50	WG1191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 22:31	WG1188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 22:31	WG1188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 22:31	WG1188131
Bromoform	U		0.186	0.500	1	10/29/2018 22:31	WG1188131
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/29/2018 22:31	WG1188131
n-Butylbenzene	U	<u>JO</u>	0.143	0.500	1	10/29/2018 22:31	WG1188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 22:31	WG1188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 22:31	WG1188131
Carbon disulfide	0.317	<u>J</u>	0.101	0.500	1	10/29/2018 22:31	WG1188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 22:31	WG1188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 22:31	WG1188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 22:31	WG1188131
Chloroethane	U	<u>JO</u>	0.141	2.50	1	10/29/2018 22:31	WG1188131
Chloroform	U		0.0860	0.500	1	10/29/2018 22:31	WG1188131
Chloromethane	U		0.153	1.25	1	11/05/2018 15:50	WG1191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 22:31	WG1188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dibromo-3-Chloropropane	U	<u>JO</u>	0.325	2.50	1	10/29/2018 22:31	WG1188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 22:31	WG1188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 22:31	WG1188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 22:31	WG1188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 22:31	WG1188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 15:50	WG1191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	10/29/2018 22:31	WG1188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 22:31	WG1188131
cis-1,2-Dichloroethene	3.10		0.0933	0.500	1	11/05/2018 15:50	WG1191602
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 22:31	WG1188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 22:31	WG1188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 22:31	WG1188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 22:31	WG1188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 22:31	WG1188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 22:31	WG1188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 15:50	WG1191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 22:31	WG1188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 22:31	WG1188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 22:31	WG1188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 22:31	WG1188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 22:31	WG1188131
n-Hexane	U		0.305	5.00	1	10/29/2018 22:31	WG1188131
Iodomethane	U		0.377	10.0	1	10/29/2018 22:31	WG1188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 22:31	WG1188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 22:31	WG1188131
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/29/2018 22:31	WG1188131



Collected date/time: 10/25/18 13:20

L1038867

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/29/2018 22:31	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 22:31	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 22:31	WG1188131
Naphthalene	U	JO	0.174	2.50	1	11/05/2018 15:50	WG1191602
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 22:31	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 22:31	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 22:31	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 22:31	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 22:31	WG1188131
Tetrachloroethene	U		0.199	0.500	1	11/05/2018 15:50	WG1191602
Toluene	U		0.412	0.500	1	11/05/2018 15:50	WG1191602
1,2,3-Trichlorobenzene	U	JO	0.164	0.500	1	10/29/2018 22:31	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 22:31	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 22:31	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 22:31	WG1188131
Trichloroethene	U		0.153	0.500	1	11/05/2018 15:50	WG1191602
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 22:31	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 22:31	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	11/05/2018 15:50	WG1191602
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 22:31	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 22:31	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 22:31	WG1188131
Vinyl chloride	U		0.118	0.500	1	10/29/2018 22:31	WG1188131
Xylenes, Total	U		0.316	1.50	1	11/05/2018 15:50	WG1191602
(S) Toluene-d8	103			80.0-120		10/29/2018 22:31	WG1188131
(S) Toluene-d8	106			80.0-120		11/05/2018 15:50	WG1191602
(S) Dibromofluoromethane	91.9			75.0-120		10/29/2018 22:31	WG1188131
(S) Dibromofluoromethane	103			75.0-120		11/05/2018 15:50	WG1191602
(S) 4-Bromofluorobenzene	95.4			77.0-126		10/29/2018 22:31	WG1188131
(S) 4-Bromofluorobenzene	107			77.0-126		11/05/2018 15:50	WG1191602

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/26/18 08:45

L1038867

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1570		31.6	100	1	11/01/2018 18:39	WG189621
(S) a,a,a-Trifluorotoluene(FID)	95.4			78.0-120		11/01/2018 18:39	WG189621

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.91	<u>J JO</u>	1.05	25.0	1	10/29/2018 22:50	WG188131
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/29/2018 22:50	WG188131
Benzene	U		0.0896	0.500	1	11/05/2018 16:10	WG191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 22:50	WG188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 22:50	WG188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 22:50	WG188131
Bromoform	U		0.186	0.500	1	10/29/2018 22:50	WG188131
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/29/2018 22:50	WG188131
n-Butylbenzene	U	<u>JO</u>	0.143	0.500	1	10/29/2018 22:50	WG188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 22:50	WG188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 22:50	WG188131
Carbon disulfide	0.675		0.101	0.500	1	10/29/2018 22:50	WG188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 22:50	WG188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 22:50	WG188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 22:50	WG188131
Chloroethane	U	<u>JO</u>	0.141	2.50	1	10/29/2018 22:50	WG188131
Chloroform	U		0.0860	0.500	1	10/29/2018 22:50	WG188131
Chloromethane	U		0.153	1.25	1	11/05/2018 16:10	WG191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 22:50	WG188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 22:50	WG188131
1,2-Dibromo-3-Chloropropane	U	<u>JO</u>	0.325	2.50	1	10/29/2018 22:50	WG188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 22:50	WG188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 22:50	WG188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 22:50	WG188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 22:50	WG188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 22:50	WG188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 16:10	WG191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 22:50	WG188131
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	10/29/2018 22:50	WG188131
1,1-Dichloroethene	0.374	<u>J</u>	0.188	0.500	1	10/29/2018 22:50	WG188131
cis-1,2-Dichloroethene	71.2		0.0933	0.500	1	10/29/2018 22:50	WG188131
trans-1,2-Dichloroethene	0.257	<u>J</u>	0.152	0.500	1	10/29/2018 22:50	WG188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 22:50	WG188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 22:50	WG188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 22:50	WG188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 22:50	WG188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 22:50	WG188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 16:10	WG191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 22:50	WG188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 22:50	WG188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 22:50	WG188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 22:50	WG188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 22:50	WG188131
n-Hexane	U		0.305	5.00	1	10/29/2018 22:50	WG188131
Iodomethane	U		0.377	10.0	1	10/29/2018 22:50	WG188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 22:50	WG188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 22:50	WG188131
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/29/2018 22:50	WG188131

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/26/18 08:45

L1038867

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/29/2018 22:50	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 22:50	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 22:50	WG1188131
Naphthalene	U	JO	0.174	2.50	1	11/05/2018 16:10	WG1191602
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 22:50	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 22:50	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 22:50	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 22:50	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 22:50	WG1188131
Tetrachloroethene	1.87		0.199	0.500	1	10/29/2018 22:50	WG1188131
Toluene	0.618		0.412	0.500	1	11/05/2018 16:10	WG1191602
1,2,3-Trichlorobenzene	U	JO	0.164	0.500	1	10/29/2018 22:50	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 22:50	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 22:50	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 22:50	WG1188131
Trichloroethene	2.94		0.153	0.500	1	10/29/2018 22:50	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 22:50	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 22:50	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 22:50	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 22:50	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 22:50	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 22:50	WG1188131
Vinyl chloride	43.5		0.118	0.500	1	10/29/2018 22:50	WG1188131
Xylenes, Total	U		0.316	1.50	1	11/05/2018 16:10	WG1191602
(S) Toluene-d8	103			80.0-120		10/29/2018 22:50	WG1188131
(S) Toluene-d8	104			80.0-120		11/05/2018 16:10	WG1191602
(S) Dibromofluoromethane	92.2			75.0-120		10/29/2018 22:50	WG1188131
(S) Dibromofluoromethane	106			75.0-120		11/05/2018 16:10	WG1191602
(S) 4-Bromofluorobenzene	95.3			77.0-126		10/29/2018 22:50	WG1188131
(S) 4-Bromofluorobenzene	111			77.0-126		11/05/2018 16:10	WG1191602

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/26/18 11:05

L1038867

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	458		31.6	100	1	11/01/2018 19:02	WG189621
(S) a,a,a-Trifluorotoluene(FID)	96.7			78.0-120		11/01/2018 19:02	WG189621

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.14	<u>J JO</u>	1.05	25.0	1	10/29/2018 23:10	WG188131
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/29/2018 23:10	WG188131
Benzene	U		0.0896	0.500	1	11/05/2018 16:30	WG191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 23:10	WG188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 23:10	WG188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 23:10	WG188131
Bromoform	U		0.186	0.500	1	10/29/2018 23:10	WG188131
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/29/2018 23:10	WG188131
n-Butylbenzene	U	<u>JO</u>	0.143	0.500	1	10/29/2018 23:10	WG188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 23:10	WG188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 23:10	WG188131
Carbon disulfide	0.205	<u>J</u>	0.101	0.500	1	10/29/2018 23:10	WG188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 23:10	WG188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 23:10	WG188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 23:10	WG188131
Chloroethane	U	<u>JO</u>	0.141	2.50	1	10/29/2018 23:10	WG188131
Chloroform	U		0.0860	0.500	1	10/29/2018 23:10	WG188131
Chloromethane	U		0.153	1.25	1	11/05/2018 16:30	WG191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 23:10	WG188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 23:10	WG188131
1,2-Dibromo-3-Chloropropane	U	<u>JO</u>	0.325	2.50	1	10/29/2018 23:10	WG188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 23:10	WG188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 23:10	WG188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 23:10	WG188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 23:10	WG188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 23:10	WG188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 16:30	WG191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 23:10	WG188131
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	10/29/2018 23:10	WG188131
1,1-Dichloroethene	0.619		0.188	0.500	1	10/29/2018 23:10	WG188131
cis-1,2-Dichloroethene	7.94		0.0933	0.500	1	10/29/2018 23:10	WG188131
trans-1,2-Dichloroethene	0.257	<u>J</u>	0.152	0.500	1	10/29/2018 23:10	WG188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 23:10	WG188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 23:10	WG188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 23:10	WG188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 23:10	WG188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 23:10	WG188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 16:30	WG191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 23:10	WG188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 23:10	WG188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 23:10	WG188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 23:10	WG188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 23:10	WG188131
n-Hexane	U		0.305	5.00	1	10/29/2018 23:10	WG188131
Iodomethane	U		0.377	10.0	1	10/29/2018 23:10	WG188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 23:10	WG188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 23:10	WG188131
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/29/2018 23:10	WG188131



Collected date/time: 10/26/18 11:05

L1038867

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/29/2018 23:10	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 23:10	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 23:10	WG1188131
Naphthalene	0.411	JJO	0.174	2.50	1	10/29/2018 23:10	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 23:10	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 23:10	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 23:10	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 23:10	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 23:10	WG1188131
Tetrachloroethene	1.92		0.199	0.500	1	10/29/2018 23:10	WG1188131
Toluene	U		0.412	0.500	1	11/05/2018 16:30	WG1191602
1,2,3-Trichlorobenzene	U	JO	0.164	0.500	1	10/29/2018 23:10	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 23:10	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 23:10	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 23:10	WG1188131
Trichloroethene	1.63		0.153	0.500	1	10/29/2018 23:10	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 23:10	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 23:10	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 23:10	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 23:10	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 23:10	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 23:10	WG1188131
Vinyl chloride	3.43		0.118	0.500	1	10/29/2018 23:10	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 23:10	WG1188131
(S) Toluene-d8	103			80.0-120		10/29/2018 23:10	WG1188131
(S) Toluene-d8	106			80.0-120		11/05/2018 16:30	WG1191602
(S) Dibromofluoromethane	91.7			75.0-120		10/29/2018 23:10	WG1188131
(S) Dibromofluoromethane	107			75.0-120		11/05/2018 16:30	WG1191602
(S) 4-Bromofluorobenzene	95.7			77.0-126		10/29/2018 23:10	WG1188131
(S) 4-Bromofluorobenzene	108			77.0-126		11/05/2018 16:30	WG1191602

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/26/18 13:30

L1038867

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	86.9	<u>B</u> <u>J</u>	31.6	100	1	11/01/2018 19:25	WG189621
(S) a,a,a-Trifluorotoluene(FID)	96.8			78.0-120		11/01/2018 19:25	WG189621

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/29/2018 23:29	WG188131
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/29/2018 23:29	WG188131
Benzene	U		0.0896	0.500	1	11/05/2018 16:51	WG191602
Bromobenzene	U		0.133	0.500	1	10/29/2018 23:29	WG188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 23:29	WG188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 23:29	WG188131
Bromoform	U		0.186	0.500	1	10/29/2018 23:29	WG188131
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/29/2018 23:29	WG188131
n-Butylbenzene	U	<u>JO</u>	0.143	0.500	1	10/29/2018 23:29	WG188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 23:29	WG188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 23:29	WG188131
Carbon disulfide	0.282	<u>J</u>	0.101	0.500	1	10/29/2018 23:29	WG188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 23:29	WG188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 23:29	WG188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 23:29	WG188131
Chloroethane	U	<u>JO</u>	0.141	2.50	1	10/29/2018 23:29	WG188131
Chloroform	U		0.0860	0.500	1	10/29/2018 23:29	WG188131
Chloromethane	U		0.153	1.25	1	11/05/2018 16:51	WG191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 23:29	WG188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 23:29	WG188131
1,2-Dibromo-3-Chloropropane	U	<u>JO</u>	0.325	2.50	1	10/29/2018 23:29	WG188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 23:29	WG188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 23:29	WG188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 23:29	WG188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 23:29	WG188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 23:29	WG188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 16:51	WG191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 23:29	WG188131
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	10/29/2018 23:29	WG188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 23:29	WG188131
cis-1,2-Dichloroethene	0.893		0.0933	0.500	1	10/29/2018 23:29	WG188131
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 23:29	WG188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 23:29	WG188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 23:29	WG188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 23:29	WG188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 23:29	WG188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 23:29	WG188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 16:51	WG191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 23:29	WG188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 23:29	WG188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 23:29	WG188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 23:29	WG188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 23:29	WG188131
n-Hexane	U		0.305	5.00	1	10/29/2018 23:29	WG188131
Iodomethane	U		0.377	10.0	1	10/29/2018 23:29	WG188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 23:29	WG188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 23:29	WG188131
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/29/2018 23:29	WG188131



Collected date/time: 10/26/18 13:30

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/29/2018 23:29	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 23:29	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 23:29	WG1188131
Naphthalene	U	<u>JO</u>	0.174	2.50	1	10/29/2018 23:29	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 23:29	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 23:29	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 23:29	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 23:29	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 23:29	WG1188131
Tetrachloroethene	0.896		0.199	0.500	1	10/29/2018 23:29	WG1188131
Toluene	U		0.412	0.500	1	11/05/2018 16:51	WG1191602
1,2,3-Trichlorobenzene	U	<u>JO</u>	0.164	0.500	1	10/29/2018 23:29	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 23:29	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 23:29	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 23:29	WG1188131
Trichloroethene	0.463	<u>J</u>	0.153	0.500	1	10/29/2018 23:29	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 23:29	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 23:29	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 23:29	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 23:29	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 23:29	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 23:29	WG1188131
Vinyl chloride	U		0.118	0.500	1	10/29/2018 23:29	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 23:29	WG1188131
(S) Toluene-d8	103			80.0-120		10/29/2018 23:29	WG1188131
(S) Toluene-d8	107			80.0-120		11/05/2018 16:51	WG1191602
(S) Dibromofluoromethane	91.4			75.0-120		10/29/2018 23:29	WG1188131
(S) Dibromofluoromethane	105			75.0-120		11/05/2018 16:51	WG1191602
(S) 4-Bromofluorobenzene	94.9			77.0-126		10/29/2018 23:29	WG1188131
(S) 4-Bromofluorobenzene	105			77.0-126		11/05/2018 16:51	WG1191602

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	41.5	<u>B</u> <u>J</u>	31.6	100	1	11/01/2018 19:47	WG189621
(S) a,a,a-Trifluorotoluene(FID)	97.1			78.0-120		11/01/2018 19:47	WG189621

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.86	<u>J</u> <u>JO</u>	1.05	25.0	1	10/29/2018 23:48	WG188131
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/29/2018 23:48	WG188131
Benzene	U		0.0896	0.500	1	10/29/2018 23:48	WG188131
Bromobenzene	U		0.133	0.500	1	10/29/2018 23:48	WG188131
Bromodichloromethane	U		0.0800	0.500	1	10/29/2018 23:48	WG188131
Bromochloromethane	U		0.145	0.500	1	10/29/2018 23:48	WG188131
Bromoform	U		0.186	0.500	1	10/29/2018 23:48	WG188131
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/29/2018 23:48	WG188131
n-Butylbenzene	U	<u>JO</u>	0.143	0.500	1	10/29/2018 23:48	WG188131
sec-Butylbenzene	U		0.134	0.500	1	10/29/2018 23:48	WG188131
tert-Butylbenzene	U		0.183	0.500	1	10/29/2018 23:48	WG188131
Carbon disulfide	U		0.101	0.500	1	10/29/2018 23:48	WG188131
Carbon tetrachloride	U		0.159	0.500	1	10/29/2018 23:48	WG188131
Chlorobenzene	U		0.140	0.500	1	10/29/2018 23:48	WG188131
Chlorodibromomethane	U		0.128	0.500	1	10/29/2018 23:48	WG188131
Chloroethane	U	<u>JO</u>	0.141	2.50	1	10/29/2018 23:48	WG188131
Chloroform	U		0.0860	0.500	1	10/29/2018 23:48	WG188131
Chloromethane	U		0.153	1.25	1	11/05/2018 17:11	WG191602
2-Chlorotoluene	U		0.111	0.500	1	10/29/2018 23:48	WG188131
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2018 23:48	WG188131
1,2-Dibromo-3-Chloropropane	U	<u>JO</u>	0.325	2.50	1	10/29/2018 23:48	WG188131
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2018 23:48	WG188131
Dibromomethane	U		0.117	0.500	1	10/29/2018 23:48	WG188131
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2018 23:48	WG188131
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2018 23:48	WG188131
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2018 23:48	WG188131
Dichlorodifluoromethane	U		0.127	2.50	1	11/05/2018 17:11	WG191602
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2018 23:48	WG188131
1,2-Dichloroethane	U	<u>JO</u>	0.108	0.500	1	10/29/2018 23:48	WG188131
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2018 23:48	WG188131
cis-1,2-Dichloroethene	0.486	<u>J</u>	0.0933	0.500	1	10/29/2018 23:48	WG188131
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2018 23:48	WG188131
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2018 23:48	WG188131
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2018 23:48	WG188131
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2018 23:48	WG188131
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2018 23:48	WG188131
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2018 23:48	WG188131
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	11/05/2018 17:11	WG191602
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2018 23:48	WG188131
Di-isopropyl ether	U		0.0924	0.500	1	10/29/2018 23:48	WG188131
Ethylbenzene	U		0.158	0.500	1	10/29/2018 23:48	WG188131
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2018 23:48	WG188131
2-Hexanone	U		0.757	5.00	1	10/29/2018 23:48	WG188131
n-Hexane	U		0.305	5.00	1	10/29/2018 23:48	WG188131
Iodomethane	U		0.377	10.0	1	10/29/2018 23:48	WG188131
Isopropylbenzene	U		0.126	0.500	1	10/29/2018 23:48	WG188131
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2018 23:48	WG188131
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/29/2018 23:48	WG188131

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/29/2018 23:48	WG1188131
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/29/2018 23:48	WG1188131
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2018 23:48	WG1188131
Naphthalene	U	<u>JO</u>	0.174	2.50	1	10/29/2018 23:48	WG1188131
n-Propylbenzene	U		0.162	0.500	1	10/29/2018 23:48	WG1188131
Styrene	U		0.117	0.500	1	10/29/2018 23:48	WG1188131
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2018 23:48	WG1188131
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2018 23:48	WG1188131
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2018 23:48	WG1188131
Tetrachloroethene	0.850		0.199	0.500	1	10/29/2018 23:48	WG1188131
Toluene	0.527		0.412	0.500	1	10/29/2018 23:48	WG1188131
1,2,3-Trichlorobenzene	U	<u>JO</u>	0.164	0.500	1	10/29/2018 23:48	WG1188131
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2018 23:48	WG1188131
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/29/2018 23:48	WG1188131
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2018 23:48	WG1188131
Trichloroethene	0.371	<u>J</u>	0.153	0.500	1	10/29/2018 23:48	WG1188131
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2018 23:48	WG1188131
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2018 23:48	WG1188131
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2018 23:48	WG1188131
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2018 23:48	WG1188131
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2018 23:48	WG1188131
Vinyl acetate	U		0.645	5.00	1	10/29/2018 23:48	WG1188131
Vinyl chloride	U		0.118	0.500	1	10/29/2018 23:48	WG1188131
Xylenes, Total	U		0.316	1.50	1	10/29/2018 23:48	WG1188131
(S) Toluene-d8	103			80.0-120		10/29/2018 23:48	WG1188131
(S) Toluene-d8	103			80.0-120		11/05/2018 17:11	WG1191602
(S) Dibromofluoromethane	92.8			75.0-120		10/29/2018 23:48	WG1188131
(S) Dibromofluoromethane	106			75.0-120		11/05/2018 17:11	WG1191602
(S) 4-Bromofluorobenzene	95.6			77.0-126		10/29/2018 23:48	WG1188131
(S) 4-Bromofluorobenzene	105			77.0-126		11/05/2018 17:11	WG1191602

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L1038867-01.02.03.04.05.06](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
(MB) R3356100-3 11/01/18 12:12				
Gasoline Range Organics-NWTPH	44.3	J	316	100
^(S) a,a-o-Trifluorotoluene(FID)	95.4			78.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(LCS) R3356100-2 11/01/18 11:27 • (LCSD) R3356100-1 11/01/18 10:44										
Gasoline Range Organics-NWTPH	5500	6320	5470	115	99.4	70.0-124			14.4	20
^(S) a,a-o-Trifluorotoluene(FID)				102	101	78.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
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5 Sr
6 Qc
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Method Blank (MB)

(MB) R3356910-4 10/29/18 16:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3356910-4 10/29/18 16:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	92.3			75.0-120
(S) 4-Bromofluorobenzene	97.5			77.0-126

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1 Cp
2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356910-1 10/29/18 14:45 • (LCSD) R3356910-2 10/29/18 15:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	82.1	80.1	65.7	64.1	19.0-160			2.39	27
Acrylonitrile	125	97.5	96.6	78.0	77.3	55.0-149			0.905	20
Benzene	25.0	22.6	22.3	90.6	89.0	70.0-123			1.70	20
Bromobenzene	25.0	22.6	24.6	90.4	98.4	73.0-121			8.48	20
Bromodichloromethane	25.0	22.4	22.4	89.6	89.5	75.0-120			0.0545	20
Bromochloromethane	25.0	24.3	24.0	97.0	96.0	76.0-122			1.12	20
Bromoform	25.0	26.0	28.8	104	115	68.0-132			10.2	20
Bromomethane	25.0	18.1	21.0	72.5	84.2	10.0-160			14.9	25
n-Butylbenzene	25.0	18.8	20.2	75.2	80.6	73.0-125			6.96	20
sec-Butylbenzene	25.0	21.6	23.6	86.4	94.6	75.0-125			9.00	20
tert-Butylbenzene	25.0	23.0	25.3	91.9	101	76.0-124			9.43	20
Carbon disulfide	25.0	23.7	22.3	95.0	89.3	61.0-128			6.10	20
Carbon tetrachloride	25.0	22.5	22.1	90.0	88.2	68.0-126			1.99	20
Chlorobenzene	25.0	26.1	25.8	104	103	80.0-121			1.01	20
Chlorodibromomethane	25.0	26.1	25.9	104	104	77.0-125			0.649	20
Chloroethane	25.0	19.8	20.4	79.0	81.6	47.0-150			3.18	20
Chloroform	25.0	22.4	22.1	89.8	88.4	73.0-120			1.57	20
2-Chlorotoluene	25.0	23.4	25.4	93.8	102	76.0-123			8.19	20
4-Chlorotoluene	25.0	23.1	25.0	92.4	100	75.0-122			8.07	20
1,2-Dibromo-3-Chloropropane	25.0	19.1	21.9	76.5	87.5	58.0-134			13.4	20
1,2-Dibromoethane	25.0	24.8	24.8	99.2	99.1	80.0-122			0.0468	20
Dibromomethane	25.0	23.0	23.1	92.0	92.5	80.0-120			0.523	20
1,2-Dichlorobenzene	25.0	21.6	23.2	86.2	92.8	79.0-121			7.34	20
1,3-Dichlorobenzene	25.0	22.9	24.6	91.6	98.3	79.0-120			7.06	20
1,4-Dichlorobenzene	25.0	22.2	24.3	88.7	97.4	79.0-120			9.36	20
1,1-Dichloroethane	25.0	21.8	21.4	87.3	85.5	70.0-126			2.04	20
1,2-Dichloroethane	25.0	19.7	19.7	78.9	78.7	70.0-128			0.233	20
1,1-Dichloroethene	25.0	25.0	23.7	100	94.9	71.0-124			5.29	20
cis-1,2-Dichloroethene	25.0	24.1	23.5	96.4	93.8	73.0-120			2.71	20
trans-1,2-Dichloroethene	25.0	23.4	23.0	93.7	92.2	73.0-120			1.63	20
1,2-Dichloropropane	25.0	23.2	23.0	92.8	91.9	77.0-125			0.997	20
1,1-Dichloropropene	25.0	22.3	21.7	89.2	87.0	74.0-126			2.54	20
1,3-Dichloropropene	25.0	24.2	23.7	96.7	94.8	80.0-120			2.03	20
cis-1,3-Dichloropropene	25.0	24.7	24.4	98.8	97.8	80.0-123			1.06	20
trans-1,3-Dichloropropene	25.0	24.4	24.1	97.7	96.6	78.0-124			1.11	20
2,2-Dichloropropane	25.0	21.9	21.3	87.7	85.4	58.0-130			2.69	20
Di-isopropyl ether	25.0	20.5	20.3	82.1	81.0	58.0-138			1.33	20
Ethylbenzene	25.0	25.8	25.5	103	102	79.0-123			1.18	20
Hexachloro-1,3-butadiene	25.0	20.1	23.3	80.4	93.1	54.0-138			14.6	20
2-Hexanone	125	108	108	86.2	86.2	67.0-149			0.0374	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356910-1 10/29/18 14:45 • (LCSD) R3356910-2 10/29/18 15:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
n-Hexane	25.0	20.7	20.3	82.8	81.3	57.0-133			1.85	20
Iodomethane	125	132	125	105	100	33.0-147			5.12	26
Isopropylbenzene	25.0	23.7	25.6	94.7	103	76.0-127			7.88	20
p-Isopropyltoluene	25.0	21.8	23.8	87.1	95.2	76.0-125			8.88	20
2-Butanone (MEK)	125	87.6	86.1	70.1	68.8	44.0-160			1.73	20
Methylene Chloride	25.0	23.2	22.5	92.7	90.1	67.0-120			2.84	20
4-Methyl-2-pentanone (MIBK)	125	100	101	80.3	80.6	68.0-142			0.367	20
Methyl tert-butyl ether	25.0	21.5	20.8	86.1	83.1	68.0-125			3.61	20
Naphthalene	25.0	18.1	19.9	72.3	79.6	54.0-135			9.62	20
n-Propylbenzene	25.0	22.7	24.9	90.9	99.5	77.0-124			9.05	20
Styrene	25.0	24.8	26.8	99.2	107	73.0-130			7.52	20
1,1,1,2-Tetrachloroethane	25.0	27.0	26.9	108	108	75.0-125			0.528	20
1,1,2,2-Tetrachloroethane	25.0	23.7	26.1	94.9	104	65.0-130			9.48	20
1,1,2-Trichlorotrifluoroethane	25.0	24.3	25.4	97.3	102	69.0-132			4.29	20
Tetrachloroethene	25.0	26.8	26.5	107	106	72.0-132			0.926	20
Toluene	25.0	24.8	24.4	99.4	97.5	79.0-120			1.94	20
1,2,3-Trichlorobenzene	25.0	19.4	21.7	77.4	86.8	50.0-138			11.5	20
1,2,4-Trichlorobenzene	25.0	20.0	22.1	80.1	88.3	57.0-137			9.74	20
1,1,1-Trichloroethane	25.0	23.0	22.4	92.0	89.5	73.0-124			2.77	20
1,1,2-Trichloroethane	25.0	25.0	25.0	100	100	80.0-120			0.0538	20
Trichloroethene	25.0	25.2	25.1	101	100	78.0-124			0.315	20
Trichlorofluoromethane	25.0	21.2	21.4	85.0	85.5	59.0-147			0.621	20
1,2,3-Trichloropropane	25.0	24.0	25.5	95.9	102	73.0-130			6.34	20
1,2,4-Trimethylbenzene	25.0	22.6	24.7	90.5	98.8	76.0-121			8.73	20
1,2,3-Trimethylbenzene	25.0	21.4	23.0	85.5	92.2	77.0-120			7.48	20
1,3,5-Trimethylbenzene	25.0	23.7	25.8	94.8	103	76.0-122			8.43	20
Vinyl acetate	125	128	129	103	103	11.0-160			0.600	20
Vinyl chloride	25.0	20.7	20.9	82.8	83.8	67.0-131			1.10	20
Xylenes, Total	75.0	76.3	75.1	102	100	79.0-123			1.59	20
(S) Toluene-d8				101	100	80.0-120				
(S) Dibromofluoromethane				91.5	90.1	75.0-120				
(S) 4-Bromofluorobenzene				93.2	97.5	77.0-126				

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Method Blank (MB)

(MB) R3357068-4 11/05/18 10:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Benzene	U		0.0896	0.500
Chloromethane	U		0.153	1.25
Dichlorodifluoromethane	U		0.127	2.50
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Ethylbenzene	U		0.158	0.500
Naphthalene	U		0.174	2.50
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
Trichloroethene	U		0.153	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	107			80.0-120
(S) Dibromofluoromethane	105			75.0-120
(S) 4-Bromofluorobenzene	107			77.0-126

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3357068-1 11/05/18 09:32 • (LCSD) R3357068-2 11/05/18 09:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Benzene	25.0	23.8	24.4	95.3	97.4	70.0-123			2.25	20
Chloromethane	25.0	22.4	23.6	89.5	94.5	41.0-142			5.45	20
Dichlorodifluoromethane	25.0	28.9	29.1	116	116	51.0-149			0.486	20
cis-1,2-Dichloroethene	25.0	25.5	26.3	102	105	73.0-120			3.20	20
trans-1,4-Dichloro-2-butene	25.0	22.8	23.2	91.3	92.8	33.0-144			1.69	20
Ethylbenzene	25.0	25.2	26.5	101	106	79.0-123			4.97	20
Naphthalene	25.0	19.4	21.1	77.6	84.4	54.0-135			8.45	20
Tetrachloroethene	25.0	26.0	27.8	104	111	72.0-132			6.43	20
Toluene	25.0	24.8	25.8	99.2	103	79.0-120			3.86	20
Trichloroethene	25.0	23.8	24.7	95.2	98.8	78.0-124			3.79	20
1,2,4-Trimethylbenzene	25.0	27.0	27.4	108	110	76.0-121			1.75	20
1,2,3-Trimethylbenzene	25.0	25.1	25.4	101	102	77.0-120			1.25	20
1,3,5-Trimethylbenzene	25.0	25.9	26.2	104	105	76.0-122			1.14	20
Xylenes, Total	75.0	75.6	78.8	101	105	79.0-123			4.15	20
(S) Toluene-d8				105	105	80.0-120				
(S) Dibromofluoromethane				107	106	75.0-120				

ACCOUNT: PES Environmental, Inc - WA

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1038867-01.02.03.04.05.06](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3357068-1 11/05/18 09:32 • (LCSD) R3357068-2 11/05/18 09:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(S) 4-Bromofluorobenzene				106	106	77.0-126				

Public Review Draft

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
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- ⁶ Qc
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- ⁸ Al
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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.

1 Cp

2 Tc

3 Ss

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Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

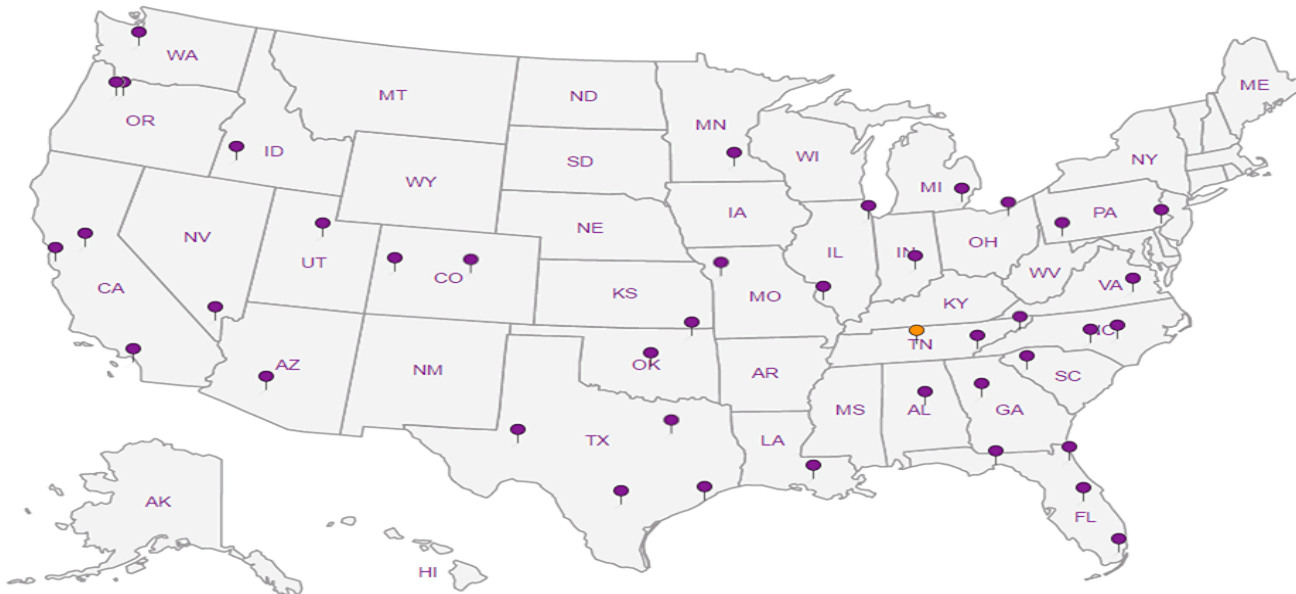
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:
Email To: bhaldeman@pesenv.com

Report to:
Bill Haldeman

Project Description: **American Linen**

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #: **1413.001.05.601**

City/State Collected:
Lab Project #: **PESENVSWA-HALDEMAN**

Collected by (print):
Ben Hecht

Site/Facility ID #

P.O. #

Contacted by (signature):
Ben Hecht

Rush? (lab MUST be notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 30 Day (Rad Only)
Three Day

Quote #

Immediately Packed on ice N Y

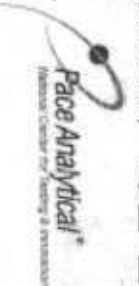
Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cnt's	No of	Date Results Needed
MW-134-102518	Grab	GW	85	10/25/18	12:00	3	X	
MW-141-102518		GW	90		13:20	3	X	
MW-104-102618		GW	124	10/26/18	08:45	3	X	
MW-133-102618		GW	134		11:05	3	X	
MW-137-102618		GW	110		13:30	3	X	
Rinsate	-	GW	-		12:15	3	X	

V8260C 40ml Amb-HCl

Price Chk

Analysis / Container / Preservative

Chain of custody Page ___ of ___



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-798-5858
Phone: 800-767-5859
Fax: 615-798-5859



L# **L1038867**

H151

Account: **PESENVSWA**

Template: **T141146**

Prelogin: **P673965**

TSR: **110 - Brian Ford**

PB:

Shipped Via: **FedEx Ground**

Remarks: Sample # (lab only)

- * Matrix: SS - Soil AIR - Air F - Filter
- GW - Groundwater B - Bioassay
- WW - Wastewater
- DW - Drinking Water
- OT - Other

Remarks:
Samples returned via:
UPS FedEx Courier

RAD SCREEN: <0.5 pCi/l

pH _____ Temp _____
Flow _____ Other _____

Relinquished by: (Signature) *[Signature]*

Date: **10/26/18**

Time: **16:00**

Received by: (Signature) *[Signature]*

Trip Blank Received: Yes/No
HCL/Mesh TR

Sample Receipt Checklist:
COC Bag Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Corrupt bottles used: Y N
Sufficient volume sent: Y N
IT Applicable: Y N
VQA zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature) *[Signature]*

Date:

Time:

Received by: (Signature)

Temp: **34.0 = 34.5** °C
Bottles Received: **18 VD**

If preservation required by login: Date/Time

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature) *[Signature]*

Date: **10/27/18** Time: **0845**

Hold: Condition: **NCF / OK**



ANALYTICAL REPORT

November 06, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L1039305
Samples Received: 10/30/2018
Project Number: 14B.001.05
Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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TRIP BLANK L1039305-04	11	
Qc: Quality Control Summary	13	6 Qc
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Gl: Glossary of Terms	18	8 Al
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Sc: Sample Chain of Custody	20	9 Sc



MW-136-102918 L1039305-01 GW

Collected by R. McLaughlin
 Collected date/time 10/29/18 08:30
 Received date/time 10/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1190352	1	11/02/18 19:24	11/02/18 19:24	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/31/18 01:41	10/31/18 01:41	JCP

1 Cp

2 Tc

3 Ss

MW-138-102918 L1039305-02 GW

Collected by R. McLaughlin
 Collected date/time 10/29/18 10:40
 Received date/time 10/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1190352	1	11/02/18 19:46	11/02/18 19:46	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/31/18 02:03	10/31/18 02:03	JCP

4 Cn

5 Sr

6 Qc

W-MW-01-102918 L1039305-03 GW

Collected by R. McLaughlin
 Collected date/time 10/29/18 12:10
 Received date/time 10/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1190352	1	11/02/18 20:09	11/02/18 20:09	JAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/31/18 02:24	10/31/18 02:24	JCP

7 Gl

8 Al

9 Sc

TRIP BLANK L1039305-04 GW

Collected by R. McLaughlin
 Collected date/time 10/29/18 00:00
 Received date/time 10/30/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1188785	1	10/30/18 20:00	10/30/18 20:00	JCP



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	31.9	<u>B</u> <u>J</u>	31.6	100	1	11/02/2018 19:24	WG1190352
(S) a,a,a-Trifluorotoluene(FID)	93.9			78.0-120		11/02/2018 19:24	WG1190352

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.75	<u>J</u>	1.05	25.0	1	10/31/2018 01:41	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/31/2018 01:41	WG1188785
Benzene	U		0.0896	0.500	1	10/31/2018 01:41	WG1188785
Bromobenzene	U		0.133	0.500	1	10/31/2018 01:41	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/31/2018 01:41	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/31/2018 01:41	WG1188785
Bromoform	U		0.186	0.500	1	10/31/2018 01:41	WG1188785
Bromomethane	U		0.157	2.50	1	10/31/2018 01:41	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/31/2018 01:41	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/31/2018 01:41	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/31/2018 01:41	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/31/2018 01:41	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/31/2018 01:41	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/31/2018 01:41	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/31/2018 01:41	WG1188785
Chloroethane	U		0.141	2.50	1	10/31/2018 01:41	WG1188785
Chloroform	U		0.0860	0.500	1	10/31/2018 01:41	WG1188785
Chloromethane	U		0.153	1.25	1	10/31/2018 01:41	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/31/2018 01:41	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2018 01:41	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2018 01:41	WG1188785
Dibromomethane	U		0.117	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2018 01:41	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2018 01:41	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2018 01:41	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2018 01:41	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2018 01:41	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2018 01:41	WG1188785
cis-1,2-Dichloroethene	1.44		0.0933	0.500	1	10/31/2018 01:41	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2018 01:41	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2018 01:41	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2018 01:41	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2018 01:41	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2018 01:41	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2018 01:41	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/31/2018 01:41	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2018 01:41	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2018 01:41	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/31/2018 01:41	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2018 01:41	WG1188785
2-Hexanone	U		0.757	5.00	1	10/31/2018 01:41	WG1188785
n-Hexane	U		0.305	5.00	1	10/31/2018 01:41	WG1188785
Iodomethane	0.461	<u>B</u> <u>J</u>	0.377	10.0	1	10/31/2018 01:41	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/31/2018 01:41	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2018 01:41	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2018 01:41	WG1188785



Collected date/time: 10/29/18 08:30

L1039305

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/31/2018 01:41	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2018 01:41	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2018 01:41	WG1188785
Naphthalene	U		0.174	2.50	1	10/31/2018 01:41	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/31/2018 01:41	WG1188785
Styrene	U		0.117	0.500	1	10/31/2018 01:41	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2018 01:41	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2018 01:41	WG1188785
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2018 01:41	WG1188785
Tetrachloroethene	U		0.199	0.500	1	10/31/2018 01:41	WG1188785
Toluene	U		0.412	0.500	1	10/31/2018 01:41	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2018 01:41	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2018 01:41	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2018 01:41	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2018 01:41	WG1188785
Trichloroethene	0.177	U	0.153	0.500	1	10/31/2018 01:41	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2018 01:41	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2018 01:41	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2018 01:41	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2018 01:41	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2018 01:41	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/31/2018 01:41	WG1188785
Vinyl chloride	0.236	U	0.118	0.500	1	10/31/2018 01:41	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/31/2018 01:41	WG1188785
(S) Toluene-d8	104			80.0-120		10/31/2018 01:41	WG1188785
(S) Dibromofluoromethane	101			75.0-120		10/31/2018 01:41	WG1188785
(S) 4-Bromofluorobenzene	103			77.0-126		10/31/2018 01:41	WG1188785

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/29/18 10:40

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	38.5	<u>B</u> <u>J</u>	31.6	100	1	11/02/2018 19:46	WG1190352
(S) a,a,a-Trifluorotoluene(FID)	93.7			78.0-120		11/02/2018 19:46	WG1190352

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.23	<u>J</u>	1.05	25.0	1	10/31/2018 02:03	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/31/2018 02:03	WG1188785
Benzene	U		0.0896	0.500	1	10/31/2018 02:03	WG1188785
Bromobenzene	U		0.133	0.500	1	10/31/2018 02:03	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/31/2018 02:03	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/31/2018 02:03	WG1188785
Bromoform	U		0.186	0.500	1	10/31/2018 02:03	WG1188785
Bromomethane	U		0.157	2.50	1	10/31/2018 02:03	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/31/2018 02:03	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/31/2018 02:03	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/31/2018 02:03	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/31/2018 02:03	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/31/2018 02:03	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/31/2018 02:03	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/31/2018 02:03	WG1188785
Chloroethane	U		0.141	2.50	1	10/31/2018 02:03	WG1188785
Chloroform	U		0.0860	0.500	1	10/31/2018 02:03	WG1188785
Chloromethane	U		0.153	1.25	1	10/31/2018 02:03	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/31/2018 02:03	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2018 02:03	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2018 02:03	WG1188785
Dibromomethane	U		0.117	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2018 02:03	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2018 02:03	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2018 02:03	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2018 02:03	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2018 02:03	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2018 02:03	WG1188785
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/31/2018 02:03	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2018 02:03	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2018 02:03	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2018 02:03	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2018 02:03	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2018 02:03	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2018 02:03	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/31/2018 02:03	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2018 02:03	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2018 02:03	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/31/2018 02:03	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2018 02:03	WG1188785
2-Hexanone	U		0.757	5.00	1	10/31/2018 02:03	WG1188785
n-Hexane	U		0.305	5.00	1	10/31/2018 02:03	WG1188785
Iodomethane	0.609	<u>B</u> <u>J</u>	0.377	10.0	1	10/31/2018 02:03	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/31/2018 02:03	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2018 02:03	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2018 02:03	WG1188785



Collected date/time: 10/29/18 10:40

L1039305

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/31/2018 02:03	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2018 02:03	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2018 02:03	WG1188785
Naphthalene	U		0.174	2.50	1	10/31/2018 02:03	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/31/2018 02:03	WG1188785
Styrene	0.146	U	0.117	0.500	1	10/31/2018 02:03	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2018 02:03	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2018 02:03	WG1188785
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2018 02:03	WG1188785
Tetrachloroethene	U		0.199	0.500	1	10/31/2018 02:03	WG1188785
Toluene	U		0.412	0.500	1	10/31/2018 02:03	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2018 02:03	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2018 02:03	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2018 02:03	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2018 02:03	WG1188785
Trichloroethene	U		0.153	0.500	1	10/31/2018 02:03	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2018 02:03	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2018 02:03	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2018 02:03	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2018 02:03	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2018 02:03	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/31/2018 02:03	WG1188785
Vinyl chloride	0.169	U	0.118	0.500	1	10/31/2018 02:03	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/31/2018 02:03	WG1188785
(S) Toluene-d8	106			80.0-120		10/31/2018 02:03	WG1188785
(S) Dibromofluoromethane	102			75.0-120		10/31/2018 02:03	WG1188785
(S) 4-Bromofluorobenzene	101			77.0-126		10/31/2018 02:03	WG1188785

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/29/18 12:10

L1039305

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	11/02/2018 20:09	WG1190352
(S) a,a,a-Trifluorotoluene(FID)	94.1			78.0-120		11/02/2018 20:09	WG1190352

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.39	J	1.05	25.0	1	10/31/2018 02:24	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/31/2018 02:24	WG1188785
Benzene	U		0.0896	0.500	1	10/31/2018 02:24	WG1188785
Bromobenzene	U		0.133	0.500	1	10/31/2018 02:24	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/31/2018 02:24	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/31/2018 02:24	WG1188785
Bromoform	U		0.186	0.500	1	10/31/2018 02:24	WG1188785
Bromomethane	U		0.157	2.50	1	10/31/2018 02:24	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/31/2018 02:24	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/31/2018 02:24	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/31/2018 02:24	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/31/2018 02:24	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/31/2018 02:24	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/31/2018 02:24	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/31/2018 02:24	WG1188785
Chloroethane	U		0.141	2.50	1	10/31/2018 02:24	WG1188785
Chloroform	U		0.0860	0.500	1	10/31/2018 02:24	WG1188785
Chloromethane	U		0.153	1.25	1	10/31/2018 02:24	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/31/2018 02:24	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2018 02:24	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2018 02:24	WG1188785
Dibromomethane	U		0.117	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2018 02:24	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2018 02:24	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2018 02:24	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2018 02:24	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2018 02:24	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2018 02:24	WG1188785
cis-1,2-Dichloroethene	0.629		0.0933	0.500	1	10/31/2018 02:24	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2018 02:24	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2018 02:24	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2018 02:24	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2018 02:24	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2018 02:24	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2018 02:24	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/31/2018 02:24	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2018 02:24	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2018 02:24	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/31/2018 02:24	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2018 02:24	WG1188785
2-Hexanone	U		0.757	5.00	1	10/31/2018 02:24	WG1188785
n-Hexane	U		0.305	5.00	1	10/31/2018 02:24	WG1188785
Iodomethane	0.659	B J	0.377	10.0	1	10/31/2018 02:24	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/31/2018 02:24	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2018 02:24	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2018 02:24	WG1188785

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/29/18 12:10

L1039305

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/31/2018 02:24	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2018 02:24	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2018 02:24	WG1188785
Naphthalene	U		0.174	2.50	1	10/31/2018 02:24	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/31/2018 02:24	WG1188785
Styrene	0.242	U	0.117	0.500	1	10/31/2018 02:24	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2018 02:24	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2018 02:24	WG1188785
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2018 02:24	WG1188785
Tetrachloroethene	0.220	U	0.199	0.500	1	10/31/2018 02:24	WG1188785
Toluene	U		0.412	0.500	1	10/31/2018 02:24	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2018 02:24	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2018 02:24	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2018 02:24	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2018 02:24	WG1188785
Trichloroethene	0.696		0.153	0.500	1	10/31/2018 02:24	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2018 02:24	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2018 02:24	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2018 02:24	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2018 02:24	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2018 02:24	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/31/2018 02:24	WG1188785
Vinyl chloride	3.90		0.118	0.500	1	10/31/2018 02:24	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/31/2018 02:24	WG1188785
(S) Toluene-d8	102			80.0-120		10/31/2018 02:24	WG1188785
(S) Dibromofluoromethane	101			75.0-120		10/31/2018 02:24	WG1188785
(S) 4-Bromofluorobenzene	102			77.0-126		10/31/2018 02:24	WG1188785

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/29/18 00:00

L1039305

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.48	J	1.05	25.0	1	10/30/2018 20:00	WG1188785
Acrylonitrile	U		0.873	5.00	1	10/30/2018 20:00	WG1188785
Benzene	U		0.0896	0.500	1	10/30/2018 20:00	WG1188785
Bromobenzene	U		0.133	0.500	1	10/30/2018 20:00	WG1188785
Bromodichloromethane	U		0.0800	0.500	1	10/30/2018 20:00	WG1188785
Bromochloromethane	U		0.145	0.500	1	10/30/2018 20:00	WG1188785
Bromoform	U		0.186	0.500	1	10/30/2018 20:00	WG1188785
Bromomethane	U		0.157	2.50	1	10/30/2018 20:00	WG1188785
n-Butylbenzene	U		0.143	0.500	1	10/30/2018 20:00	WG1188785
sec-Butylbenzene	U		0.134	0.500	1	10/30/2018 20:00	WG1188785
tert-Butylbenzene	U		0.183	0.500	1	10/30/2018 20:00	WG1188785
Carbon disulfide	U		0.101	0.500	1	10/30/2018 20:00	WG1188785
Carbon tetrachloride	U		0.159	0.500	1	10/30/2018 20:00	WG1188785
Chlorobenzene	U		0.140	0.500	1	10/30/2018 20:00	WG1188785
Chlorodibromomethane	U		0.128	0.500	1	10/30/2018 20:00	WG1188785
Chloroethane	U		0.141	2.50	1	10/30/2018 20:00	WG1188785
Chloroform	U		0.0860	0.500	1	10/30/2018 20:00	WG1188785
Chloromethane	U		0.153	1.25	1	10/30/2018 20:00	WG1188785
2-Chlorotoluene	U		0.111	0.500	1	10/30/2018 20:00	WG1188785
4-Chlorotoluene	U		0.0972	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/30/2018 20:00	WG1188785
1,2-Dibromoethane	U		0.193	0.500	1	10/30/2018 20:00	WG1188785
Dibromomethane	U		0.117	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dichlorobenzene	U		0.101	0.500	1	10/30/2018 20:00	WG1188785
1,3-Dichlorobenzene	U		0.130	0.500	1	10/30/2018 20:00	WG1188785
1,4-Dichlorobenzene	U		0.121	0.500	1	10/30/2018 20:00	WG1188785
Dichlorodifluoromethane	U		0.127	2.50	1	10/30/2018 20:00	WG1188785
1,1-Dichloroethane	U		0.114	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dichloroethane	U		0.108	0.500	1	10/30/2018 20:00	WG1188785
1,1-Dichloroethene	U		0.188	0.500	1	10/30/2018 20:00	WG1188785
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/30/2018 20:00	WG1188785
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/30/2018 20:00	WG1188785
1,2-Dichloropropane	U		0.190	0.500	1	10/30/2018 20:00	WG1188785
1,1-Dichloropropene	U		0.128	0.500	1	10/30/2018 20:00	WG1188785
1,3-Dichloropropane	U		0.147	1.00	1	10/30/2018 20:00	WG1188785
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/30/2018 20:00	WG1188785
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/30/2018 20:00	WG1188785
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/30/2018 20:00	WG1188785
2,2-Dichloropropane	U		0.0929	0.500	1	10/30/2018 20:00	WG1188785
Di-isopropyl ether	U		0.0924	0.500	1	10/30/2018 20:00	WG1188785
Ethylbenzene	U		0.158	0.500	1	10/30/2018 20:00	WG1188785
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/30/2018 20:00	WG1188785
2-Hexanone	U		0.757	5.00	1	10/30/2018 20:00	WG1188785
n-Hexane	U		0.305	5.00	1	10/30/2018 20:00	WG1188785
Iodomethane	0.869	B J	0.377	10.0	1	10/30/2018 20:00	WG1188785
Isopropylbenzene	U		0.126	0.500	1	10/30/2018 20:00	WG1188785
p-Isopropyltoluene	U		0.138	0.500	1	10/30/2018 20:00	WG1188785
2-Butanone (MEK)	U		1.28	5.00	1	10/30/2018 20:00	WG1188785
Methylene Chloride	U		1.07	2.50	1	10/30/2018 20:00	WG1188785
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/30/2018 20:00	WG1188785
Methyl tert-butyl ether	U		0.102	0.500	1	10/30/2018 20:00	WG1188785
Naphthalene	U		0.174	2.50	1	10/30/2018 20:00	WG1188785
n-Propylbenzene	U		0.162	0.500	1	10/30/2018 20:00	WG1188785
Styrene	U		0.117	0.500	1	10/30/2018 20:00	WG1188785
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/30/2018 20:00	WG1188785
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/30/2018 20:00	WG1188785

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/29/18 00:00

L1039305

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/30/2018 20:00	WG1188785
Tetrachloroethene	U		0.199	0.500	1	10/30/2018 20:00	WG1188785
Toluene	U		0.412	0.500	1	10/30/2018 20:00	WG1188785
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/30/2018 20:00	WG1188785
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/30/2018 20:00	WG1188785
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/30/2018 20:00	WG1188785
1,1,2-Trichloroethane	U		0.186	0.500	1	10/30/2018 20:00	WG1188785
Trichloroethene	U		0.153	0.500	1	10/30/2018 20:00	WG1188785
Trichlorofluoromethane	U		0.130	2.50	1	10/30/2018 20:00	WG1188785
1,2,3-Trichloropropane	U		0.247	2.50	1	10/30/2018 20:00	WG1188785
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/30/2018 20:00	WG1188785
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/30/2018 20:00	WG1188785
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/30/2018 20:00	WG1188785
Vinyl acetate	U		0.645	5.00	1	10/30/2018 20:00	WG1188785
Vinyl chloride	U		0.118	0.500	1	10/30/2018 20:00	WG1188785
Xylenes, Total	U		0.316	1.50	1	10/30/2018 20:00	WG1188785
(S) Toluene-d8	104			80.0-120		10/30/2018 20:00	WG1188785
(S) Dibromofluoromethane	102			75.0-120		10/30/2018 20:00	WG1188785
(S) 4-Bromofluorobenzene	101			77.0-126		10/30/2018 20:00	WG1188785

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L1039305-01.02.03](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
(MB) R3357030-3 11/02/18 15:29				
Gasoline Range Organics-NWTPH	52.6	J	316	100
^(S) a,a'-Trifluorotoluene(FID)	93.9			78.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
(LCS) R3357030-1 11/02/18 14:10 • (LCSD) R3357030-2 11/02/18 14:44										
Gasoline Range Organics-NWTPH	5500	5100	5100	92.7	92.8	70.0-124			0.0891	20
^(S) a,a'-Trifluorotoluene(FID)				98.7	98.6	78.0-120				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc- WA

PROJECT:

14B.001.05

SDG:

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DATE/TIME:

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1039305-01.02.03.04](#)

Method Blank (MB)

(MB) R3356994-3 10/30/18 19:04

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
n-Butylbenzene	U		0.143	0.500
Bromomethane	U		0.157	2.50
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
Chloroform	U		0.0860	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
Chloromethane	U		0.153	1.25
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,1-Dichloropropane	U		0.128	0.500
1,2-Dichloroethane	U		0.108	0.500
1,3-Dichloropropane	U		0.147	1.00
1,1-Dichloroethene	U		0.188	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,2-Dichloropropane	U		0.190	0.500
2,2-Dichloropropane	U		0.0929	0.500
Diisopropyl ether	U		0.0924	0.500
cis-1,3-Dichloropropene	U		0.0976	0.500
Hexachloro-1,3-butadiene	0.310	J	0.157	1.00

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc- WA

PROJECT:

14B.001.05

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1039305-01.02.03.04](#)

Method Blank (MB)

(MB) R3356994-3 10/30/18 19:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
trans-1,3-Dichloropropene	U		0.222	0.500
n-Hexane	U		0.305	5.00
Iodomethane	0.875	J	0.377	10.0
Ethylbenzene	U		0.158	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Hexanone	U		0.757	5.00
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
1,1,2-Tetrachloroethane	U		0.120	0.500
Isopropylbenzene	U		0.126	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Styrene	U		0.117	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.197	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	104			80.0-120
(S) Dibromofluoromethane	103			75.0-120
(S) 4-Bromofluorobenzene	103			77.0-126

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT: PES Environmental, Inc- WA

PROJECT: 14B.001.05

SDG: L1039305

DATE/TIME: 11/06/18 09:47

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356994-1 10/30/18 18:00 • (LCSD) R3356994-2 10/30/18 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	25.0	24.3	24.1	97.3	96.5	73.0-121			0.758	20
Bromochloromethane	25.0	25.5	25.6	102	102	76.0-122			0.290	20
n-Butylbenzene	25.0	25.2	25.1	101	100	73.0-125			0.420	20
sec-Butylbenzene	25.0	25.5	24.8	102	99.4	75.0-125			2.51	20
tert-Butylbenzene	25.0	25.7	25.5	103	102	76.0-124			1.12	20
2-Chlorotoluene	25.0	24.3	24.3	97.4	97.0	76.0-123			0.342	20
4-Chlorotoluene	25.0	24.9	24.1	99.7	96.4	75.0-122			3.43	20
1,2-Dibromo-3-Chloropropane	25.0	24.7	25.8	98.8	103	58.0-134			4.26	20
1,2-Dibromoethane	25.0	25.2	24.3	101	97.2	80.0-122			3.75	20
Dibromomethane	25.0	24.9	24.0	99.5	96.0	80.0-120			3.51	20
cis-1,2-Dichloroethene	25.0	24.3	24.4	97.0	97.7	73.0-120			0.691	20
1,1-Dichloropropene	25.0	26.2	25.2	105	101	74.0-126			4.09	20
1,3-Dichloropropene	25.0	24.8	24.2	99.4	96.8	80.0-120			2.62	20
trans-1,4-Dichloro-2-butene	25.0	24.3	24.7	97.3	98.6	33.0-144			1.39	20
2,2-Dichloropropane	25.0	24.6	23.7	98.2	94.7	58.0-130			3.61	20
Diisopropyl ether	25.0	24.5	24.1	98.1	96.4	58.0-138			1.71	20
Hexachloro-1,3-butadiene	25.0	23.5	24.0	94.0	96.1	54.0-138			2.21	20
Acetone	125	121	119	96.5	94.9	19.0-160			1.66	27
n-Hexane	25.0	25.8	24.1	103	96.4	57.0-133			6.83	20
Iodomethane	125	132	132	105	105	33.0-147			0.0485	26
Acrylonitrile	125	119	120	95.5	96.4	55.0-149			0.855	20
Benzene	25.0	24.4	24.1	97.4	96.2	70.0-123			1.25	20
p-Isopropyltoluene	25.0	25.7	25.6	103	103	76.0-125			0.355	20
Bromodichloromethane	25.0	25.3	24.5	101	98.0	75.0-120			3.04	20
Bromoform	25.0	25.2	25.8	101	103	68.0-132			2.17	20
Bromomethane	25.0	26.4	25.1	106	100	10.0-160			5.20	25
Naphthalene	25.0	24.2	25.0	96.9	99.9	54.0-135			3.04	20
n-Propylbenzene	25.0	24.9	24.3	99.7	97.0	77.0-124			2.68	20
1,1,1,2-Tetrachloroethane	25.0	24.8	24.0	99.3	96.1	75.0-125			3.25	20
Carbon disulfide	25.0	25.1	23.9	101	95.8	61.0-128			4.93	20
Carbon tetrachloride	25.0	24.9	24.3	99.4	97.3	68.0-126			2.16	20
Chlorobenzene	25.0	24.8	24.0	99.0	96.0	80.0-121			3.10	20
Chlorodibromomethane	25.0	24.6	24.1	98.3	96.5	77.0-125			1.87	20
Chloroethane	25.0	25.5	24.4	102	97.4	47.0-150			4.79	20
Chloroform	25.0	23.6	23.2	94.4	92.7	73.0-120			1.75	20
Chloromethane	25.0	25.3	23.4	101	93.5	41.0-142			7.79	20
1,2,3-Trichloropropane	25.0	24.2	24.3	96.9	97.0	73.0-130			0.0849	20
1,2,4-Trimethylbenzene	25.0	25.0	24.8	100	99.3	76.0-121			0.900	20
1,2,3-Trimethylbenzene	25.0	24.3	24.2	97.3	96.9	77.0-120			0.418	20
1,3,5-Trimethylbenzene	25.0	24.8	24.1	99.2	96.6	76.0-122			2.75	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
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9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

14B.001.05

SDG:

LI039305

DATE/TIME:

11/06/18 09:47

PAGE:

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3356994-1 10/30/18 18:00 • (LCSD) R3356994-2 10/30/18 18:21

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
1,2-Dichlorobenzene	25.0	24.9	24.2	99.7	96.9	79.0-121			2.79	20
Vinyl acetate	125	135	132	108	105	11.0-160			2.43	20
1,3-Dichlorobenzene	25.0	24.5	23.9	97.9	95.8	79.0-120			2.25	20
1,4-Dichlorobenzene	25.0	23.3	23.1	93.1	92.4	79.0-120			0.784	20
Dichlorodifluoromethane	25.0	27.9	25.8	112	103	51.0-149			7.70	20
1,1-Dichloroethane	25.0	25.1	24.3	100	97.2	70.0-126			3.26	20
1,2-Dichloroethane	25.0	24.7	24.3	98.7	97.4	70.0-128			1.32	20
1,1-Dichloroethene	25.0	26.6	25.3	106	101	71.0-124			5.12	20
trans-1,2-Dichloroethene	25.0	25.4	24.2	102	96.8	73.0-120			4.78	20
1,2-Dichloropropane	25.0	25.5	24.7	102	98.9	77.0-125			3.27	20
cis-1,3-Dichloropropene	25.0	24.7	24.1	98.7	96.5	80.0-123			2.29	20
trans-1,3-Dichloropropene	25.0	25.1	24.6	100	98.4	78.0-124			2.09	20
Ethylbenzene	25.0	24.6	23.7	98.5	94.7	79.0-123			3.88	20
2-Hexanone	125	126	123	101	98.4	67.0-149			2.54	20
Isopropylbenzene	25.0	25.3	24.6	101	98.4	76.0-127			2.76	20
2-Butanone (MEK)	125	120	118	96.0	94.8	44.0-160			1.22	20
Methylene Chloride	25.0	23.3	22.9	93.3	91.5	67.0-120			1.90	20
4-Methyl-2-pentanone (MIBK)	125	123	122	98.7	97.8	68.0-142			0.861	20
Methyl tert-butyl ether	25.0	24.5	23.9	98.0	95.7	68.0-125			2.35	20
Styrene	25.0	25.2	25.1	101	100	73.0-130			0.365	20
1,1,2,2-Tetrachloroethane	25.0	24.8	24.4	99.3	97.7	65.0-130			1.68	20
1,1,2-Trichlorotrifluoroethane	25.0	27.0	25.5	108	102	69.0-132			5.64	20
Tetrachloroethene	25.0	25.1	24.6	100	98.4	72.0-132			2.01	20
Toluene	25.0	24.3	23.3	97.3	93.2	79.0-120			4.29	20
1,2,3-Trichlorobenzene	25.0	24.3	25.3	97.2	101	50.0-138			3.89	20
1,2,4-Trichlorobenzene	25.0	25.2	24.6	101	98.5	57.0-137			2.44	20
1,1,1-Trichloroethane	25.0	26.2	24.8	105	99.2	73.0-124			5.46	20
1,1,2-Trichloroethane	25.0	25.5	24.2	102	96.7	80.0-120			5.50	20
Trichloroethene	25.0	25.2	23.7	101	94.7	78.0-124			6.30	20
Trichlorofluoromethane	25.0	26.8	25.9	107	103	59.0-147			3.74	20
Vinyl chloride	25.0	26.7	25.4	107	102	67.0-131			4.81	20
Xylenes, Total	75.0	75.6	72.7	101	96.9	79.0-123			3.91	20
(S) Toluene-d8				102	100	80.0-120				
(S) Dibromofluoromethane				102	99.5	75.0-120				
(S) 4-Bromofluorobenzene				101	104	77.0-126				

Public Review Draft

1 Cp
2 Tc
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ACCOUNT: PES Environmental, Inc.- WA

PROJECT: 14B.001.05

SDG: L1039305

DATE/TIME: 11/06/18 09:47

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

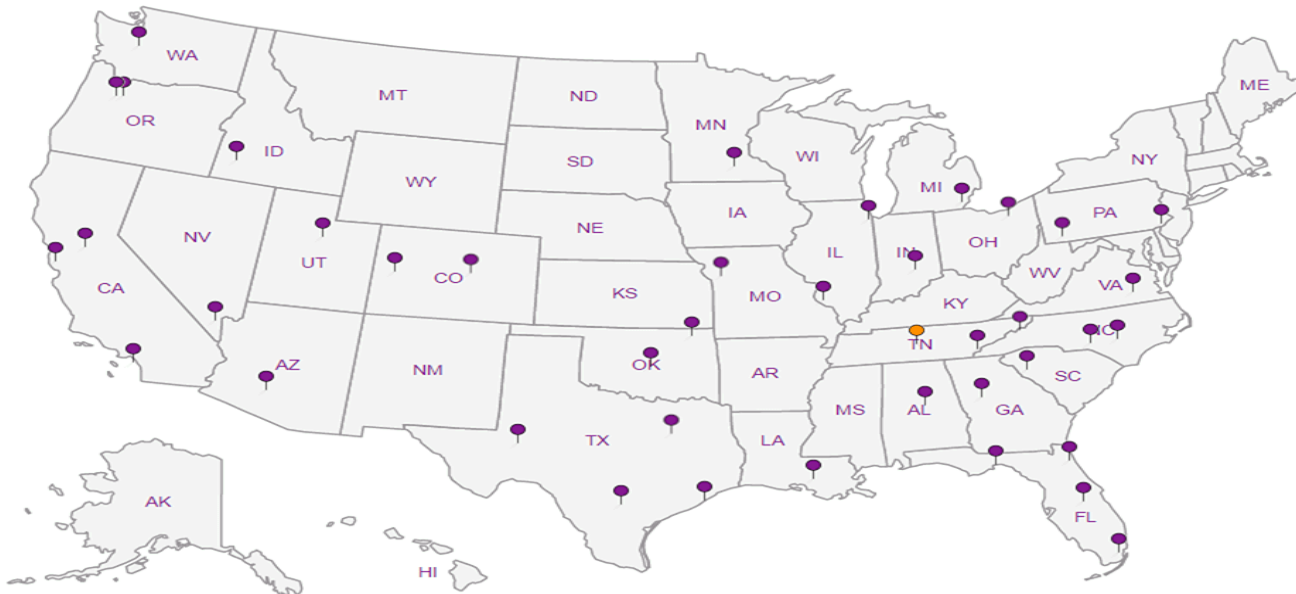
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Report to:
Bill Haldeman

Email To: bhaldeman@pesenv.com

Project: **American Linen**

City/State Collected: **Seattle WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
14B.001.05

Lab Project #
PESENVSWA-HALDEMAN

Collected by (print):
R. McLaughlin

Site/Facility ID #

P.O. #

Collected by (signature):
R. McLaughlin

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Date Results Needed

Immediately
Packed on Ice N Y

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cnts

of

Neg

Pres Chk

Analysis / Container / Preservative

Chain of Custody

Page 1 of 1

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cnts	of	Neg	Pres Chk	Analysis / Container / Preservative	Chain of Custody	Page 1 of 1
MW-136-102918	Grab	GW	89	10/29/18	830	3	3	X	X	V8260C 40mlAmb-HCl	12065 Lebanon Rd Madison, TN 37122 Phone: 615-758-5858 Fax: 615-758-5859	
MW-138-102918	Y	GW	110	10/29/18	1040	3	3	X	X			
MW-110-21-102918	Y	GW	73.5'	10/29/18	1210	3	3	X	X			
Trip Blank	---	GW	---	---	---	3	3	X	X			
		GW				3	3	X	X			
		GW				3	3	X	X			
		GW				3	3	X	X			
		GW				3	3	X	X			

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks: **RAD SCREEN: 0.5 mR/hr**

Temp _____ pH _____
Flow _____ Other _____

Tracking # **4196** Trip Blank Received: Yes No
Received by: *[Signature]* HIC/Meoh TBR

Temp: **20.1°C** bottles Received: **9**
Date: **10/30/18** Time: **0845**

Received for lab by: *[Signature]* **McLain**

Reinquired by: *[Signature]* Date: **10/29/18** Time: **1305**

Reinquired by: *[Signature]* Date: _____ Time: _____

Condition: **NCE / OK**

Sample Receipt Checklist:
 VOC Seal Present/Intact: **Y**
 VOC Signed/Accurate: **Y**
 Bottles active/intact: **Y**
 Correct bottles used: **Y**
 Sufficient volume sent: **Y**
 If Applicable
 VOA Zero Headspace: **Y**
 Preservation Correct/Checked: **Y**

Pace Analytical
NATION'S CENTER FOR TESTING & RESEARCH

L# **L1039305**
B157

Actnum: **PESENVSWA**
Template: **T141146**
Prelogin: **P673964**
TSR: **110 - Brian Ford**
PB:

Shipped Via: **FedEx Ground**

Public Review Draft



ANALYTICAL REPORT

December 18, 2018

PES Environmental, Inc.- WA

Sample Delivery Group: L1053394
Samples Received: 12/14/2018
Project Number: 1358.001.01.003
Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	2 Tc
Cn: Case Narrative	4	
Sr: Sample Results	5	3 Ss
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MW-137-121218 L1053394-02	7	4 Cn
W-MW-02-121218 L1053394-03	9	5 Sr
MW-134-121218 L1053394-04	11	
MW-133-121218 L1053394-05	13	6 Qc
MW-141-121218 L1053394-06	15	
Qc: Quality Control Summary	17	7 Gl
Volatile Organic Compounds (GC) by Method NWTPHGX	17	
Volatile Organic Compounds (GC/MS) by Method 8260C	19	8 Al
Gl: Glossary of Terms	24	
Al: Accreditations & Locations	25	9 Sc
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MW-131-121218 L1053394-01 GW

Collected by
AW/BH/KZ

Collected date/time
12/12/18 12:45

Received date/time
12/14/18 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1211498	1	12/15/18 20:38	12/15/18 20:38	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1211567	1	12/16/18 16:48	12/16/18 16:48	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1212222	1	12/18/18 00:40	12/18/18 00:40	ACG

1 Cp

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3 Ss

MW-137-121218 L1053394-02 GW

Collected by
AW/BH/KZ

Collected date/time
12/12/18 14:45

Received date/time
12/14/18 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1211498	1	12/15/18 20:59	12/15/18 20:59	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1211567	1	12/16/18 17:07	12/16/18 17:07	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1212222	1	12/18/18 01:35	12/18/18 01:35	ACG

4 Cn

5 Sr

6 Qc

W-MW-02-121218 L1053394-03 GW

Collected by
AW/BH/KZ

Collected date/time
12/12/18 14:25

Received date/time
12/14/18 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1211718	5	12/17/18 09:23	12/17/18 09:23	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1211567	1	12/16/18 17:26	12/16/18 17:26	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1212222	1	12/18/18 01:54	12/18/18 01:54	ACG

7 Gl

8 Al

9 Sc

MW-134-121218 L1053394-04 GW

Collected by
AW/BH/KZ

Collected date/time
12/12/18 12:50

Received date/time
12/14/18 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1211718	1	12/17/18 09:44	12/17/18 09:44	ACG
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1211567	1	12/16/18 17:44	12/16/18 17:44	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1212222	1	12/18/18 02:13	12/18/18 02:13	ACG

MW-133-121218 L1053394-05 GW

Collected by
AW/BH/KZ

Collected date/time
12/12/18 10:00

Received date/time
12/14/18 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1211498	1	12/15/18 22:04	12/15/18 22:04	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1211567	1	12/16/18 18:03	12/16/18 18:03	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1212222	1	12/18/18 02:33	12/18/18 02:33	ACG

MW-141-121218 L1053394-06 GW

Collected by
AW/BH/KZ

Collected date/time
12/12/18 11:20

Received date/time
12/14/18 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1211498	1	12/15/18 22:25	12/15/18 22:25	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1211567	1	12/16/18 18:22	12/16/18 18:22	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1212222	1	12/18/18 02:52	12/18/18 02:52	ACG



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/15/2018 20:38	WG1211498
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		12/15/2018 20:38	WG1211498

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	8.19	J	1.05	25.0	1	12/18/2018 00:40	WG1212222
Acrylonitrile	U		0.873	5.00	1	12/16/2018 16:48	WG1211567
Benzene	U		0.0896	0.500	1	12/16/2018 16:48	WG1211567
Bromobenzene	U		0.133	0.500	1	12/16/2018 16:48	WG1211567
Bromodichloromethane	U		0.0800	0.500	1	12/16/2018 16:48	WG1211567
Bromochloromethane	U		0.145	0.500	1	12/16/2018 16:48	WG1211567
Bromoform	U		0.186	0.500	1	12/16/2018 16:48	WG1211567
Bromomethane	U		0.157	2.50	1	12/16/2018 16:48	WG1211567
n-Butylbenzene	U		0.143	0.500	1	12/16/2018 16:48	WG1211567
sec-Butylbenzene	U		0.134	0.500	1	12/16/2018 16:48	WG1211567
tert-Butylbenzene	U		0.183	0.500	1	12/16/2018 16:48	WG1211567
Carbon disulfide	U		0.101	0.500	1	12/16/2018 16:48	WG1211567
Carbon tetrachloride	U		0.159	0.500	1	12/16/2018 16:48	WG1211567
Chlorobenzene	U		0.140	0.500	1	12/16/2018 16:48	WG1211567
Chlorodibromomethane	U		0.128	0.500	1	12/16/2018 16:48	WG1211567
Chloroethane	U		0.141	2.50	1	12/16/2018 16:48	WG1211567
Chloroform	U		0.0860	0.500	1	12/16/2018 16:48	WG1211567
Chloromethane	6.51		0.153	1.25	1	12/16/2018 16:48	WG1211567
2-Chlorotoluene	U		0.111	0.500	1	12/16/2018 16:48	WG1211567
4-Chlorotoluene	U		0.0972	0.500	1	12/16/2018 16:48	WG1211567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/16/2018 16:48	WG1211567
1,2-Dibromoethane	U		0.193	0.500	1	12/16/2018 16:48	WG1211567
Dibromomethane	U		0.117	0.500	1	12/16/2018 16:48	WG1211567
1,2-Dichlorobenzene	U		0.101	0.500	1	12/16/2018 16:48	WG1211567
1,3-Dichlorobenzene	U		0.130	0.500	1	12/16/2018 16:48	WG1211567
1,4-Dichlorobenzene	U		0.121	0.500	1	12/16/2018 16:48	WG1211567
Dichlorodifluoromethane	U		0.127	2.50	1	12/16/2018 16:48	WG1211567
1,1-Dichloroethane	U		0.114	0.500	1	12/16/2018 16:48	WG1211567
1,2-Dichloroethane	U		0.108	0.500	1	12/16/2018 16:48	WG1211567
1,1-Dichloroethene	U		0.188	0.500	1	12/16/2018 16:48	WG1211567
cis-1,2-Dichloroethene	1.20		0.0933	0.500	1	12/18/2018 00:40	WG1212222
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/16/2018 16:48	WG1211567
1,2-Dichloropropane	U		0.190	0.500	1	12/16/2018 16:48	WG1211567
1,1-Dichloropropene	U		0.128	0.500	1	12/16/2018 16:48	WG1211567
1,3-Dichloropropane	U		0.147	1.00	1	12/16/2018 16:48	WG1211567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/16/2018 16:48	WG1211567
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/16/2018 16:48	WG1211567
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/16/2018 16:48	WG1211567
2,2-Dichloropropane	U		0.0929	0.500	1	12/16/2018 16:48	WG1211567
Di-isopropyl ether	U		0.0924	0.500	1	12/16/2018 16:48	WG1211567
Ethylbenzene	U		0.158	0.500	1	12/16/2018 16:48	WG1211567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/16/2018 16:48	WG1211567
2-Hexanone	U		0.757	5.00	1	12/16/2018 16:48	WG1211567
n-Hexane	U		0.305	5.00	1	12/16/2018 16:48	WG1211567
Iodomethane	U		0.377	10.0	1	12/16/2018 16:48	WG1211567
Isopropylbenzene	U		0.126	0.500	1	12/16/2018 16:48	WG1211567
p-Isopropyltoluene	U		0.138	0.500	1	12/16/2018 16:48	WG1211567
2-Butanone (MEK)	3.89	J	1.28	5.00	1	12/16/2018 16:48	WG1211567

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/12/18 12:45

L1053394

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	12/16/2018 16:48	WG1211567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/16/2018 16:48	WG1211567
Methyl tert-butyl ether	U		0.102	0.500	1	12/16/2018 16:48	WG1211567
Naphthalene	U		0.174	2.50	1	12/16/2018 16:48	WG1211567
n-Propylbenzene	U		0.162	0.500	1	12/16/2018 16:48	WG1211567
Styrene	U		0.117	0.500	1	12/16/2018 16:48	WG1211567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/16/2018 16:48	WG1211567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/16/2018 16:48	WG1211567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/16/2018 16:48	WG1211567
Tetrachloroethene	U		0.199	0.500	1	12/18/2018 00:40	WG1212222
Toluene	U		0.412	0.500	1	12/16/2018 16:48	WG1211567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/16/2018 16:48	WG1211567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/16/2018 16:48	WG1211567
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/16/2018 16:48	WG1211567
1,1,2-Trichloroethane	U		0.186	0.500	1	12/16/2018 16:48	WG1211567
Trichloroethene	0.172	U	0.153	0.500	1	12/18/2018 00:40	WG1212222
Trichlorofluoromethane	U		0.130	2.50	1	12/16/2018 16:48	WG1211567
1,2,3-Trichloropropane	U		0.247	2.50	1	12/16/2018 16:48	WG1211567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/16/2018 16:48	WG1211567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/16/2018 16:48	WG1211567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/16/2018 16:48	WG1211567
Vinyl acetate	U		0.645	5.00	1	12/16/2018 16:48	WG1211567
Vinyl chloride	1.39		0.118	0.500	1	12/16/2018 16:48	WG1211567
Xylenes, Total	U		0.316	1.50	1	12/16/2018 16:48	WG1211567
(S) Toluene-d8	101			80.0-120		12/16/2018 16:48	WG1211567
(S) Toluene-d8	105			80.0-120		12/18/2018 00:40	WG1212222
(S) Dibromofluoromethane	111			75.0-120		12/16/2018 16:48	WG1211567
(S) Dibromofluoromethane	91.3			75.0-120		12/18/2018 00:40	WG1212222
(S) 4-Bromofluorobenzene	90.4			77.0-126		12/16/2018 16:48	WG1211567
(S) 4-Bromofluorobenzene	96.7			77.0-126		12/18/2018 00:40	WG1212222

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/12/18 14:45

L1053394

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/15/2018 20:59	WG1211498
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		12/15/2018 20:59	WG1211498

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.62	J	1.05	25.0	1	12/18/2018 01:35	WG1212222
Acrylonitrile	U		0.873	5.00	1	12/16/2018 17:07	WG1211567
Benzene	U		0.0896	0.500	1	12/16/2018 17:07	WG1211567
Bromobenzene	U		0.133	0.500	1	12/16/2018 17:07	WG1211567
Bromodichloromethane	U		0.0800	0.500	1	12/16/2018 17:07	WG1211567
Bromochloromethane	U		0.145	0.500	1	12/16/2018 17:07	WG1211567
Bromoform	U		0.186	0.500	1	12/16/2018 17:07	WG1211567
Bromomethane	U		0.157	2.50	1	12/16/2018 17:07	WG1211567
n-Butylbenzene	U		0.143	0.500	1	12/16/2018 17:07	WG1211567
sec-Butylbenzene	U		0.134	0.500	1	12/16/2018 17:07	WG1211567
tert-Butylbenzene	U		0.183	0.500	1	12/16/2018 17:07	WG1211567
Carbon disulfide	U		0.101	0.500	1	12/16/2018 17:07	WG1211567
Carbon tetrachloride	U		0.159	0.500	1	12/16/2018 17:07	WG1211567
Chlorobenzene	U		0.140	0.500	1	12/16/2018 17:07	WG1211567
Chlorodibromomethane	U		0.128	0.500	1	12/16/2018 17:07	WG1211567
Chloroethane	U		0.141	2.50	1	12/16/2018 17:07	WG1211567
Chloroform	U		0.0860	0.500	1	12/16/2018 17:07	WG1211567
Chloromethane	U		0.153	1.25	1	12/16/2018 17:07	WG1211567
2-Chlorotoluene	U		0.111	0.500	1	12/16/2018 17:07	WG1211567
4-Chlorotoluene	U		0.0972	0.500	1	12/16/2018 17:07	WG1211567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/16/2018 17:07	WG1211567
1,2-Dibromoethane	U		0.193	0.500	1	12/16/2018 17:07	WG1211567
Dibromomethane	U		0.117	0.500	1	12/16/2018 17:07	WG1211567
1,2-Dichlorobenzene	U		0.101	0.500	1	12/16/2018 17:07	WG1211567
1,3-Dichlorobenzene	U		0.130	0.500	1	12/16/2018 17:07	WG1211567
1,4-Dichlorobenzene	U		0.121	0.500	1	12/16/2018 17:07	WG1211567
Dichlorodifluoromethane	U		0.127	2.50	1	12/16/2018 17:07	WG1211567
1,1-Dichloroethane	U		0.114	0.500	1	12/16/2018 17:07	WG1211567
1,2-Dichloroethane	U		0.108	0.500	1	12/16/2018 17:07	WG1211567
1,1-Dichloroethene	U		0.188	0.500	1	12/16/2018 17:07	WG1211567
cis-1,2-Dichloroethene	0.437	J	0.0933	0.500	1	12/18/2018 01:35	WG1212222
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/16/2018 17:07	WG1211567
1,2-Dichloropropane	U		0.190	0.500	1	12/16/2018 17:07	WG1211567
1,1-Dichloropropene	U		0.128	0.500	1	12/16/2018 17:07	WG1211567
1,3-Dichloropropane	U		0.147	1.00	1	12/16/2018 17:07	WG1211567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/16/2018 17:07	WG1211567
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/16/2018 17:07	WG1211567
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/16/2018 17:07	WG1211567
2,2-Dichloropropane	U		0.0929	0.500	1	12/16/2018 17:07	WG1211567
Di-isopropyl ether	U		0.0924	0.500	1	12/16/2018 17:07	WG1211567
Ethylbenzene	U		0.158	0.500	1	12/16/2018 17:07	WG1211567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/16/2018 17:07	WG1211567
2-Hexanone	U		0.757	5.00	1	12/16/2018 17:07	WG1211567
n-Hexane	U		0.305	5.00	1	12/16/2018 17:07	WG1211567
Iodomethane	U		0.377	10.0	1	12/16/2018 17:07	WG1211567
Isopropylbenzene	U		0.126	0.500	1	12/16/2018 17:07	WG1211567
p-Isopropyltoluene	U		0.138	0.500	1	12/16/2018 17:07	WG1211567
2-Butanone (MEK)	U		1.28	5.00	1	12/16/2018 17:07	WG1211567



Collected date/time: 12/12/18 14:45

L1053394

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	12/16/2018 17:07	WG1211567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/16/2018 17:07	WG1211567
Methyl tert-butyl ether	U		0.102	0.500	1	12/16/2018 17:07	WG1211567
Naphthalene	U		0.174	2.50	1	12/16/2018 17:07	WG1211567
n-Propylbenzene	U		0.162	0.500	1	12/16/2018 17:07	WG1211567
Styrene	U		0.117	0.500	1	12/16/2018 17:07	WG1211567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/16/2018 17:07	WG1211567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/16/2018 17:07	WG1211567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/16/2018 17:07	WG1211567
Tetrachloroethene	U		0.199	0.500	1	12/18/2018 01:35	WG1212222
Toluene	U		0.412	0.500	1	12/16/2018 17:07	WG1211567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/16/2018 17:07	WG1211567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/16/2018 17:07	WG1211567
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/16/2018 17:07	WG1211567
1,1,2-Trichloroethane	U		0.186	0.500	1	12/16/2018 17:07	WG1211567
Trichloroethene	U		0.153	0.500	1	12/18/2018 01:35	WG1212222
Trichlorofluoromethane	U		0.130	2.50	1	12/16/2018 17:07	WG1211567
1,2,3-Trichloropropane	U		0.247	2.50	1	12/16/2018 17:07	WG1211567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/16/2018 17:07	WG1211567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/16/2018 17:07	WG1211567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/16/2018 17:07	WG1211567
Vinyl acetate	U		0.645	5.00	1	12/16/2018 17:07	WG1211567
Vinyl chloride	0.357	U	0.118	0.500	1	12/16/2018 17:07	WG1211567
Xylenes, Total	U		0.316	1.50	1	12/16/2018 17:07	WG1211567
(S) Toluene-d8	104			80.0-120		12/16/2018 17:07	WG1211567
(S) Toluene-d8	108			80.0-120		12/18/2018 01:35	WG1212222
(S) Dibromofluoromethane	109			75.0-120		12/16/2018 17:07	WG1211567
(S) Dibromofluoromethane	89.1			75.0-120		12/18/2018 01:35	WG1212222
(S) 4-Bromofluorobenzene	89.1			77.0-126		12/16/2018 17:07	WG1211567
(S) 4-Bromofluorobenzene	95.1			77.0-126		12/18/2018 01:35	WG1212222

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/12/18 14:25

L1053394

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		158	500	5	12/17/2018 09:23	WG1211718
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		12/17/2018 09:23	WG1211718

Sample Narrative:

L1053394-03 WG1211718: Lowest possible dilution due to sample foaming.

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.12	J	1.05	25.0	1	12/18/2018 01:54	WG1212222
Acrylonitrile	U		0.873	5.00	1	12/16/2018 17:26	WG1211567
Benzene	U		0.0896	0.500	1	12/16/2018 17:26	WG1211567
Bromobenzene	U		0.133	0.500	1	12/16/2018 17:26	WG1211567
Bromodichloromethane	U		0.0800	0.500	1	12/16/2018 17:26	WG1211567
Bromochloromethane	U		0.145	0.500	1	12/16/2018 17:26	WG1211567
Bromoform	U		0.186	0.500	1	12/16/2018 17:26	WG1211567
Bromomethane	U		0.157	2.50	1	12/16/2018 17:26	WG1211567
n-Butylbenzene	U		0.143	0.500	1	12/16/2018 17:26	WG1211567
sec-Butylbenzene	U		0.134	0.500	1	12/16/2018 17:26	WG1211567
tert-Butylbenzene	U		0.183	0.500	1	12/16/2018 17:26	WG1211567
Carbon disulfide	U		0.101	0.500	1	12/16/2018 17:26	WG1211567
Carbon tetrachloride	U		0.159	0.500	1	12/16/2018 17:26	WG1211567
Chlorobenzene	U		0.140	0.500	1	12/16/2018 17:26	WG1211567
Chlorodibromomethane	U		0.128	0.500	1	12/16/2018 17:26	WG1211567
Chloroethane	U		0.141	2.50	1	12/16/2018 17:26	WG1211567
Chloroform	U		0.0860	0.500	1	12/16/2018 17:26	WG1211567
Chloromethane	U		0.153	1.25	1	12/16/2018 17:26	WG1211567
2-Chlorotoluene	U		0.111	0.500	1	12/16/2018 17:26	WG1211567
4-Chlorotoluene	U		0.0972	0.500	1	12/16/2018 17:26	WG1211567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/16/2018 17:26	WG1211567
1,2-Dibromoethane	U		0.193	0.500	1	12/16/2018 17:26	WG1211567
Dibromomethane	U		0.117	0.500	1	12/16/2018 17:26	WG1211567
1,2-Dichlorobenzene	U		0.101	0.500	1	12/16/2018 17:26	WG1211567
1,3-Dichlorobenzene	U		0.130	0.500	1	12/16/2018 17:26	WG1211567
1,4-Dichlorobenzene	U		0.121	0.500	1	12/16/2018 17:26	WG1211567
Dichlorodifluoromethane	U		0.127	2.50	1	12/16/2018 17:26	WG1211567
1,1-Dichloroethane	U		0.114	0.500	1	12/16/2018 17:26	WG1211567
1,2-Dichloroethane	U		0.108	0.500	1	12/16/2018 17:26	WG1211567
1,1-Dichloroethene	U		0.188	0.500	1	12/16/2018 17:26	WG1211567
cis-1,2-Dichloroethene	1.80		0.0933	0.500	1	12/18/2018 01:54	WG1212222
trans-1,2-Dichloroethene	0.463	J	0.152	0.500	1	12/16/2018 17:26	WG1211567
1,2-Dichloropropane	U		0.190	0.500	1	12/16/2018 17:26	WG1211567
1,1-Dichloropropene	U		0.128	0.500	1	12/16/2018 17:26	WG1211567
1,3-Dichloropropane	U		0.147	1.00	1	12/16/2018 17:26	WG1211567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/16/2018 17:26	WG1211567
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/16/2018 17:26	WG1211567
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/16/2018 17:26	WG1211567
2,2-Dichloropropane	U		0.0929	0.500	1	12/16/2018 17:26	WG1211567
Di-isopropyl ether	U		0.0924	0.500	1	12/16/2018 17:26	WG1211567
Ethylbenzene	U		0.158	0.500	1	12/16/2018 17:26	WG1211567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/16/2018 17:26	WG1211567
2-Hexanone	U		0.757	5.00	1	12/16/2018 17:26	WG1211567
n-Hexane	U		0.305	5.00	1	12/16/2018 17:26	WG1211567
Iodomethane	U		0.377	10.0	1	12/16/2018 17:26	WG1211567

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/12/18 14:25

L1053394

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Isopropylbenzene	U		0.126	0.500	1	12/16/2018 17:26	WG1211567
p-Isopropyltoluene	U		0.138	0.500	1	12/16/2018 17:26	WG1211567
2-Butanone (MEK)	U		1.28	5.00	1	12/16/2018 17:26	WG1211567
Methylene Chloride	U		1.07	2.50	1	12/16/2018 17:26	WG1211567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/16/2018 17:26	WG1211567
Methyl tert-butyl ether	U		0.102	0.500	1	12/16/2018 17:26	WG1211567
Naphthalene	U		0.174	2.50	1	12/16/2018 17:26	WG1211567
n-Propylbenzene	U		0.162	0.500	1	12/16/2018 17:26	WG1211567
Styrene	U		0.117	0.500	1	12/16/2018 17:26	WG1211567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/16/2018 17:26	WG1211567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/16/2018 17:26	WG1211567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/16/2018 17:26	WG1211567
Tetrachloroethene	U		0.199	0.500	1	12/18/2018 01:54	WG1212222
Toluene	1.05		0.412	0.500	1	12/16/2018 17:26	WG1211567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/16/2018 17:26	WG1211567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/16/2018 17:26	WG1211567
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/16/2018 17:26	WG1211567
1,1,2-Trichloroethane	U		0.186	0.500	1	12/16/2018 17:26	WG1211567
Trichloroethene	U		0.153	0.500	1	12/18/2018 01:54	WG1212222
Trichlorofluoromethane	U		0.130	2.50	1	12/16/2018 17:26	WG1211567
1,2,3-Trichloropropane	U		0.247	2.50	1	12/16/2018 17:26	WG1211567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/16/2018 17:26	WG1211567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/16/2018 17:26	WG1211567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/16/2018 17:26	WG1211567
Vinyl acetate	U		0.645	5.00	1	12/16/2018 17:26	WG1211567
Vinyl chloride	2.30		0.118	0.500	1	12/16/2018 17:26	WG1211567
Xylenes, Total	U		0.316	1.50	1	12/16/2018 17:26	WG1211567
(S) Toluene-d8	106			80.0-120		12/16/2018 17:26	WG1211567
(S) Toluene-d8	107			80.0-120		12/18/2018 01:54	WG1212222
(S) Dibromofluoromethane	106			75.0-120		12/16/2018 17:26	WG1211567
(S) Dibromofluoromethane	89.4			75.0-120		12/18/2018 01:54	WG1212222
(S) 4-Bromofluorobenzene	88.5			77.0-126		12/16/2018 17:26	WG1211567
(S) 4-Bromofluorobenzene	98.3			77.0-126		12/18/2018 01:54	WG1212222

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 12/12/18 12:50

L1053394

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/17/2018 09:44	WG1211718
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		12/17/2018 09:44	WG1211718

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	12/18/2018 02:13	WG1212222
Acrylonitrile	U		0.873	5.00	1	12/16/2018 17:44	WG1211567
Benzene	U		0.0896	0.500	1	12/16/2018 17:44	WG1211567
Bromobenzene	U		0.133	0.500	1	12/16/2018 17:44	WG1211567
Bromodichloromethane	U		0.0800	0.500	1	12/16/2018 17:44	WG1211567
Bromochloromethane	U		0.145	0.500	1	12/16/2018 17:44	WG1211567
Bromoform	U		0.186	0.500	1	12/16/2018 17:44	WG1211567
Bromomethane	U		0.157	2.50	1	12/16/2018 17:44	WG1211567
n-Butylbenzene	U		0.143	0.500	1	12/16/2018 17:44	WG1211567
sec-Butylbenzene	U		0.134	0.500	1	12/16/2018 17:44	WG1211567
tert-Butylbenzene	U		0.183	0.500	1	12/16/2018 17:44	WG1211567
Carbon disulfide	U		0.101	0.500	1	12/16/2018 17:44	WG1211567
Carbon tetrachloride	U		0.159	0.500	1	12/16/2018 17:44	WG1211567
Chlorobenzene	U		0.140	0.500	1	12/16/2018 17:44	WG1211567
Chlorodibromomethane	U		0.128	0.500	1	12/16/2018 17:44	WG1211567
Chloroethane	U		0.141	2.50	1	12/16/2018 17:44	WG1211567
Chloroform	U		0.0860	0.500	1	12/16/2018 17:44	WG1211567
Chloromethane	U		0.153	1.25	1	12/16/2018 17:44	WG1211567
2-Chlorotoluene	U		0.111	0.500	1	12/16/2018 17:44	WG1211567
4-Chlorotoluene	U		0.0972	0.500	1	12/16/2018 17:44	WG1211567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/16/2018 17:44	WG1211567
1,2-Dibromoethane	U		0.193	0.500	1	12/16/2018 17:44	WG1211567
Dibromomethane	U		0.117	0.500	1	12/16/2018 17:44	WG1211567
1,2-Dichlorobenzene	U		0.101	0.500	1	12/16/2018 17:44	WG1211567
1,3-Dichlorobenzene	U		0.130	0.500	1	12/16/2018 17:44	WG1211567
1,4-Dichlorobenzene	U		0.121	0.500	1	12/16/2018 17:44	WG1211567
Dichlorodifluoromethane	U		0.127	2.50	1	12/16/2018 17:44	WG1211567
1,1-Dichloroethane	U		0.114	0.500	1	12/16/2018 17:44	WG1211567
1,2-Dichloroethane	U		0.108	0.500	1	12/16/2018 17:44	WG1211567
1,1-Dichloroethene	U		0.188	0.500	1	12/16/2018 17:44	WG1211567
cis-1,2-Dichloroethene	0.259	J	0.0933	0.500	1	12/18/2018 02:13	WG1212222
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/16/2018 17:44	WG1211567
1,2-Dichloropropane	U		0.190	0.500	1	12/16/2018 17:44	WG1211567
1,1-Dichloropropene	U		0.128	0.500	1	12/16/2018 17:44	WG1211567
1,3-Dichloropropane	U		0.147	1.00	1	12/16/2018 17:44	WG1211567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/16/2018 17:44	WG1211567
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/16/2018 17:44	WG1211567
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/16/2018 17:44	WG1211567
2,2-Dichloropropane	U		0.0929	0.500	1	12/16/2018 17:44	WG1211567
Di-isopropyl ether	U		0.0924	0.500	1	12/16/2018 17:44	WG1211567
Ethylbenzene	U		0.158	0.500	1	12/16/2018 17:44	WG1211567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/16/2018 17:44	WG1211567
2-Hexanone	U		0.757	5.00	1	12/16/2018 17:44	WG1211567
n-Hexane	U		0.305	5.00	1	12/16/2018 17:44	WG1211567
Iodomethane	U		0.377	10.0	1	12/16/2018 17:44	WG1211567
Isopropylbenzene	U		0.126	0.500	1	12/16/2018 17:44	WG1211567
p-Isopropyltoluene	U		0.138	0.500	1	12/16/2018 17:44	WG1211567
2-Butanone (MEK)	U		1.28	5.00	1	12/16/2018 17:44	WG1211567



Collected date/time: 12/12/18 12:50

L1053394

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	12/16/2018 17:44	WG1211567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/16/2018 17:44	WG1211567
Methyl tert-butyl ether	U		0.102	0.500	1	12/16/2018 17:44	WG1211567
Naphthalene	U		0.174	2.50	1	12/16/2018 17:44	WG1211567
n-Propylbenzene	U		0.162	0.500	1	12/16/2018 17:44	WG1211567
Styrene	U		0.117	0.500	1	12/16/2018 17:44	WG1211567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/16/2018 17:44	WG1211567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/16/2018 17:44	WG1211567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/16/2018 17:44	WG1211567
Tetrachloroethene	U		0.199	0.500	1	12/18/2018 02:13	WG1212222
Toluene	U		0.412	0.500	1	12/16/2018 17:44	WG1211567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/16/2018 17:44	WG1211567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/16/2018 17:44	WG1211567
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/16/2018 17:44	WG1211567
1,1,2-Trichloroethane	U		0.186	0.500	1	12/16/2018 17:44	WG1211567
Trichloroethene	U		0.153	0.500	1	12/18/2018 02:13	WG1212222
Trichlorofluoromethane	U		0.130	2.50	1	12/16/2018 17:44	WG1211567
1,2,3-Trichloropropane	U		0.247	2.50	1	12/16/2018 17:44	WG1211567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/16/2018 17:44	WG1211567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/16/2018 17:44	WG1211567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/16/2018 17:44	WG1211567
Vinyl acetate	U		0.645	5.00	1	12/16/2018 17:44	WG1211567
Vinyl chloride	21.9		0.118	0.500	1	12/16/2018 17:44	WG1211567
Xylenes, Total	U		0.316	1.50	1	12/16/2018 17:44	WG1211567
(S) Toluene-d8	106			80.0-120		12/16/2018 17:44	WG1211567
(S) Toluene-d8	107			80.0-120		12/18/2018 02:13	WG1212222
(S) Dibromofluoromethane	105			75.0-120		12/16/2018 17:44	WG1211567
(S) Dibromofluoromethane	88.2			75.0-120		12/18/2018 02:13	WG1212222
(S) 4-Bromofluorobenzene	88.9			77.0-126		12/16/2018 17:44	WG1211567
(S) 4-Bromofluorobenzene	95.6			77.0-126		12/18/2018 02:13	WG1212222

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/15/2018 22:04	WG1211498
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		12/15/2018 22:04	WG1211498

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.76	J	1.05	25.0	1	12/18/2018 02:33	WG1212222
Acrylonitrile	U		0.873	5.00	1	12/16/2018 18:03	WG1211567
Benzene	U		0.0896	0.500	1	12/16/2018 18:03	WG1211567
Bromobenzene	U		0.133	0.500	1	12/16/2018 18:03	WG1211567
Bromodichloromethane	U		0.0800	0.500	1	12/16/2018 18:03	WG1211567
Bromochloromethane	U		0.145	0.500	1	12/16/2018 18:03	WG1211567
Bromoform	U		0.186	0.500	1	12/16/2018 18:03	WG1211567
Bromomethane	U		0.157	2.50	1	12/16/2018 18:03	WG1211567
n-Butylbenzene	U		0.143	0.500	1	12/16/2018 18:03	WG1211567
sec-Butylbenzene	U		0.134	0.500	1	12/16/2018 18:03	WG1211567
tert-Butylbenzene	U		0.183	0.500	1	12/16/2018 18:03	WG1211567
Carbon disulfide	U		0.101	0.500	1	12/16/2018 18:03	WG1211567
Carbon tetrachloride	U		0.159	0.500	1	12/16/2018 18:03	WG1211567
Chlorobenzene	U		0.140	0.500	1	12/16/2018 18:03	WG1211567
Chlorodibromomethane	U		0.128	0.500	1	12/16/2018 18:03	WG1211567
Chloroethane	U		0.141	2.50	1	12/16/2018 18:03	WG1211567
Chloroform	U		0.0860	0.500	1	12/16/2018 18:03	WG1211567
Chloromethane	0.233	J	0.153	1.25	1	12/16/2018 18:03	WG1211567
2-Chlorotoluene	U		0.111	0.500	1	12/16/2018 18:03	WG1211567
4-Chlorotoluene	U		0.0972	0.500	1	12/16/2018 18:03	WG1211567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/16/2018 18:03	WG1211567
1,2-Dibromoethane	U		0.193	0.500	1	12/16/2018 18:03	WG1211567
Dibromomethane	U		0.117	0.500	1	12/16/2018 18:03	WG1211567
1,2-Dichlorobenzene	U		0.101	0.500	1	12/16/2018 18:03	WG1211567
1,3-Dichlorobenzene	U		0.130	0.500	1	12/16/2018 18:03	WG1211567
1,4-Dichlorobenzene	U		0.121	0.500	1	12/16/2018 18:03	WG1211567
Dichlorodifluoromethane	U		0.127	2.50	1	12/16/2018 18:03	WG1211567
1,1-Dichloroethane	U		0.114	0.500	1	12/16/2018 18:03	WG1211567
1,2-Dichloroethane	U		0.108	0.500	1	12/16/2018 18:03	WG1211567
1,1-Dichloroethene	1.67		0.188	0.500	1	12/16/2018 18:03	WG1211567
cis-1,2-Dichloroethene	7.88		0.0933	0.500	1	12/18/2018 02:33	WG1212222
trans-1,2-Dichloroethene	0.454	J	0.152	0.500	1	12/16/2018 18:03	WG1211567
1,2-Dichloropropane	U		0.190	0.500	1	12/16/2018 18:03	WG1211567
1,1-Dichloropropene	U		0.128	0.500	1	12/16/2018 18:03	WG1211567
1,3-Dichloropropane	U		0.147	1.00	1	12/16/2018 18:03	WG1211567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/16/2018 18:03	WG1211567
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/16/2018 18:03	WG1211567
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/16/2018 18:03	WG1211567
2,2-Dichloropropane	U		0.0929	0.500	1	12/16/2018 18:03	WG1211567
Di-isopropyl ether	U		0.0924	0.500	1	12/16/2018 18:03	WG1211567
Ethylbenzene	U		0.158	0.500	1	12/16/2018 18:03	WG1211567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/16/2018 18:03	WG1211567
2-Hexanone	U		0.757	5.00	1	12/16/2018 18:03	WG1211567
n-Hexane	U		0.305	5.00	1	12/16/2018 18:03	WG1211567
Iodomethane	U		0.377	10.0	1	12/16/2018 18:03	WG1211567
Isopropylbenzene	U		0.126	0.500	1	12/16/2018 18:03	WG1211567
p-Isopropyltoluene	U		0.138	0.500	1	12/16/2018 18:03	WG1211567
2-Butanone (MEK)	U		1.28	5.00	1	12/16/2018 18:03	WG1211567

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 12/12/18 10:00

L1053394

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	12/16/2018 18:03	WG1211567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/16/2018 18:03	WG1211567
Methyl tert-butyl ether	U		0.102	0.500	1	12/16/2018 18:03	WG1211567
Naphthalene	0.251	J	0.174	2.50	1	12/16/2018 18:03	WG1211567
n-Propylbenzene	U		0.162	0.500	1	12/16/2018 18:03	WG1211567
Styrene	U		0.117	0.500	1	12/16/2018 18:03	WG1211567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/16/2018 18:03	WG1211567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/16/2018 18:03	WG1211567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/16/2018 18:03	WG1211567
Tetrachloroethene	1.71		0.199	0.500	1	12/18/2018 02:33	WG1212222
Toluene	U		0.412	0.500	1	12/16/2018 18:03	WG1211567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/16/2018 18:03	WG1211567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/16/2018 18:03	WG1211567
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/16/2018 18:03	WG1211567
1,1,2-Trichloroethane	U		0.186	0.500	1	12/16/2018 18:03	WG1211567
Trichloroethene	2.75		0.153	0.500	1	12/18/2018 02:33	WG1212222
Trichlorofluoromethane	U		0.130	2.50	1	12/16/2018 18:03	WG1211567
1,2,3-Trichloropropane	U		0.247	2.50	1	12/16/2018 18:03	WG1211567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/16/2018 18:03	WG1211567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/16/2018 18:03	WG1211567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/16/2018 18:03	WG1211567
Vinyl acetate	U		0.645	5.00	1	12/16/2018 18:03	WG1211567
Vinyl chloride	5.95		0.118	0.500	1	12/16/2018 18:03	WG1211567
Xylenes, Total	U		0.316	1.50	1	12/16/2018 18:03	WG1211567
(S) Toluene-d8	104			80.0-120		12/16/2018 18:03	WG1211567
(S) Toluene-d8	106			80.0-120		12/18/2018 02:33	WG1212222
(S) Dibromofluoromethane	96.1			75.0-120		12/16/2018 18:03	WG1211567
(S) Dibromofluoromethane	87.9			75.0-120		12/18/2018 02:33	WG1212222
(S) 4-Bromofluorobenzene	88.5			77.0-126		12/16/2018 18:03	WG1211567
(S) 4-Bromofluorobenzene	96.7			77.0-126		12/18/2018 02:33	WG1212222

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/15/2018 22:25	WG1211498
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		12/15/2018 22:25	WG1211498

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.11	J	1.05	25.0	1	12/18/2018 02:52	WG1212222
Acrylonitrile	U		0.873	5.00	1	12/16/2018 18:22	WG1211567
Benzene	U		0.0896	0.500	1	12/16/2018 18:22	WG1211567
Bromobenzene	U		0.133	0.500	1	12/16/2018 18:22	WG1211567
Bromodichloromethane	U		0.0800	0.500	1	12/16/2018 18:22	WG1211567
Bromochloromethane	U		0.145	0.500	1	12/16/2018 18:22	WG1211567
Bromoform	U		0.186	0.500	1	12/16/2018 18:22	WG1211567
Bromomethane	U		0.157	2.50	1	12/16/2018 18:22	WG1211567
n-Butylbenzene	U		0.143	0.500	1	12/16/2018 18:22	WG1211567
sec-Butylbenzene	U		0.134	0.500	1	12/16/2018 18:22	WG1211567
tert-Butylbenzene	U		0.183	0.500	1	12/16/2018 18:22	WG1211567
Carbon disulfide	U		0.101	0.500	1	12/16/2018 18:22	WG1211567
Carbon tetrachloride	U		0.159	0.500	1	12/16/2018 18:22	WG1211567
Chlorobenzene	U		0.140	0.500	1	12/16/2018 18:22	WG1211567
Chlorodibromomethane	U		0.128	0.500	1	12/16/2018 18:22	WG1211567
Chloroethane	U		0.141	2.50	1	12/16/2018 18:22	WG1211567
Chloroform	U		0.0860	0.500	1	12/16/2018 18:22	WG1211567
Chloromethane	U		0.153	1.25	1	12/16/2018 18:22	WG1211567
2-Chlorotoluene	U		0.111	0.500	1	12/16/2018 18:22	WG1211567
4-Chlorotoluene	U		0.0972	0.500	1	12/16/2018 18:22	WG1211567
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/16/2018 18:22	WG1211567
1,2-Dibromoethane	U		0.193	0.500	1	12/16/2018 18:22	WG1211567
Dibromomethane	U		0.117	0.500	1	12/16/2018 18:22	WG1211567
1,2-Dichlorobenzene	U		0.101	0.500	1	12/16/2018 18:22	WG1211567
1,3-Dichlorobenzene	U		0.130	0.500	1	12/16/2018 18:22	WG1211567
1,4-Dichlorobenzene	U		0.121	0.500	1	12/16/2018 18:22	WG1211567
Dichlorodifluoromethane	U		0.127	2.50	1	12/16/2018 18:22	WG1211567
1,1-Dichloroethane	U		0.114	0.500	1	12/16/2018 18:22	WG1211567
1,2-Dichloroethane	U		0.108	0.500	1	12/16/2018 18:22	WG1211567
1,1-Dichloroethene	U		0.188	0.500	1	12/16/2018 18:22	WG1211567
cis-1,2-Dichloroethene	1.46		0.0933	0.500	1	12/18/2018 02:52	WG1212222
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/16/2018 18:22	WG1211567
1,2-Dichloropropane	U		0.190	0.500	1	12/16/2018 18:22	WG1211567
1,1-Dichloropropene	U		0.128	0.500	1	12/16/2018 18:22	WG1211567
1,3-Dichloropropane	U		0.147	1.00	1	12/16/2018 18:22	WG1211567
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/16/2018 18:22	WG1211567
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/16/2018 18:22	WG1211567
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/16/2018 18:22	WG1211567
2,2-Dichloropropane	U		0.0929	0.500	1	12/16/2018 18:22	WG1211567
Di-isopropyl ether	U		0.0924	0.500	1	12/16/2018 18:22	WG1211567
Ethylbenzene	U		0.158	0.500	1	12/16/2018 18:22	WG1211567
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/16/2018 18:22	WG1211567
2-Hexanone	U		0.757	5.00	1	12/16/2018 18:22	WG1211567
n-Hexane	U		0.305	5.00	1	12/16/2018 18:22	WG1211567
Iodomethane	U		0.377	10.0	1	12/16/2018 18:22	WG1211567
Isopropylbenzene	U		0.126	0.500	1	12/16/2018 18:22	WG1211567
p-Isopropyltoluene	U		0.138	0.500	1	12/16/2018 18:22	WG1211567
2-Butanone (MEK)	U		1.28	5.00	1	12/16/2018 18:22	WG1211567

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	12/16/2018 18:22	WG1211567
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/16/2018 18:22	WG1211567
Methyl tert-butyl ether	U		0.102	0.500	1	12/16/2018 18:22	WG1211567
Naphthalene	U		0.174	2.50	1	12/16/2018 18:22	WG1211567
n-Propylbenzene	U		0.162	0.500	1	12/16/2018 18:22	WG1211567
Styrene	U		0.117	0.500	1	12/16/2018 18:22	WG1211567
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/16/2018 18:22	WG1211567
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/16/2018 18:22	WG1211567
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/16/2018 18:22	WG1211567
Tetrachloroethene	U		0.199	0.500	1	12/18/2018 02:52	WG1212222
Toluene	U		0.412	0.500	1	12/16/2018 18:22	WG1211567
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/16/2018 18:22	WG1211567
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/16/2018 18:22	WG1211567
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/16/2018 18:22	WG1211567
1,1,2-Trichloroethane	U		0.186	0.500	1	12/16/2018 18:22	WG1211567
Trichloroethene	U		0.153	0.500	1	12/18/2018 02:52	WG1212222
Trichlorofluoromethane	U		0.130	2.50	1	12/16/2018 18:22	WG1211567
1,2,3-Trichloropropane	U		0.247	2.50	1	12/16/2018 18:22	WG1211567
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/16/2018 18:22	WG1211567
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/16/2018 18:22	WG1211567
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/16/2018 18:22	WG1211567
Vinyl acetate	U		0.645	5.00	1	12/16/2018 18:22	WG1211567
Vinyl chloride	0.520		0.118	0.500	1	12/16/2018 18:22	WG1211567
Xylenes, Total	U		0.316	1.50	1	12/16/2018 18:22	WG1211567
(S) Toluene-d8	104			80.0-120		12/16/2018 18:22	WG1211567
(S) Toluene-d8	108			80.0-120		12/18/2018 02:52	WG1212222
(S) Dibromofluoromethane	107			75.0-120		12/16/2018 18:22	WG1211567
(S) Dibromofluoromethane	91.6			75.0-120		12/18/2018 02:52	WG1212222
(S) 4-Bromofluorobenzene	87.8			77.0-126		12/16/2018 18:22	WG1211567
(S) 4-Bromofluorobenzene	96.1			77.0-126		12/18/2018 02:52	WG1212222

- 1 Cp
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- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1053394-01.02.05.06](#)

Method Blank (MB)

	(MB) R3368595-3	12/15/18	14:52															
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL														
Gasoline Range Organics-NWTPH	U		316	100														
^(S) a,a'-Trifluorotoluene(FID)	105			78.0-120														

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3368595-1	12/15/18	13:48	(LCSD) R3368595-2	12/15/18	14:09												
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits								
Gasoline Range Organics-NWTPH	5500	5920	5860	108	107	70.0-124			0.937	20								
^(S) a,a'-Trifluorotoluene(FID)				99.9	97.9	78.0-120												

L1053029-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1053029-04	12/15/18	18:09	(MS) R3368595-4	12/15/18	22:46	(MSD) R3368595-5	12/15/18	23:08									
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits						
Gasoline Range Organics-NWTPH	5500	U	7330	5710	133	104	1	10.0-155			24.9	21						
^(S) a,a'-Trifluorotoluene(FID)					97.4	99.8		78.0-120										

1 Cp
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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1053394-03.04](#)

Method Blank (MB)

(MB) R3368736-3 12/17/18 00:08

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l

Gasoline Range Organics-NWTPH	U		316	100
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^(S) a,a'-Trifluorotoluene(FID)	105			78.0-120
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3368736-1 12/16/18 23:04 • (LCSD) R3368736-2 12/16/18 23:25

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Gasoline Range Organics-NWTPH	5500	5600	5560	102	101	70.0-124			0.660	20
^(S) a,a'-Trifluorotoluene(FID)				101	99.1	78.0-120				

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Method Blank (MB)

(MB) R3368961-3 12/16/18 11:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Method Blank (MB)

(MB) R3368961-3 12/16/18 11:47

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	98.0			75.0-120
(S) 4-Bromofluorobenzene	98.3			77.0-126

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3368961-1 12/16/18 10:50 • (LCSD) R3368961-2 12/16/18 11:09

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Acrylonitrile	125	101	109	80.6	87.1	55.0-149			7.79	20
Benzene	25.0	23.6	23.5	94.4	94.2	70.0-123			0.298	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3368961-1 12/16/18 10:50 • (LCSD) R3368961-2 12/16/18 11:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromobenzene	25.0	22.9	22.8	91.5	91.1	73.0-121			0.383	20
Bromodichloromethane	25.0	23.7	23.6	94.7	94.6	75.0-120			0.0741	20
Bromochloromethane	25.0	25.4	25.3	102	101	76.0-122			0.355	20
Bromoform	25.0	24.9	24.9	99.6	99.5	68.0-132			0.0793	20
Bromomethane	25.0	25.9	26.2	103	105	10.0-160			1.34	25
n-Butylbenzene	25.0	24.2	24.0	96.6	96.1	73.0-125			0.545	20
sec-Butylbenzene	25.0	23.8	23.5	95.4	94.2	75.0-125			1.28	20
tert-Butylbenzene	25.0	23.8	23.6	95.1	94.2	76.0-124			0.955	20
Carbon disulfide	25.0	24.9	25.4	99.7	101	61.0-128			1.69	20
Carbon tetrachloride	25.0	24.3	23.9	97.3	95.7	68.0-126			1.71	20
Chlorobenzene	25.0	25.5	25.3	102	101	80.0-121			0.906	20
Chlorodibromomethane	25.0	25.3	25.3	101	101	77.0-125			0.149	20
Chloroethane	25.0	25.3	23.7	101	94.8	47.0-150			6.38	20
Chloroform	25.0	23.6	23.6	94.3	94.2	73.0-120			0.0644	20
Chloromethane	25.0	25.0	24.1	99.8	96.5	41.0-142			3.37	20
2-Chlorotoluene	25.0	23.2	23.2	92.9	92.9	76.0-123			0.00176	20
4-Chlorotoluene	25.0	23.2	22.8	92.8	91.2	75.0-122			1.66	20
1,2-Dibromo-3-Chloropropane	25.0	22.8	24.1	91.1	96.6	58.0-134			5.90	20
1,2-Dibromoethane	25.0	25.0	24.9	100	99.6	80.0-122			0.550	20
Dibromomethane	25.0	24.4	24.4	97.6	97.6	80.0-120			0.0523	20
1,2-Dichlorobenzene	25.0	23.9	24.3	95.6	97.3	79.0-121			1.69	20
1,3-Dichlorobenzene	25.0	23.8	23.7	95.2	94.8	79.0-120			0.380	20
1,4-Dichlorobenzene	25.0	24.3	24.3	97.3	97.0	79.0-120			0.252	20
Dichlorodifluoromethane	25.0	28.9	28.9	116	116	51.0-149			0.0230	20
1,1-Dichloroethane	25.0	24.8	24.3	99.1	97.3	70.0-126			1.89	20
1,2-Dichloroethane	25.0	24.0	24.3	96.2	97.4	70.0-128			1.25	20
1,1-Dichloropropene	25.0	26.0	26.4	104	106	71.0-124			1.50	20
trans-1,2-Dichloroethene	25.0	24.3	24.3	97.2	97.4	73.0-120			0.198	20
1,2-Dichloropropane	25.0	24.8	24.3	99.1	97.1	77.0-125			1.97	20
1,1-Dichloropropane	25.0	25.1	25.0	100	99.8	74.0-126			0.438	20
1,3-Dichloropropane	25.0	25.3	25.1	101	100	80.0-120			0.785	20
cis-1,3-Dichloropropene	25.0	25.9	25.6	104	102	80.0-123			1.35	20
trans-1,3-Dichloropropene	25.0	25.6	25.1	102	100	78.0-124			2.07	20
trans-1,4-Dichloro-2-butene	25.0	22.8	22.3	91.1	89.1	33.0-144			2.22	20
2,2-Dichloropropane	25.0	23.5	22.8	94.1	91.3	58.0-130			3.04	20
Di-isopropyl ether	25.0	24.1	23.5	96.4	93.8	58.0-138			2.65	20
Ethylbenzene	25.0	25.3	24.6	101	98.5	79.0-123			2.84	20
Hexachloro-1,3-butadiene	25.0	24.3	23.9	97.1	95.8	54.0-138			1.42	20
2-Hexanone	125	119	115	95.3	91.8	67.0-149			3.78	20
n-Hexane	25.0	25.8	26.3	103	105	57.0-133			2.19	20

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1053394-01.02.03.04.05.06](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	(LCS) R3368961-1 12/16/18 10:50 • (LCSD) R3368961-2 12/16/18 11:09		LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
	Spike Amount ug/l	LCS Result ug/l							
Iodomethane	125	127	102	101	33.0-147			0.981	26
Isopropylbenzene	25.0	23.1	92.5	92.1	76.0-127			0.379	20
p-Isopropyltoluene	25.0	24.4	97.7	97.0	76.0-125			0.648	20
2-Butanone (MEK)	125	123	98.7	91.5	44.0-160			7.56	20
Methylene Chloride	25.0	23.8	95.3	94.6	67.0-120			0.735	20
4-Methyl-2-pentanone (MIBK)	125	117	93.8	92.2	68.0-142			1.76	20
Methyl tert-butyl ether	25.0	25.0	100	95.2	68.0-125			4.98	20
Naphthalene	25.0	21.9	87.5	93.3	54.0-135			6.41	20
n-Propylbenzene	25.0	23.4	93.6	92.2	77.0-124			1.49	20
Styrene	25.0	23.9	95.6	94.0	73.0-130			1.68	20
1,1,1,2-Tetrachloroethane	25.0	25.4	102	99.5	75.0-125			2.17	20
1,1,2,2-Tetrachloroethane	25.0	22.4	89.5	89.7	65.0-130			0.238	20
1,1,2-Trichlorotrifluoroethane	25.0	25.9	104	102	69.0-132			1.14	20
Toluene	25.0	23.6	94.5	93.9	79.0-120			0.549	20
1,2,3-Trichlorobenzene	25.0	22.4	89.5	94.1	50.0-138			4.99	20
1,2,4-Trichlorobenzene	25.0	22.6	90.5	95.5	57.0-137			5.47	20
1,1,1-Trichloroethane	25.0	23.8	95.4	93.8	73.0-124			1.66	20
1,1,2-Trichloroethane	25.0	23.6	94.5	94.8	80.0-120			0.371	20
Trichlorofluoromethane	25.0	26.8	107	104	59.0-147			2.68	20
1,2,3-Trichloropropane	25.0	21.6	86.5	88.8	73.0-130			2.63	20
1,2,4-Trimethylbenzene	25.0	23.2	92.7	91.5	76.0-121			1.41	20
1,2,3-Trimethylbenzene	25.0	23.7	94.6	95.4	77.0-120			0.824	20
1,3,5-Trimethylbenzene	25.0	23.1	92.4	92.7	76.0-122			0.275	20
Vinyl acetate	125	117	93.9	93.1	11.0-160			0.857	20
Vinyl chloride	25.0	26.2	105	102	67.0-131			2.81	20
Xylenes, Total	75.0	75.6	101	98.3	79.0-123			2.55	20
(S) Toluene-d8			103	102	80.0-120				
(S) Dibromofluoromethane			101	101	75.0-120				
(S) 4-Bromofluorobenzene			96.5	95.5	77.0-126				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3369057-2 12/17/18 22:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Acetone	U		1.05	25.0
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	110			80.0-120
(S) Dibromofluoromethane	87.0			75.0-120
(S) 4-Bromofluorobenzene	98.0			77.0-126

Laboratory Control Sample (LCS)

(LCS) R3369057-1 12/17/18 21:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	113	90.7	19.0-160	
cis-1,2-Dichloroethene	25.0	22.2	88.8	73.0-120	
Tetrachloroethene	25.0	29.6	118	72.0-132	
Trichloroethene	25.0	25.0	99.8	78.0-124	
(S) Toluene-d8			104	80.0-120	
(S) Dibromofluoromethane			84.1	75.0-120	
(S) 4-Bromofluorobenzene			96.7	77.0-126	

Public Review Draft





Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
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- 9 Sc

Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J3	The associated batch QC was outside the established quality control range for precision.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

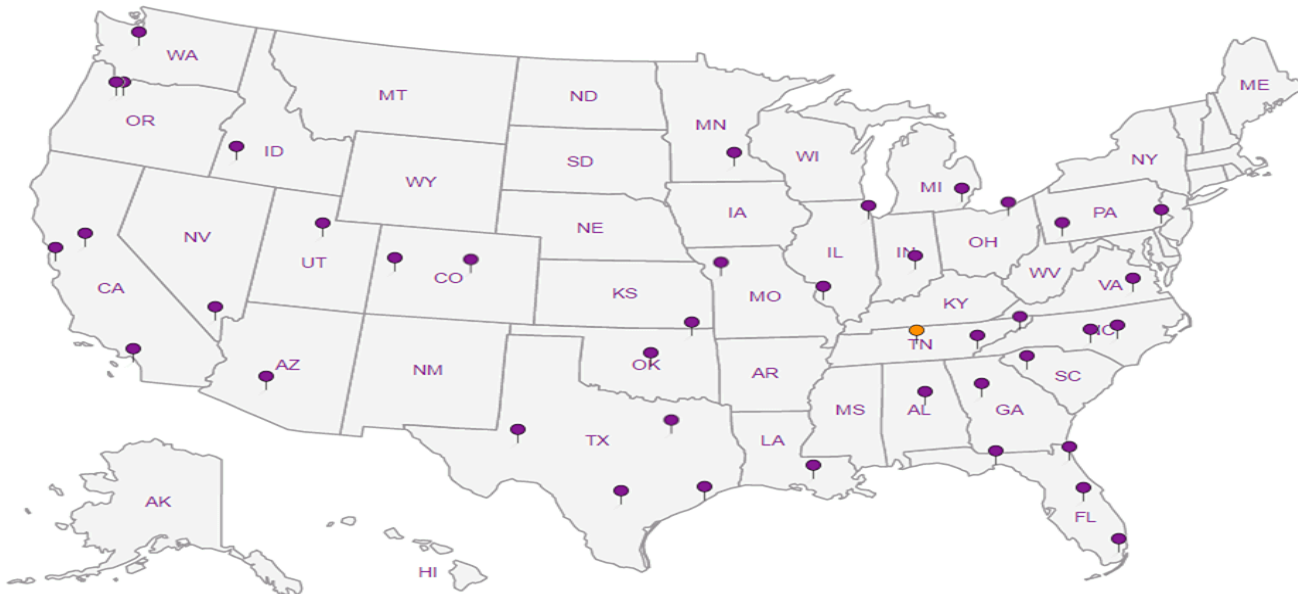
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to: **Brian O'Neal**
Kester-Springstead

Email to: **kspringstead@pesenv.com**
bowl@pesenv.com

Project: **AWSE American Linen**

City/State Collected: **Seattle WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project # **1358.001.01.003**

Lab Project # **PESENVSWA-MVSC**

Collected by (print): **A. With/B. Held/K. Zygus**

Site/Facility ID #

P.O. #

Collected by (signature): *[Signature]*

Quote #

Immediately Packed on Ice N Y

Date Results Needed
Same Day Five Day
Next Day 5 Day (Iad Only)
Two Day 10 Day (Iad Only)
Three Day

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Qty

V8260LLC VOCs 40ml/Amb-HCl

NWTPH - GX

MW-131-121218
MW-132-121218
W-MW-02-121218
MW-134-121218
MW-133-121218
MW-141-121218

Grab	GW	49'	12-12-18	1245	6
	GW	110'		1445	6
	GW	75'		1425	6
	GW	85'		1250	6
	GW	134'		1200	4
	GW	100'	X	1120	6

Remarks:

[Handwritten notes and markings in the sample table area]

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Blossom
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS FedEx Courier

Relinquished by: (Signature) *[Signature]*

Date: **12/13/18** Time: **1000**

Relinquished by: (Signature)

Date: _____ Time: _____

Pres. Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-798-8888
Phone: 800-767-8899
Fax: 615-798-9899



L# **U053394**
D086

Account: **PESENVSWA**

Template: **T131700**

Prelogin: **P662457**

TSN: **110 - Brian Ford**

PB:

Shipped Via: _____
Remarks: _____
Sample # (Iad only)

pH _____ Temp _____
Flow _____ Other _____

Tracking # **4585648984C7**

Trip Blank Received: Yes/No
HCL/MeOH TBR

Temp: **15.80°C** bottles received: **34**
Date: **12/14/18** Time: **0830**

Received for lab by: (Signature) *[Signature]*

Date: **12/14/18** Time: **0830**

Hold: _____
If preservation required by Login: Date/Time

Sample Receipt Checklist

COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive Intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable:
VOR zero HeadSpace: Y N
Preservation Correct/Checked: Y N

PAR GREEN: <0.5 MB/HR

Conf: OK NCF

Katie Ingram



Login #: <u>UD53394</u>	Client: PESENVSWA	Date: 12/14/18	Evaluated by: Myra "Katie" Ingram
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Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	
Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
Broken container	x Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments:

We received all 40ml Amb-HCL containers.

Does client want these vials placed on hold or them analyzed.

Client informed by:	Call	Email X	Voice Mail	Date: 12/14/18	Time: 2030
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TSR Initials: bjf	Client Contact: Brian O'Neal
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Login Instructions:

Analyze all samples for NWTPHGX and V8260LLC as R3 due 12/18.



ANALYTICAL REPORT

January 04, 2019

PES Environmental, Inc.- WA

Sample Delivery Group: L1053929
Samples Received: 12/18/2018
Project Number: 1413.001.05.601
Description: American Linen
Site: AMERICAN LINEN
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



Cp: Cover Page	1	1 Cp
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Cn: Case Narrative	4	
Sr: Sample Results	5	3 Ss
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Qc: Quality Control Summary	10	5 Sr
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MW-138-121718 L1053929-01 GW

Collected by Alyssa Witt
 Collected date/time 12/17/18 11:25
 Received date/time 12/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1213027	1	12/19/18 19:22	12/19/18 19:22	JHH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1213125	1	12/19/18 20:42	12/19/18 20:42	PP

¹ Cp

² Tc

³ Ss

MW-130-121718 L1053929-02 GW

Collected by Alyssa Witt
 Collected date/time 12/17/18 13:20
 Received date/time 12/18/18 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1213167	1	12/21/18 15:17	12/21/18 15:17	GB
Wet Chemistry by Method 9056A	WG1212377	1	12/18/18 18:48	12/18/18 18:48	ELN
Wet Chemistry by Method 9056A	WG1212377	5	12/18/18 19:36	12/18/18 19:36	ELN
Wet Chemistry by Method 9060A	WG1218013	1	01/02/19 19:31	01/02/19 19:31	EEM
Metals (ICPMS) by Method 6020B	WG1212854	1	12/19/18 10:18	12/20/18 15:18	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1213027	20	12/19/18 19:43	12/19/18 19:43	JHH
Volatile Organic Compounds (GC) by Method RSK175	WG1213275	1	12/21/18 13:35	12/21/18 13:35	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1213125	50	12/19/18 21:02	12/19/18 21:02	PP
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1214284	200	12/21/18 17:19	12/21/18 17:19	BMB

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	12/19/2018 19:22	WG1213027
(S) a,a,a-Trifluorotoluene(FID)	92.8			78.0-120		12/19/2018 19:22	WG1213027

- 1 Cp
- 2 Tc
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- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	12/19/2018 20:42	WG1213125
Acrylonitrile	U		0.873	5.00	1	12/19/2018 20:42	WG1213125
Benzene	U		0.0896	0.500	1	12/19/2018 20:42	WG1213125
Bromobenzene	U		0.133	0.500	1	12/19/2018 20:42	WG1213125
Bromodichloromethane	U		0.0800	0.500	1	12/19/2018 20:42	WG1213125
Bromochloromethane	U		0.145	0.500	1	12/19/2018 20:42	WG1213125
Bromoform	U		0.186	0.500	1	12/19/2018 20:42	WG1213125
Bromomethane	U		0.157	2.50	1	12/19/2018 20:42	WG1213125
n-Butylbenzene	U		0.143	0.500	1	12/19/2018 20:42	WG1213125
sec-Butylbenzene	U		0.134	0.500	1	12/19/2018 20:42	WG1213125
tert-Butylbenzene	U		0.183	0.500	1	12/19/2018 20:42	WG1213125
Carbon disulfide	0.382	J	0.101	0.500	1	12/19/2018 20:42	WG1213125
Carbon tetrachloride	U		0.159	0.500	1	12/19/2018 20:42	WG1213125
Chlorobenzene	U		0.140	0.500	1	12/19/2018 20:42	WG1213125
Chlorodibromomethane	U		0.128	0.500	1	12/19/2018 20:42	WG1213125
Chloroethane	U		0.141	2.50	1	12/19/2018 20:42	WG1213125
Chloroform	U		0.0860	0.500	1	12/19/2018 20:42	WG1213125
Chloromethane	U		0.153	1.25	1	12/19/2018 20:42	WG1213125
2-Chlorotoluene	U		0.111	0.500	1	12/19/2018 20:42	WG1213125
4-Chlorotoluene	U		0.0972	0.500	1	12/19/2018 20:42	WG1213125
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	12/19/2018 20:42	WG1213125
1,2-Dibromoethane	U		0.193	0.500	1	12/19/2018 20:42	WG1213125
Dibromomethane	U		0.117	0.500	1	12/19/2018 20:42	WG1213125
1,2-Dichlorobenzene	U		0.101	0.500	1	12/19/2018 20:42	WG1213125
1,3-Dichlorobenzene	U		0.130	0.500	1	12/19/2018 20:42	WG1213125
1,4-Dichlorobenzene	U		0.121	0.500	1	12/19/2018 20:42	WG1213125
Dichlorodifluoromethane	U		0.127	2.50	1	12/19/2018 20:42	WG1213125
1,1-Dichloroethane	U		0.114	0.500	1	12/19/2018 20:42	WG1213125
1,2-Dichloroethane	U		0.108	0.500	1	12/19/2018 20:42	WG1213125
1,1-Dichloroethene	U		0.188	0.500	1	12/19/2018 20:42	WG1213125
cis-1,2-Dichloroethene	U		0.0933	0.500	1	12/19/2018 20:42	WG1213125
trans-1,2-Dichloroethene	U		0.152	0.500	1	12/19/2018 20:42	WG1213125
1,2-Dichloropropane	U		0.190	0.500	1	12/19/2018 20:42	WG1213125
1,1-Dichloropropene	U		0.128	0.500	1	12/19/2018 20:42	WG1213125
1,3-Dichloropropane	U		0.147	1.00	1	12/19/2018 20:42	WG1213125
cis-1,3-Dichloropropene	U		0.0976	0.500	1	12/19/2018 20:42	WG1213125
trans-1,3-Dichloropropene	U		0.222	0.500	1	12/19/2018 20:42	WG1213125
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	12/19/2018 20:42	WG1213125
2,2-Dichloropropane	U		0.0929	0.500	1	12/19/2018 20:42	WG1213125
Di-isopropyl ether	U		0.0924	0.500	1	12/19/2018 20:42	WG1213125
Ethylbenzene	U		0.158	0.500	1	12/19/2018 20:42	WG1213125
Hexachloro-1,3-butadiene	U		0.157	1.00	1	12/19/2018 20:42	WG1213125
2-Hexanone	U		0.757	5.00	1	12/19/2018 20:42	WG1213125
n-Hexane	U		0.305	5.00	1	12/19/2018 20:42	WG1213125
Iodomethane	U		0.377	10.0	1	12/19/2018 20:42	WG1213125
Isopropylbenzene	U		0.126	0.500	1	12/19/2018 20:42	WG1213125
p-Isopropyltoluene	U		0.138	0.500	1	12/19/2018 20:42	WG1213125
2-Butanone (MEK)	U		1.28	5.00	1	12/19/2018 20:42	WG1213125



Collected date/time: 12/17/18 11:25

L1053929

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	12/19/2018 20:42	WG1213125
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	12/19/2018 20:42	WG1213125
Methyl tert-butyl ether	U		0.102	0.500	1	12/19/2018 20:42	WG1213125
Naphthalene	U		0.174	2.50	1	12/19/2018 20:42	WG1213125
n-Propylbenzene	U		0.162	0.500	1	12/19/2018 20:42	WG1213125
Styrene	U		0.117	0.500	1	12/19/2018 20:42	WG1213125
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	12/19/2018 20:42	WG1213125
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	12/19/2018 20:42	WG1213125
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	12/19/2018 20:42	WG1213125
Tetrachloroethene	U		0.199	0.500	1	12/19/2018 20:42	WG1213125
Toluene	U		0.412	0.500	1	12/19/2018 20:42	WG1213125
1,2,3-Trichlorobenzene	U		0.164	0.500	1	12/19/2018 20:42	WG1213125
1,2,4-Trichlorobenzene	U		0.355	0.500	1	12/19/2018 20:42	WG1213125
1,1,1-Trichloroethane	U		0.0940	0.500	1	12/19/2018 20:42	WG1213125
1,1,2-Trichloroethane	U		0.186	0.500	1	12/19/2018 20:42	WG1213125
Trichloroethene	U		0.153	0.500	1	12/19/2018 20:42	WG1213125
Trichlorofluoromethane	U		0.130	2.50	1	12/19/2018 20:42	WG1213125
1,2,3-Trichloropropane	U		0.247	2.50	1	12/19/2018 20:42	WG1213125
1,2,4-Trimethylbenzene	U		0.123	0.500	1	12/19/2018 20:42	WG1213125
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	12/19/2018 20:42	WG1213125
1,3,5-Trimethylbenzene	U		0.124	0.500	1	12/19/2018 20:42	WG1213125
Vinyl acetate	U		0.645	5.00	1	12/19/2018 20:42	WG1213125
Vinyl chloride	U		0.118	0.500	1	12/19/2018 20:42	WG1213125
Xylenes, Total	U		0.316	1.50	1	12/19/2018 20:42	WG1213125
(S) Toluene-d8	103			80.0-120		12/19/2018 20:42	WG1213125
(S) Dibromofluoromethane	98.1			75.0-120		12/19/2018 20:42	WG1213125
(S) 4-Bromofluorobenzene	104			77.0-126		12/19/2018 20:42	WG1213125

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	384000		2710	20000	1	12/21/2018 15:17	WG1213167

Sample Narrative:

L1053929-02 WG1213167: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	143000		260	5000	5	12/18/2018 19:36	WG1212377
Nitrate	U		22.7	100	1	12/18/2018 18:48	WG1212377
Sulfate	17300		77.4	5000	1	12/18/2018 18:48	WG1212377

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12600		102	1000	1	01/02/2019 19:31	WG1218013

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2260		15.0	100	1	12/20/2018 15:18	WG1212854
Manganese	490		0.250	5.00	1	12/20/2018 15:18	WG1212854

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	16400		632	2000	20	12/19/2018 19:43	WG1213027
(S) a,a,a-Trifluorotoluene(FID)	93.1			78.0-120		12/19/2018 19:43	WG1213027

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	324		0.287	0.678	1	12/21/2018 13:35	WG1213275
Ethane	8.36		0.296	1.29	1	12/21/2018 13:35	WG1213275
Ethene	166		0.422	1.27	1	12/21/2018 13:35	WG1213275

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	65.0	J	52.5	1250	50	12/19/2018 21:02	WG1213125
Acrylonitrile	U		43.6	250	50	12/19/2018 21:02	WG1213125
Benzene	U		4.48	25.0	50	12/19/2018 21:02	WG1213125
Bromobenzene	U		6.65	25.0	50	12/19/2018 21:02	WG1213125
Bromodichloromethane	U		4.00	25.0	50	12/19/2018 21:02	WG1213125
Bromochloromethane	U		7.25	25.0	50	12/19/2018 21:02	WG1213125
Bromoform	U		9.30	25.0	50	12/19/2018 21:02	WG1213125
Bromomethane	U		7.85	125	50	12/19/2018 21:02	WG1213125
n-Butylbenzene	U		7.15	25.0	50	12/19/2018 21:02	WG1213125
sec-Butylbenzene	U		6.70	25.0	50	12/19/2018 21:02	WG1213125
tert-Butylbenzene	U		9.15	25.0	50	12/19/2018 21:02	WG1213125
Carbon disulfide	5.74	J	5.05	25.0	50	12/19/2018 21:02	WG1213125
Carbon tetrachloride	U		7.95	25.0	50	12/19/2018 21:02	WG1213125

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 12/17/18 13:20

L1053929

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		7.00	25.0	50	12/19/2018 21:02	WG1213125
Chlorodibromomethane	U		6.40	25.0	50	12/19/2018 21:02	WG1213125
Chloroethane	U		7.05	125	50	12/19/2018 21:02	WG1213125
Chloroform	U		4.30	25.0	50	12/19/2018 21:02	WG1213125
Chloromethane	U		7.65	62.5	50	12/19/2018 21:02	WG1213125
2-Chlorotoluene	U		5.55	25.0	50	12/19/2018 21:02	WG1213125
4-Chlorotoluene	U		4.86	25.0	50	12/19/2018 21:02	WG1213125
1,2-Dibromo-3-Chloropropane	U		16.2	125	50	12/19/2018 21:02	WG1213125
1,2-Dibromoethane	U		9.65	25.0	50	12/19/2018 21:02	WG1213125
Dibromomethane	U		5.85	25.0	50	12/19/2018 21:02	WG1213125
1,2-Dichlorobenzene	U		5.05	25.0	50	12/19/2018 21:02	WG1213125
1,3-Dichlorobenzene	U		6.50	25.0	50	12/19/2018 21:02	WG1213125
1,4-Dichlorobenzene	U		6.05	25.0	50	12/19/2018 21:02	WG1213125
Dichlorodifluoromethane	U		6.35	125	50	12/19/2018 21:02	WG1213125
1,1-Dichloroethane	U		5.70	25.0	50	12/19/2018 21:02	WG1213125
1,2-Dichloroethane	U		5.40	25.0	50	12/19/2018 21:02	WG1213125
1,1-Dichloroethene	124		9.40	25.0	50	12/19/2018 21:02	WG1213125
cis-1,2-Dichloroethene	26400		18.7	100	200	12/21/2018 17:19	WG1214284
trans-1,2-Dichloroethene	83.5		7.60	25.0	50	12/19/2018 21:02	WG1213125
1,2-Dichloropropane	U		9.50	25.0	50	12/19/2018 21:02	WG1213125
1,1-Dichloropropene	U		6.40	25.0	50	12/19/2018 21:02	WG1213125
1,3-Dichloropropane	U		7.35	50.0	50	12/19/2018 21:02	WG1213125
cis-1,3-Dichloropropene	U		4.88	25.0	50	12/19/2018 21:02	WG1213125
trans-1,3-Dichloropropene	U		11.1	25.0	50	12/19/2018 21:02	WG1213125
trans-1,4-Dichloro-2-butene	U		12.8	250	50	12/19/2018 21:02	WG1213125
2,2-Dichloropropane	U		4.64	25.0	50	12/19/2018 21:02	WG1213125
Di-isopropyl ether	U		4.62	25.0	50	12/19/2018 21:02	WG1213125
Ethylbenzene	U		7.90	25.0	50	12/19/2018 21:02	WG1213125
Hexachloro-1,3-butadiene	U		7.85	50.0	50	12/19/2018 21:02	WG1213125
2-Hexanone	U		37.8	250	50	12/19/2018 21:02	WG1213125
n-Hexane	U		15.2	250	50	12/19/2018 21:02	WG1213125
Iodomethane	U		18.8	500	50	12/19/2018 21:02	WG1213125
Isopropylbenzene	U		6.30	25.0	50	12/19/2018 21:02	WG1213125
p-Isopropyltoluene	U		6.90	25.0	50	12/19/2018 21:02	WG1213125
2-Butanone (MEK)	U		64.0	250	50	12/19/2018 21:02	WG1213125
Methylene Chloride	U		53.5	125	50	12/19/2018 21:02	WG1213125
4-Methyl-2-pentanone (MIBK)	U		41.2	250	50	12/19/2018 21:02	WG1213125
Methyl tert-butyl ether	U		5.10	25.0	50	12/19/2018 21:02	WG1213125
Naphthalene	U		8.70	125	50	12/19/2018 21:02	WG1213125
n-Propylbenzene	U		8.10	25.0	50	12/19/2018 21:02	WG1213125
Styrene	U		5.85	25.0	50	12/19/2018 21:02	WG1213125
1,1,1,2-Tetrachloroethane	U		6.00	25.0	50	12/19/2018 21:02	WG1213125
1,1,2,2-Tetrachloroethane	U		6.50	25.0	50	12/19/2018 21:02	WG1213125
1,1,2-Trichlorotrifluoroethane	U		8.20	25.0	50	12/19/2018 21:02	WG1213125
Tetrachloroethene	9650		9.95	25.0	50	12/19/2018 21:02	WG1213125
Toluene	U		20.6	25.0	50	12/19/2018 21:02	WG1213125
1,2,3-Trichlorobenzene	U		8.20	25.0	50	12/19/2018 21:02	WG1213125
1,2,4-Trichlorobenzene	U		17.8	25.0	50	12/19/2018 21:02	WG1213125
1,1,1-Trichloroethane	U		4.70	25.0	50	12/19/2018 21:02	WG1213125
1,1,2-Trichloroethane	U		9.30	25.0	50	12/19/2018 21:02	WG1213125
Trichloroethene	3220		7.65	25.0	50	12/19/2018 21:02	WG1213125
Trichlorofluoromethane	U		6.50	125	50	12/19/2018 21:02	WG1213125
1,2,3-Trichloropropane	U		12.4	125	50	12/19/2018 21:02	WG1213125
1,2,4-Trimethylbenzene	U		6.15	25.0	50	12/19/2018 21:02	WG1213125
1,2,3-Trimethylbenzene	U		3.70	25.0	50	12/19/2018 21:02	WG1213125
1,3,5-Trimethylbenzene	U		6.20	25.0	50	12/19/2018 21:02	WG1213125

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 12/17/18 13:20

L1053929

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		32.2	250	50	12/19/2018 21:02	WG1213125
Vinyl chloride	1420		5.90	25.0	50	12/19/2018 21:02	WG1213125
Xylenes, Total	U		15.8	75.0	50	12/19/2018 21:02	WG1213125
(S) Toluene-d8	104			80.0-120		12/19/2018 21:02	WG1213125
(S) Toluene-d8	103			80.0-120		12/21/2018 17:19	WG1214284
(S) Dibromofluoromethane	98.3			75.0-120		12/19/2018 21:02	WG1213125
(S) Dibromofluoromethane	94.3			75.0-120		12/21/2018 17:19	WG1214284
(S) 4-Bromofluorobenzene	103			77.0-126		12/19/2018 21:02	WG1213125
(S) 4-Bromofluorobenzene	108			77.0-126		12/21/2018 17:19	WG1214284

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1053929-02 WG1213125: Diluted due to high levels of target analytes.



Method Blank (MB)

(MB) R3370909-1 12/21/18 12:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	2870	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1053462-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1053462-02 12/21/18 12:25 • (DUP) R3370909-3 12/21/18 12:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	299000	297000	1	0.833		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

L1052876-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1052876-01 12/21/18 15:46 • (DUP) R3370909-5 12/21/18 15:53

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	114000	113000	1	0.550		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3370909-4 12/21/18 13:50

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	99200	99.2	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3369443-1 12/18/18 10:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1053961-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1053961-01 12/18/18 14:02 • (DUP) R3369443-3 12/18/18 14:18

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Chloride	8240	8710	1	5.56				15
Nitrate	467	501	1	6.90				15
Sulfate	67700	72000	1	6.23				15

L1053966-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1053966-04 12/18/18 21:28 • (DUP) R3369443-6 12/18/18 21:43

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Chloride	5110	5300	1	3.79				15
Nitrate	657	673	1	2.44				15
Sulfate	47800	49700	1	3.87				15

Laboratory Control Sample (LCS)

(LCS) R3369443-2 12/18/18 11:07

Analyte	Spike Amount		LCS Result	LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	ug/l			%	%	
Chloride	40000	39100	97.7		80.0-120		
Nitrate	8000	7990	99.9		80.0-120		
Sulfate	40000	39200	98.1		80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1053961-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	8240	55100	56300	93.8	96.1	1	80.0-120	1		2.04	15
Nitrate	5000	467	5080	5180	92.3	94.3	1	80.0-120	1		1.97	15
Sulfate	50000	67700	113000	115000	90.5	94.6	1	80.0-120	1	E	1.76	15

L1053966-04 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	5110	53800	97.4	1	80.0-120	
Nitrate	5000	657	5480	96.4	1	80.0-120	
Sulfate	50000	47800	95200	94.8	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3373226-1	01/02/19 09:53	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	158	<u>1</u>	102	1000	

L1053679-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1053679-03	01/02/19 11:51 • (DUP) R3373226-3	01/02/19 12:10	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%		%	%	%
TOC (Total Organic Carbon)	1980	2030	1	2.24		20		

L1053814-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1053814-01	01/02/19 17:37 • (DUP) R3373226-6	01/02/19 17:57	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%		%	%	%
TOC (Total Organic Carbon)	4690	4540	1	3.06		20		

Laboratory Control Sample (LCS)

(LCS) R3373226-2	01/02/19 10:36	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	76300	102	85.0-115		

L1053685-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1053685-05	01/02/19 15:39 • (MS) R3373226-4	01/02/19 15:58 • (MSD) R3373226-5	01/02/19 16:18	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	2070	54100	53900	104	104	104	80.0-120		1	80.0-120			0.371	20

L1053973-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1053973-01	01/02/19 19:51 • (MS) R3373226-7	01/02/19 20:12 • (MSD) R3373226-8	01/02/19 20:33	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	23700	74500	74500	102	102	102	80.0-120		1	80.0-120			0.000	20

Metals (ICPMS) by Method 6020B

[L1053929-02](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3370149-1 12/20/18 14:27				
Analyte	ug/l	ug/l	ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3370149-2 12/20/18 14:31 • (LCSD) R3370149-3 12/20/18 14:35										
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Iron	5000	4960	5080	99.2	102	80.0-120			2.33	20
Manganese	50.0	48.3	50.2	96.7	100	80.0-120			3.83	20

L1053590-11 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L1053590-11 12/20/18 14:38 • (MS) R3370149-5 12/20/18 14:46 • (MSD) R3370149-6 12/20/18 14:50												
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
Iron	5000	U	4980	4920	99.6	98.5	1	75.0-125			1.14	20
Manganese	50.0	U	48.7	48.5	97.4	97.1	1	75.0-125			0.380	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1053929-01.02](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	34.0	J	316	100
^(S) a,a'-Trifluorotoluene(FID)	88.3			78.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %					
Gasoline Range Organics-NWTPH	5500	5410	5400	98.3	98.1	70.0-124		0.239	20
^(S) a,a'-Trifluorotoluene(FID)				105	105	78.0-120			

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Volatile Organic Compounds (GC) by Method RSK175

[L1053929-02](#)

Method Blank (MB)

(MB) R3370532-1 12/21/18 13:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1054041-22 Original Sample (OS) • Duplicate (DUP)

(OS) L1054041-22 12/21/18 13:46 • (DUP) R3370532-2 12/21/18 13:49

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	%		ug/l	%	%	%	
Methane	ND	0.000	1	0.000				20
Ethane	ND	0.000	1	0.000				20
Ethene	ND	0.000	1	0.000				20

L1054041-24 Original Sample (OS) • Duplicate (DUP)

(OS) L1054041-24 12/21/18 13:54 • (DUP) R3370532-3 12/21/18 16:05

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	%		ug/l	%	%	%	
Methane	ND	0.000	1	0.000				20
Ethane	ND	0.000	1	0.000				20
Ethene	ND	0.000	1	0.000				20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3370532-4 12/21/18 16:09 • (LCSD) R3370532-5 12/21/18 16:11

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
	ug/l	%	ug/l	%	ug/l	%							
Methane	67.8		69.7	70.9	103	105			85.0-115			1.71	20
Ethane	129		114	117	88.1	90.7			85.0-115			2.85	20
Ethene	127		112	116	88.4	91.2			85.0-115			3.19	20

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Method Blank (MB)

(MB) R3370177-3 12/19/18 13:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3370177-3 12/19/18 13:50

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	102			75.0-120
(S) 4-Bromofluorobenzene	106			77.0-126

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3370177-1 12/19/18 12:12 • (LCSD) R3370177-2 12/19/18 12:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	147	148	118	118	19.0-160			0.492	27
Acrylonitrile	125	134	139	107	111	55.0-149			3.63	20
Benzene	25.0	25.4	25.6	102	103	70.0-123			1.01	20
Bromobenzene	25.0	27.0	28.0	108	112	73.0-121			3.81	20
Bromodichloromethane	25.0	24.9	24.6	99.6	98.5	75.0-120			1.09	20
Bromochloromethane	25.0	24.8	24.8	99.1	99.1	76.0-122			0.0711	20
Bromoform	25.0	26.9	27.2	108	109	68.0-132			1.13	20
Bromomethane	25.0	28.5	30.2	114	121	10.0-160			5.85	25
n-Butylbenzene	25.0	25.1	25.7	101	103	73.0-125			2.19	20
sec-Butylbenzene	25.0	25.6	26.2	102	105	75.0-125			2.36	20
tert-Butylbenzene	25.0	24.6	25.6	98.4	103	76.0-124			4.13	20
Carbon disulfide	25.0	26.5	27.7	106	111	61.0-128			4.25	20
Carbon tetrachloride	25.0	22.8	23.7	91.3	95.0	68.0-126			3.91	20
Chlorobenzene	25.0	24.4	24.2	97.6	96.9	80.0-121			0.768	20
Chlorodibromomethane	25.0	24.5	22.7	97.9	91.0	77.0-125			7.34	20
Chloroethane	25.0	26.8	28.7	107	115	47.0-150			6.79	20
Chloroform	25.0	25.3	25.9	101	103	73.0-120			2.19	20
Chloromethane	25.0	25.7	27.4	103	110	41.0-142			6.29	20
2-Chlorotoluene	25.0	26.4	26.8	105	107	76.0-123			1.64	20
4-Chlorotoluene	25.0	27.2	27.3	109	109	75.0-122			0.464	20
1,2-Dibromo-3-Chloropropane	25.0	25.9	26.4	104	105	58.0-134			1.81	20
1,2-Dibromoethane	25.0	24.5	24.2	98.1	96.7	80.0-122			1.40	20
Dibromomethane	25.0	26.1	25.9	104	104	80.0-120			0.671	20
1,2-Dichlorobenzene	25.0	25.5	26.0	102	104	79.0-121			2.13	20
1,3-Dichlorobenzene	25.0	25.1	25.4	100	101	79.0-120			1.03	20
1,4-Dichlorobenzene	25.0	25.2	25.4	101	102	79.0-120			0.825	20
Dichlorodifluoromethane	25.0	33.1	34.5	132	138	51.0-149			4.35	20
1,1-Dichloroethane	25.0	25.3	26.5	101	106	70.0-126			4.63	20
1,2-Dichloroethane	25.0	26.4	26.1	106	104	70.0-128			1.41	20
1,1-Dichloroethene	25.0	25.1	26.9	101	108	71.0-124			6.87	20
cis-1,2-Dichloroethene	25.0	25.7	26.6	103	107	73.0-120			3.74	20
trans-1,2-Dichloroethene	25.0	25.1	26.2	100	105	73.0-120			4.45	20
1,2-Dichloropropane	25.0	27.9	26.4	112	106	77.0-125			5.59	20
1,1-Dichloropropene	25.0	26.6	27.3	107	109	74.0-126			2.48	20
1,3-Dichloropropene	25.0	25.7	25.0	103	100	80.0-120			2.77	20
cis-1,3-Dichloropropene	25.0	26.4	25.4	105	102	80.0-123			3.69	20
trans-1,3-Dichloropropene	25.0	25.8	25.2	103	101	78.0-124			2.38	20
trans-1,4-Dichloro-2-butene	25.0	24.8	25.9	99.1	104	33.0-144			4.35	20
2,2-Dichloropropane	25.0	26.8	27.1	107	108	58.0-130			0.976	20
Di-isopropyl ether	25.0	23.8	24.2	95.2	96.9	58.0-138			1.73	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3370177-1 12/19/18 12:12 • (LCSD) R3370177-2 12/19/18 12:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.6	24.2	98.6	97.0	79.0-123			1.59	20
Hexachloro-1,3-butadiene	25.0	20.1	20.0	80.3	80.2	54.0-138			0.165	20
2-Hexanone	125	130	126	104	101	67.0-149			3.04	20
n-Hexane	25.0	26.9	27.6	108	110	57.0-133			2.65	20
Iodomethane	125	122	128	97.3	102	33.0-147			4.86	26
Isopropylbenzene	25.0	27.1	27.9	108	112	76.0-127			3.08	20
p-Isopropyltoluene	25.0	24.1	25.5	96.3	102	76.0-125			5.86	20
2-Butanone (MEK)	125	145	143	116	115	44.0-160			0.940	20
Methylene Chloride	25.0	24.7	25.8	98.8	103	67.0-120			4.13	20
4-Methyl-2-pentanone (MIBK)	125	125	115	99.8	92.4	68.0-142			7.72	20
Methyl tert-butyl ether	25.0	26.5	27.0	106	108	68.0-125			1.78	20
Naphthalene	25.0	22.7	23.1	91.0	92.3	54.0-135			1.46	20
n-Propylbenzene	25.0	26.5	27.5	106	110	77.0-124			3.84	20
Styrene	25.0	27.5	27.9	110	112	73.0-130			1.47	20
1,1,1,2-Tetrachloroethane	25.0	23.7	23.2	94.7	92.9	75.0-125			1.85	20
1,1,2,2-Tetrachloroethane	25.0	28.5	28.6	114	115	65.0-130			0.346	20
1,1,2-Trichlorotrifluoroethane	25.0	26.7	28.2	107	113	69.0-132			5.65	20
Tetrachloroethene	25.0	23.6	22.9	94.5	91.7	72.0-132			3.04	20
Toluene	25.0	24.8	24.3	99.2	97.0	79.0-120			2.22	20
1,2,3-Trichlorobenzene	25.0	19.1	19.4	76.3	77.7	50.0-138			1.89	20
1,2,4-Trichlorobenzene	25.0	20.9	21.5	83.8	86.2	57.0-137			2.80	20
1,1,1-Trichloroethane	25.0	25.4	25.4	101	102	73.0-124			0.266	20
1,1,2-Trichloroethane	25.0	25.4	24.4	101	97.8	80.0-120			3.71	20
Trichloroethene	25.0	25.3	24.3	101	97.2	78.0-124			3.81	20
Trichlorofluoromethane	25.0	26.7	28.2	107	113	59.0-147			5.40	20
1,2,3-Trichloropropane	25.0	26.0	25.7	104	103	73.0-130			1.28	20
1,2,4-Trimethylbenzene	25.0	24.9	26.7	99.7	107	76.0-121			6.89	20
1,2,3-Trimethylbenzene	25.0	24.5	25.5	98.0	102	77.0-120			4.03	20
1,3,5-Trimethylbenzene	25.0	25.9	26.6	104	106	76.0-122			2.39	20
Vinyl acetate	125	150	149	120	119	11.0-160			0.915	20
Vinyl chloride	25.0	28.1	30.3	112	121	67.0-131			7.61	20
Xylenes, Total	75.0	69.7	66.2	92.9	88.3	79.0-123			5.15	20
(S) Toluene-d8				101	99.1	80.0-120				
(S) Dibromofluoromethane				99.4	102	75.0-120				
(S) 4-Bromofluorobenzene				107	111	77.0-126				

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1053929-02](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(MB) R3370928-5 12/21/18 11:26				
cis-1,2-Dichloroethene	U		0.0933	0.500
(S) Toluene-d8	107			80.0-120
(S) Dibromofluoromethane	93.8			75.0-120
(S) 4-Bromofluorobenzene	106			77.0-126

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits	
	Spike Amount	ug/l	LCS Result	ug/l								LCSD Result
(LCS) R3370928-1 12/21/18 09:47 • (LCSD) R3370928-2 12/21/18 10:07												
cis-1,2-Dichloroethene	25.0	23.5	23.8	94.1	95.0	73.0-120			1.03	20		
(S) Toluene-d8				102	102	80.0-120						
(S) Dibromofluoromethane				94.6	94.8	75.0-120						
(S) 4-Bromofluorobenzene				102	102	77.0-126						

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

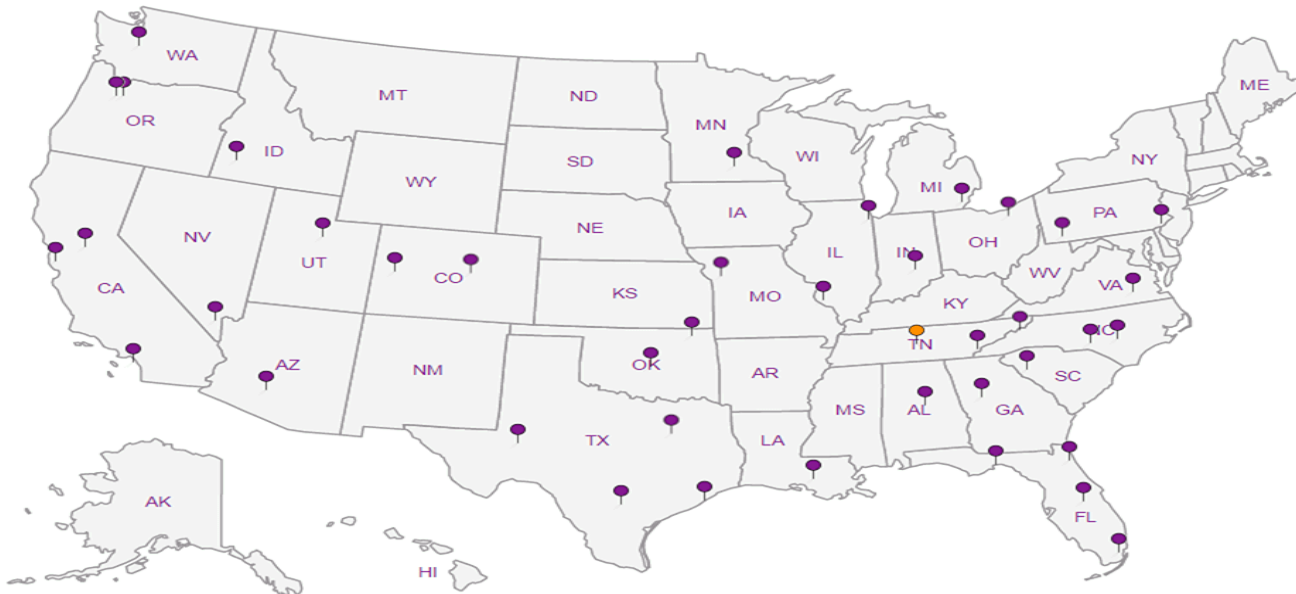
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: bona@pesenv.com,
bhaldeman@pesenv.com

Project:
Description: American Linen

City/State
Collected:

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
Alissa Witt

Site/Facility ID #
American Linen

P.O. #

Collected by (signature):
Alissa Witt

Rush? (Lab MUST be Notified)
Same Day _____ Five Day _____
Next Day _____ 5 Day (Rad Only) _____
Two Day _____ 10 Day (Rad Only) _____
Three Day _____

Quote #

Date Results Needed

Immediately
Packed on ice N Y

Sample ID

Comp./Grab

Matrix *

Depth

Date

Time

No. of Cnts

MW-138-121718
MW-130-121718

Grab
Grab

GW
GW

110
75

12/17/18
12/17/18

11:25
13:20

6
2

NO3,SO4,Cl 125mlHDPE-NoPres

Alkalinity 125mlHDPE-NoPres

EEM (RSK175LL) 40mlAmb-HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

NWTPHG 40ml Amb HCl

VOCs (V8260LLC) 40ml Amb HCl

Pres
Chk

Analysis / Container / Preservative

Chain of Custody

Page ___ of ___



12005 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-756-9858
Phone: 800-767-5859
Fax: 615-756-5859



L# L1853279

F031

Account: PESENVSWA

Template: T144057

Prelogin: P686015

TSR: 110 - Brian Ford

PG:

Shipped Via:

Remarks

Sample # (lab only)

Sample ID	Comp./Grab	Matrix *	Depth	Date	Time	No. of Cnts	Analysis / Container / Preservative
MW-138-121718	Grab	GW	110	12/17/18	11:25	6	*NO3,SO4,Cl* 125mlHDPE-NoPres
MW-130-121718	Grab	GW	75	12/17/18	13:20	2	Alkalinity 125mlHDPE-NoPres
							EEM (RSK175LL) 40mlAmb-HCl
							TOC 250mlAmb-HCl
							Total Fe Mn 6020 250mlHDPE-HNO3
							NWTPHG 40ml Amb HCl
							VOCs (V8260LLC) 40ml Amb HCl

Remarks:

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS FedEx Courier

Relinquished by: (Signature)

Date: 12/17/18 Time: 11:00

Received by: (Signature)

Tracking # 2466 1466 2190

Trip Blank Received: Yes/No

DOC Seal Present/Accurate:
Bottles arrive intact:
Correct bottles used:
Sufficient volume sent:
IC Applicable:
VOA Zero HeadSpace:
Preservation Correct/Checked:
RAD Score:

Relinquished by: (Signature)

Date: 12/17/18 Time: 11:00

Received by: (Signature)

Temp: 0.5 to 1.0, 4, 17

Bottles Received: 17

If preservation required by Login: Date/Time

Relinquished by: (Signature)

Date: 12/18/18 Time: 8:45

Received for lab by: (Signature)

Temp: 0.5 to 1.0, 4, 17

Bottles Received: 17

Condition: NCF / OK



ANALYTICAL REPORT

January 10, 2019

PES Environmental, Inc.- WA

Sample Delivery Group: L1057965
Samples Received: 01/04/2019
Project Number:
Description: American Linen










Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-138-010319 L1057965-01 GW

Collected by Alyssa Witt
 Collected date/time 01/03/19 09:35
 Received date/time 01/04/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1220272	1	01/09/19 11:14	01/09/19 11:14	GB
Wet Chemistry by Method 9056A	WG1218970	1	01/04/19 19:25	01/04/19 19:25	ELN
Wet Chemistry by Method 9060A	WG1220033	1	01/08/19 02:06	01/08/19 02:06	EEM
Metals (ICPMS) by Method 6020B	WG1219455	1	01/05/19 16:45	01/07/19 21:24	LD
Metals (ICPMS) by Method 6020B	WG1220618	1	01/08/19 17:29	01/08/19 21:59	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1218990	1	01/05/19 09:28	01/05/19 09:28	BMB
Volatile Organic Compounds (GC) by Method RSK175	WG1220690	1	01/09/19 13:23	01/09/19 13:23	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1219077	1	01/04/19 16:23	01/04/19 16:23	TJJ

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

RW-5-010319 L1057965-02 GW

Collected by Alyssa Witt
 Collected date/time 01/03/19 10:50
 Received date/time 01/04/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1218990	1	01/05/19 09:50	01/05/19 09:50	BMB
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1219077	1	01/04/19 16:43	01/04/19 16:43	TJJ

⁶ Qc

⁷ Gl

⁸ Al

TRIPBLANK L1057965-03 GW

Collected by Alyssa Witt
 Collected date/time 01/03/19 00:00
 Received date/time 01/04/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1219077	1	01/04/19 13:13	01/04/19 13:13	TJJ

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	125000		2710	20000	1	01/09/2019 11:14	WG1220272

Sample Narrative:

L1057965-01 WG1220272: Endpoint pH 4.5 HEADSPACE

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14100		51.9	1000	1	01/04/2019 19:25	WG1218970
Nitrate	U		22.7	100	1	01/04/2019 19:25	WG1218970
Sulfate	47500		77.4	5000	1	01/04/2019 19:25	WG1218970

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3900		102	1000	1	01/08/2019 02:06	WG1220033

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2190		15.0	100	1	01/07/2019 21:24	WG1219455
Manganese	375		0.250	5.00	1	01/08/2019 21:59	WG1220618

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/05/2019 09:28	WG1218990
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		01/05/2019 09:28	WG1218990

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	61.3		0.287	0.678	1	01/09/2019 13:23	WG1220690
Ethane	0.621	J	0.296	1.29	1	01/09/2019 13:23	WG1220690
Ethene	0.573	J	0.422	1.27	1	01/09/2019 13:23	WG1220690

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/04/2019 16:23	WG1219077
Acrylonitrile	U		0.873	5.00	1	01/04/2019 16:23	WG1219077
Benzene	U		0.0896	0.500	1	01/04/2019 16:23	WG1219077
Bromobenzene	U		0.133	0.500	1	01/04/2019 16:23	WG1219077
Bromodichloromethane	U		0.0800	0.500	1	01/04/2019 16:23	WG1219077
Bromochloromethane	U		0.145	0.500	1	01/04/2019 16:23	WG1219077
Bromoform	U		0.186	0.500	1	01/04/2019 16:23	WG1219077
Bromomethane	U		0.157	2.50	1	01/04/2019 16:23	WG1219077
n-Butylbenzene	U		0.143	0.500	1	01/04/2019 16:23	WG1219077
sec-Butylbenzene	U		0.134	0.500	1	01/04/2019 16:23	WG1219077
tert-Butylbenzene	U		0.183	0.500	1	01/04/2019 16:23	WG1219077
Carbon disulfide	U		0.101	0.500	1	01/04/2019 16:23	WG1219077
Carbon tetrachloride	U		0.159	0.500	1	01/04/2019 16:23	WG1219077

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 01/03/19 09:35

L1057965

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/04/2019 16:23	WG1219077
Chlorodibromomethane	U		0.128	0.500	1	01/04/2019 16:23	WG1219077
Chloroethane	U		0.141	2.50	1	01/04/2019 16:23	WG1219077
Chloroform	U		0.0860	0.500	1	01/04/2019 16:23	WG1219077
Chloromethane	U		0.153	1.25	1	01/04/2019 16:23	WG1219077
2-Chlorotoluene	U		0.111	0.500	1	01/04/2019 16:23	WG1219077
4-Chlorotoluene	U		0.0972	0.500	1	01/04/2019 16:23	WG1219077
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/04/2019 16:23	WG1219077
1,2-Dibromoethane	U		0.193	0.500	1	01/04/2019 16:23	WG1219077
Dibromomethane	U		0.117	0.500	1	01/04/2019 16:23	WG1219077
1,2-Dichlorobenzene	U		0.101	0.500	1	01/04/2019 16:23	WG1219077
1,3-Dichlorobenzene	U		0.130	0.500	1	01/04/2019 16:23	WG1219077
1,4-Dichlorobenzene	U		0.121	0.500	1	01/04/2019 16:23	WG1219077
Dichlorodifluoromethane	U		0.127	2.50	1	01/04/2019 16:23	WG1219077
1,1-Dichloroethane	U		0.114	0.500	1	01/04/2019 16:23	WG1219077
1,2-Dichloroethane	U		0.108	0.500	1	01/04/2019 16:23	WG1219077
1,1-Dichloroethene	U		0.188	0.500	1	01/04/2019 16:23	WG1219077
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/04/2019 16:23	WG1219077
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/04/2019 16:23	WG1219077
1,2-Dichloropropane	U		0.190	0.500	1	01/04/2019 16:23	WG1219077
1,1-Dichloropropene	U		0.128	0.500	1	01/04/2019 16:23	WG1219077
1,3-Dichloropropane	U		0.147	1.00	1	01/04/2019 16:23	WG1219077
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/04/2019 16:23	WG1219077
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/04/2019 16:23	WG1219077
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	01/04/2019 16:23	WG1219077
2,2-Dichloropropane	U		0.0929	0.500	1	01/04/2019 16:23	WG1219077
Di-isopropyl ether	U		0.0924	0.500	1	01/04/2019 16:23	WG1219077
Ethylbenzene	U		0.158	0.500	1	01/04/2019 16:23	WG1219077
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/04/2019 16:23	WG1219077
2-Hexanone	U		0.757	5.00	1	01/04/2019 16:23	WG1219077
n-Hexane	U		0.305	5.00	1	01/04/2019 16:23	WG1219077
Iodomethane	U		0.377	10.0	1	01/04/2019 16:23	WG1219077
Isopropylbenzene	U		0.126	0.500	1	01/04/2019 16:23	WG1219077
p-Isopropyltoluene	U		0.138	0.500	1	01/04/2019 16:23	WG1219077
2-Butanone (MEK)	U		1.28	5.00	1	01/04/2019 16:23	WG1219077
Methylene Chloride	U		1.07	2.50	1	01/04/2019 16:23	WG1219077
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/04/2019 16:23	WG1219077
Methyl tert-butyl ether	U		0.102	0.500	1	01/04/2019 16:23	WG1219077
Naphthalene	U		0.174	2.50	1	01/04/2019 16:23	WG1219077
n-Propylbenzene	U		0.162	0.500	1	01/04/2019 16:23	WG1219077
Styrene	U		0.117	0.500	1	01/04/2019 16:23	WG1219077
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/04/2019 16:23	WG1219077
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/04/2019 16:23	WG1219077
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/04/2019 16:23	WG1219077
Tetrachloroethene	U		0.199	0.500	1	01/04/2019 16:23	WG1219077
Toluene	0.442	J	0.412	0.500	1	01/04/2019 16:23	WG1219077
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/04/2019 16:23	WG1219077
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/04/2019 16:23	WG1219077
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/04/2019 16:23	WG1219077
1,1,2-Trichloroethane	U		0.186	0.500	1	01/04/2019 16:23	WG1219077
Trichloroethene	U		0.153	0.500	1	01/04/2019 16:23	WG1219077
Trichlorofluoromethane	U		0.130	2.50	1	01/04/2019 16:23	WG1219077
1,2,3-Trichloropropane	U		0.247	2.50	1	01/04/2019 16:23	WG1219077
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/04/2019 16:23	WG1219077
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/04/2019 16:23	WG1219077
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/04/2019 16:23	WG1219077

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 01/03/19 09:35

L1057965

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	01/04/2019 16:23	WG1219077
Vinyl chloride	U		0.118	0.500	1	01/04/2019 16:23	WG1219077
Xylenes, Total	U		0.316	1.50	1	01/04/2019 16:23	WG1219077
<i>(S) Toluene-d8</i>	106			80.0-120		01/04/2019 16:23	WG1219077
<i>(S) Dibromofluoromethane</i>	88.6			75.0-120		01/04/2019 16:23	WG1219077
<i>(S) 4-Bromofluorobenzene</i>	103			77.0-126		01/04/2019 16:23	WG1219077

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/03/19 10:50

L1057965

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	81.5	J	31.6	100	1	01/05/2019 09:50	WG1218990
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		01/05/2019 09:50	WG1218990

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/04/2019 16:43	WG1219077
Acrylonitrile	U		0.873	5.00	1	01/04/2019 16:43	WG1219077
Benzene	U		0.0896	0.500	1	01/04/2019 16:43	WG1219077
Bromobenzene	U		0.133	0.500	1	01/04/2019 16:43	WG1219077
Bromodichloromethane	U		0.0800	0.500	1	01/04/2019 16:43	WG1219077
Bromochloromethane	U		0.145	0.500	1	01/04/2019 16:43	WG1219077
Bromoform	U		0.186	0.500	1	01/04/2019 16:43	WG1219077
Bromomethane	U		0.157	2.50	1	01/04/2019 16:43	WG1219077
n-Butylbenzene	U		0.143	0.500	1	01/04/2019 16:43	WG1219077
sec-Butylbenzene	U		0.134	0.500	1	01/04/2019 16:43	WG1219077
tert-Butylbenzene	U		0.183	0.500	1	01/04/2019 16:43	WG1219077
Carbon disulfide	U		0.101	0.500	1	01/04/2019 16:43	WG1219077
Carbon tetrachloride	U		0.159	0.500	1	01/04/2019 16:43	WG1219077
Chlorobenzene	U		0.140	0.500	1	01/04/2019 16:43	WG1219077
Chlorodibromomethane	U		0.128	0.500	1	01/04/2019 16:43	WG1219077
Chloroethane	U		0.141	2.50	1	01/04/2019 16:43	WG1219077
Chloroform	U		0.0860	0.500	1	01/04/2019 16:43	WG1219077
Chloromethane	U		0.153	1.25	1	01/04/2019 16:43	WG1219077
2-Chlorotoluene	U		0.111	0.500	1	01/04/2019 16:43	WG1219077
4-Chlorotoluene	U		0.0972	0.500	1	01/04/2019 16:43	WG1219077
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/04/2019 16:43	WG1219077
1,2-Dibromoethane	U		0.193	0.500	1	01/04/2019 16:43	WG1219077
Dibromomethane	U		0.117	0.500	1	01/04/2019 16:43	WG1219077
1,2-Dichlorobenzene	U		0.101	0.500	1	01/04/2019 16:43	WG1219077
1,3-Dichlorobenzene	U		0.130	0.500	1	01/04/2019 16:43	WG1219077
1,4-Dichlorobenzene	U		0.121	0.500	1	01/04/2019 16:43	WG1219077
Dichlorodifluoromethane	U		0.127	2.50	1	01/04/2019 16:43	WG1219077
1,1-Dichloroethane	U		0.114	0.500	1	01/04/2019 16:43	WG1219077
1,2-Dichloroethane	U		0.108	0.500	1	01/04/2019 16:43	WG1219077
1,1-Dichloroethene	U		0.188	0.500	1	01/04/2019 16:43	WG1219077
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/04/2019 16:43	WG1219077
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/04/2019 16:43	WG1219077
1,2-Dichloropropane	U		0.190	0.500	1	01/04/2019 16:43	WG1219077
1,1-Dichloropropene	U		0.128	0.500	1	01/04/2019 16:43	WG1219077
1,3-Dichloropropane	U		0.147	1.00	1	01/04/2019 16:43	WG1219077
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/04/2019 16:43	WG1219077
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/04/2019 16:43	WG1219077
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	01/04/2019 16:43	WG1219077
2,2-Dichloropropane	U		0.0929	0.500	1	01/04/2019 16:43	WG1219077
Di-isopropyl ether	U		0.0924	0.500	1	01/04/2019 16:43	WG1219077
Ethylbenzene	U		0.158	0.500	1	01/04/2019 16:43	WG1219077
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/04/2019 16:43	WG1219077
2-Hexanone	U		0.757	5.00	1	01/04/2019 16:43	WG1219077
n-Hexane	U		0.305	5.00	1	01/04/2019 16:43	WG1219077
Iodomethane	U		0.377	10.0	1	01/04/2019 16:43	WG1219077
Isopropylbenzene	U		0.126	0.500	1	01/04/2019 16:43	WG1219077
p-Isopropyltoluene	U		0.138	0.500	1	01/04/2019 16:43	WG1219077
2-Butanone (MEK)	U		1.28	5.00	1	01/04/2019 16:43	WG1219077



Collected date/time: 01/03/19 10:50

L1057965

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	01/04/2019 16:43	WG1219077
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/04/2019 16:43	WG1219077
Methyl tert-butyl ether	U		0.102	0.500	1	01/04/2019 16:43	WG1219077
Naphthalene	U		0.174	2.50	1	01/04/2019 16:43	WG1219077
n-Propylbenzene	U		0.162	0.500	1	01/04/2019 16:43	WG1219077
Styrene	U		0.117	0.500	1	01/04/2019 16:43	WG1219077
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/04/2019 16:43	WG1219077
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/04/2019 16:43	WG1219077
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/04/2019 16:43	WG1219077
Tetrachloroethene	0.477	U	0.199	0.500	1	01/04/2019 16:43	WG1219077
Toluene	U		0.412	0.500	1	01/04/2019 16:43	WG1219077
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/04/2019 16:43	WG1219077
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/04/2019 16:43	WG1219077
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/04/2019 16:43	WG1219077
1,1,2-Trichloroethane	U		0.186	0.500	1	01/04/2019 16:43	WG1219077
Trichloroethene	U		0.153	0.500	1	01/04/2019 16:43	WG1219077
Trichlorofluoromethane	U		0.130	2.50	1	01/04/2019 16:43	WG1219077
1,2,3-Trichloropropane	U		0.247	2.50	1	01/04/2019 16:43	WG1219077
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/04/2019 16:43	WG1219077
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/04/2019 16:43	WG1219077
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/04/2019 16:43	WG1219077
Vinyl acetate	U		0.645	5.00	1	01/04/2019 16:43	WG1219077
Vinyl chloride	U		0.118	0.500	1	01/04/2019 16:43	WG1219077
Xylenes, Total	U		0.316	1.50	1	01/04/2019 16:43	WG1219077
(S) Toluene-d8	105			80.0-120		01/04/2019 16:43	WG1219077
(S) Dibromofluoromethane	89.9			75.0-120		01/04/2019 16:43	WG1219077
(S) 4-Bromofluorobenzene	103			77.0-126		01/04/2019 16:43	WG1219077

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/03/19 00:00

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/04/2019 13:13	WG1219077
Acrylonitrile	U		0.873	5.00	1	01/04/2019 13:13	WG1219077
Benzene	U		0.0896	0.500	1	01/04/2019 13:13	WG1219077
Bromobenzene	U		0.133	0.500	1	01/04/2019 13:13	WG1219077
Bromodichloromethane	U		0.0800	0.500	1	01/04/2019 13:13	WG1219077
Bromochloromethane	U		0.145	0.500	1	01/04/2019 13:13	WG1219077
Bromoform	U		0.186	0.500	1	01/04/2019 13:13	WG1219077
Bromomethane	U		0.157	2.50	1	01/04/2019 13:13	WG1219077
n-Butylbenzene	U		0.143	0.500	1	01/04/2019 13:13	WG1219077
sec-Butylbenzene	U		0.134	0.500	1	01/04/2019 13:13	WG1219077
tert-Butylbenzene	U		0.183	0.500	1	01/04/2019 13:13	WG1219077
Carbon disulfide	U		0.101	0.500	1	01/04/2019 13:13	WG1219077
Carbon tetrachloride	U		0.159	0.500	1	01/04/2019 13:13	WG1219077
Chlorobenzene	U		0.140	0.500	1	01/04/2019 13:13	WG1219077
Chlorodibromomethane	U		0.128	0.500	1	01/04/2019 13:13	WG1219077
Chloroethane	U		0.141	2.50	1	01/04/2019 13:13	WG1219077
Chloroform	U		0.0860	0.500	1	01/04/2019 13:13	WG1219077
Chloromethane	U		0.153	1.25	1	01/04/2019 13:13	WG1219077
2-Chlorotoluene	U		0.111	0.500	1	01/04/2019 13:13	WG1219077
4-Chlorotoluene	U		0.0972	0.500	1	01/04/2019 13:13	WG1219077
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/04/2019 13:13	WG1219077
1,2-Dibromoethane	U		0.193	0.500	1	01/04/2019 13:13	WG1219077
Dibromomethane	U		0.117	0.500	1	01/04/2019 13:13	WG1219077
1,2-Dichlorobenzene	U		0.101	0.500	1	01/04/2019 13:13	WG1219077
1,3-Dichlorobenzene	U		0.130	0.500	1	01/04/2019 13:13	WG1219077
1,4-Dichlorobenzene	U		0.121	0.500	1	01/04/2019 13:13	WG1219077
Dichlorodifluoromethane	U		0.127	2.50	1	01/04/2019 13:13	WG1219077
1,1-Dichloroethane	U		0.114	0.500	1	01/04/2019 13:13	WG1219077
1,2-Dichloroethane	U		0.108	0.500	1	01/04/2019 13:13	WG1219077
1,1-Dichloroethene	U		0.188	0.500	1	01/04/2019 13:13	WG1219077
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/04/2019 13:13	WG1219077
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/04/2019 13:13	WG1219077
1,2-Dichloropropane	U		0.190	0.500	1	01/04/2019 13:13	WG1219077
1,1-Dichloropropene	U		0.128	0.500	1	01/04/2019 13:13	WG1219077
1,3-Dichloropropane	U		0.147	1.00	1	01/04/2019 13:13	WG1219077
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/04/2019 13:13	WG1219077
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/04/2019 13:13	WG1219077
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	01/04/2019 13:13	WG1219077
2,2-Dichloropropane	U		0.0929	0.500	1	01/04/2019 13:13	WG1219077
Di-isopropyl ether	U		0.0924	0.500	1	01/04/2019 13:13	WG1219077
Ethylbenzene	U		0.158	0.500	1	01/04/2019 13:13	WG1219077
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/04/2019 13:13	WG1219077
2-Hexanone	U		0.757	5.00	1	01/04/2019 13:13	WG1219077
n-Hexane	U		0.305	5.00	1	01/04/2019 13:13	WG1219077
Iodomethane	U		0.377	10.0	1	01/04/2019 13:13	WG1219077
Isopropylbenzene	U		0.126	0.500	1	01/04/2019 13:13	WG1219077
p-Isopropyltoluene	U		0.138	0.500	1	01/04/2019 13:13	WG1219077
2-Butanone (MEK)	U		1.28	5.00	1	01/04/2019 13:13	WG1219077
Methylene Chloride	U		1.07	2.50	1	01/04/2019 13:13	WG1219077
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/04/2019 13:13	WG1219077
Methyl tert-butyl ether	U		0.102	0.500	1	01/04/2019 13:13	WG1219077
Naphthalene	U		0.174	2.50	1	01/04/2019 13:13	WG1219077
n-Propylbenzene	U		0.162	0.500	1	01/04/2019 13:13	WG1219077
Styrene	U		0.117	0.500	1	01/04/2019 13:13	WG1219077
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/04/2019 13:13	WG1219077
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/04/2019 13:13	WG1219077

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/03/19 00:00

L1057965

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/04/2019 13:13	WG1219077
Tetrachloroethene	U		0.199	0.500	1	01/04/2019 13:13	WG1219077
Toluene	U		0.412	0.500	1	01/04/2019 13:13	WG1219077
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/04/2019 13:13	WG1219077
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/04/2019 13:13	WG1219077
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/04/2019 13:13	WG1219077
1,1,2-Trichloroethane	U		0.186	0.500	1	01/04/2019 13:13	WG1219077
Trichloroethene	U		0.153	0.500	1	01/04/2019 13:13	WG1219077
Trichlorofluoromethane	U		0.130	2.50	1	01/04/2019 13:13	WG1219077
1,2,3-Trichloropropane	U		0.247	2.50	1	01/04/2019 13:13	WG1219077
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/04/2019 13:13	WG1219077
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/04/2019 13:13	WG1219077
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/04/2019 13:13	WG1219077
Vinyl acetate	U		0.645	5.00	1	01/04/2019 13:13	WG1219077
Vinyl chloride	U		0.118	0.500	1	01/04/2019 13:13	WG1219077
Xylenes, Total	U		0.316	1.50	1	01/04/2019 13:13	WG1219077
(S) Toluene-d8	107			80.0-120		01/04/2019 13:13	WG1219077
(S) Dibromofluoromethane	87.4			75.0-120		01/04/2019 13:13	WG1219077
(S) 4-Bromofluorobenzene	103			77.0-126		01/04/2019 13:13	WG1219077

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3374612-1 01/09/19 10:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	4960	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1057347-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1057347-01 01/09/19 10:39 • (DUP) R3374612-3 01/09/19 10:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	73000	73800	1	1.11		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

L1058269-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1058269-01 01/09/19 15:16 • (DUP) R3374612-6 01/09/19 15:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	382000	378000	1	0.897		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3374612-5 01/09/19 13:27

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	93200	93.2	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3373583-1 01/04/19 09:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1057946-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1057946-01 01/04/19 14:23 • (DUP) R3373583-3 01/04/19 14:38

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	10300	10300	1	0.105	15		15
Nitrate	491	492	1	0.204	15		15
Sulfate	9210	9120	1	0.907	15		15

L1057965-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1057965-01 01/04/19 19:25 • (DUP) R3373583-6 01/04/19 20:13

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	14100	14100	1	0.640	15		15
Nitrate	U	0.000	1	0.000	15		15
Sulfate	47500	47700	1	0.451	15		15

Laboratory Control Sample (LCS)

(LCS) R3373583-2 01/04/19 10:08

Analyte	Spike Amount		LCS Result	LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	ug/l			%	%	
Chloride	40000	39400	98.6		80.0-120		
Nitrate	8000	8110	101		80.0-120		
Sulfate	40000	40200	101		80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Public Review Draft

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:



L1057946-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	10300	60700	60800	101	101	1	80.0-120	1	1	0.319	15
Nitrate	5000	491	5840	5850	107	107	1	80.0-120	1	1	0.275	15
Sulfate	50000	9210	58200	58300	97.9	98.3	1	80.0-120	1	1	0.318	15

L1057965-01 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	14100	63100	98.0	1	80.0-120	
Nitrate	5000	U	4890	97.8	1	80.0-120	
Sulfate	50000	47500	94500	93.9	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3374026-1	01/07/19 20:59																		
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL																
Analyte	ug/l	ug/l	ug/l																
TOC (Total Organic Carbon)	156	<u>J</u>	102	1000															

L1057516-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1057516-08	01/07/19 22:36 • (DUP) R3374026-3	01/07/19 22:49																	
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits														
Analyte	ug/l	ug/l	%		%														
TOC (Total Organic Carbon)	ND	742	1	28.0	<u>JP1</u>	20													

L1058471-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1058471-01	01/08/19 05:29 • (DUP) R3374026-8	01/08/19 05:41																	
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits														
Analyte	ug/l	ug/l	%		%														
TOC (Total Organic Carbon)	2560	2610	1	1.70		20													

Laboratory Control Sample (LCS)

(LCS) R3374026-2	01/07/19 21:30																		
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>															
Analyte	ug/l	ug/l	%	%															
TOC (Total Organic Carbon)	75000	74100	98.8	85.0-115															

L1057793-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1057793-07	01/08/19 01:16 • (MS) R3374026-4	01/08/19 01:33 • (MSD) R3374026-5	01/08/19 01:53																
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits								
Analyte	ug/l	ug/l	ug/l	%	%		%			%	%								
TOC (Total Organic Carbon)	50000	7400	57300	57900	99.8	101	80.0-120			104	20								

L1058435-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1058435-01	01/08/19 04:06 • (MS) R3374026-6	01/08/19 04:24 • (MSD) R3374026-7	01/08/19 04:42																
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits								
Analyte	ug/l	ug/l	ug/l	%	%		%			%	%								
TOC (Total Organic Carbon)	50000	7660	57800	58800	100	102	80.0-120			165	20								



Method Blank (MB)

(MB) R3374006-7 01/07/19 18:23																			
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL															
Iron	ug/l	ug/l	ug/l	ug/l															
	U		15.0	100															

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3374006-8 01/07/19 18:27 • (LCSD) R3374006-9 01/07/19 18:32																			
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits									
Iron	ug/l	ug/l	ug/l	%	%	%	%	%	%	%									
	5000	5190	5210	104	104	80.0-120			0.403	20									

L1057494-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1057494-08 01/07/19 18:36 • (MS) R3374006-11 01/07/19 18:45 • (MSD) R3374006-12 01/07/19 18:49																			
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits							
Iron	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%							
	5000	81.1	5420	5180	107	102	1	75.0-125			4.34	20							

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Metals (ICPMS) by Method 6020B

[L1057965-01](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Manganese	U		0.250 ug/l	5.00 ug/l

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS R3374338-2 01/08/19 21:31 • (LCS)		LCS R3374338-3 01/08/19 21:36		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	Spike Amount	LCS Result	LCSD Result	LCS Result							
Manganese	50.0 ug/l	46.6 ug/l	50.3 ug/l	93.2 %	101 %	80.0-120	7.62 %	20 %			

L1058252-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS L1058252-03 01/08/19 21:40 • (MS)		R3374338-5 01/08/19 21:50 • (MSD)		R3374338-6 01/08/19 21:54		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.						
Manganese	50.0 ug/l	5.89 ug/l	56.8 ug/l	54.1 ug/l	102 %	96.4 %	1	75.0-125			4.89 %	20 %

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1057965-01.02](#)

Method Blank (MB)

(MB) R3373698-5 01/05/19 05:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l

Gasoline Range Organics-NWTPH	U		316	100
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^(S) a,a-o-Trifluorotoluene(FID)	105			78.0-120
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3373698-3 01/05/19 04:17 • (LCSD) R3373698-4 01/05/19 04:39

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%				%	%

Gasoline Range Organics-NWTPH	5500	5290	5350	96.3	97.3	70.0-124			1.08	20
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^(S) a,a,o-Trifluorotoluene(FID)				105	106	78.0-120				
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L1057580-20 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1057580-20 01/05/19 06:08 • (MS) R3373698-8 01/05/19 10:57 • (MSD) R3373698-9 01/05/19 11:19

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%					%	%

Gasoline Range Organics-NWTPH	5500	428	4180	4390	68.3	72.0	1	10.0-155			4.80	21
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^(S) a,a,o-Trifluorotoluene(FID)					97.5	97.2		78.0-120				
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Volatile Organic Compounds (GC) by Method RSK175

[L1057965-01](#)

Method Blank (MB)

(MB) R3374597-1 01/09/19 11:53

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1058322-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1058322-02 01/09/19 13:52 • (DUP) R3374597-2 01/09/19 13:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1058704-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1058704-01 01/09/19 14:01 • (DUP) R3374597-3 01/09/19 14:55

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3374597-4 01/09/19 15:05 • (LCSD) R3374597-5 01/09/19 15:08

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	68.9	72.9	102	107	85.0-115			5.67	20
Ethane	129	113	116	87.2	89.7	85.0-115			2.74	20
Ethene	127	112	114	88.4	90.0	85.0-115			1.81	20

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Method Blank (MB)

(MB) R3373435-3 01/04/19 11:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3373435-3 01/04/19 11:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.473	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	86.6			75.0-120
(S) 4-Bromofluorobenzene	108			77.0-126

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3373435-1 01/04/19 08:35 • (LCSD) R3373435-4 01/04/19 11:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	121	123	97.0	98.5	19.0-160			1.57	27
Acrylonitrile	125	112	113	89.8	90.1	55.0-149			0.380	20
Benzene	25.0	22.7	22.2	90.7	89.0	70.0-123			1.86	20
Bromobenzene	25.0	28.5	28.4	114	114	73.0-121			0.411	20
Bromodichloromethane	25.0	24.6	23.9	98.3	95.7	75.0-120			2.67	20
Bromochloromethane	25.0	23.4	23.3	93.7	93.2	76.0-122			0.505	20
Bromoform	25.0	23.8	23.7	95.0	94.9	68.0-132			0.110	20
Bromomethane	25.0	20.2	19.2	80.6	76.7	10.0-160			4.96	25
n-Butylbenzene	25.0	24.7	24.6	98.9	98.6	73.0-125			0.332	20
sec-Butylbenzene	25.0	30.2	31.1	121	125	75.0-125			2.94	20
tert-Butylbenzene	25.0	30.0	30.9	120	123	76.0-124			2.89	20
Carbon disulfide	25.0	21.9	21.3	87.7	85.3	61.0-128			2.73	20
Carbon tetrachloride	25.0	21.5	21.4	86.2	85.5	68.0-126			0.775	20
Chlorobenzene	25.0	27.4	26.4	109	106	80.0-121			3.68	20
Chlorodibromomethane	25.0	26.2	25.3	105	101	77.0-125			3.53	20
Chloroethane	25.0	22.9	23.1	91.8	92.2	47.0-150			0.497	20
Chloroform	25.0	22.9	22.8	91.5	91.3	73.0-120			0.191	20
Chloromethane	25.0	25.2	24.2	101	96.8	41.0-142			4.05	20
2-Chlorotoluene	25.0	29.2	29.0	117	116	76.0-123			0.684	20
4-Chlorotoluene	25.0	28.8	29.1	115	116	75.0-122			1.11	20
1,2-Dibromo-3-Chloropropane	25.0	17.5	17.3	69.9	69.3	58.0-134			0.865	20
1,2-Dibromoethane	25.0	25.7	25.2	103	101	80.0-122			1.90	20
Dibromomethane	25.0	23.8	24.0	95.2	96.2	80.0-120			0.992	20
1,2-Dichlorobenzene	25.0	23.4	23.3	93.5	93.3	79.0-121			0.173	20
1,3-Dichlorobenzene	25.0	27.4	26.8	110	107	79.0-120			2.27	20
1,4-Dichlorobenzene	25.0	25.4	25.2	102	101	79.0-120			0.773	20
Dichlorodifluoromethane	25.0	23.9	23.6	95.5	94.4	51.0-149			1.18	20
1,1-Dichloroethane	25.0	22.8	22.4	91.3	89.8	70.0-126			1.68	20
1,2-Dichloroethane	25.0	22.3	22.0	89.3	87.9	70.0-128			1.60	20
1,1-Dichloroethene	25.0	22.4	22.2	89.6	88.9	71.0-124			0.758	20
cis-1,2-Dichloroethene	25.0	22.8	22.4	91.2	89.5	73.0-120			1.88	20
trans-1,2-Dichloroethene	25.0	22.4	22.2	89.8	88.8	73.0-120			1.01	20
1,2-Dichloropropane	25.0	26.2	25.6	105	102	77.0-125			2.14	20
1,1-Dichloropropene	25.0	22.8	22.7	91.2	90.7	74.0-126			0.549	20
1,3-Dichloropropene	25.0	26.6	25.9	106	104	80.0-120			2.61	20
cis-1,3-Dichloropropene	25.0	27.0	26.0	108	104	80.0-123			3.66	20
trans-1,3-Dichloropropene	25.0	26.5	25.6	106	103	78.0-124			3.34	20
trans-1,4-Dichloro-2-butene	25.0	18.3	18.8	73.3	75.4	33.0-144			2.83	20
2,2-Dichloropropane	25.0	22.8	21.7	91.3	86.8	58.0-130			5.01	20
Di-isopropyl ether	25.0	24.2	23.9	97.0	95.7	58.0-138			1.33	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3373435-1 01/04/19 08:35 • (LCSD) R3373435-4 01/04/19 11:35

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	26.3	25.8	105	103	79.0-123			164	20
Hexachloro-1,3-butadiene	25.0	25.3	25.4	101	102	54.0-138			0.501	20
2-Hexanone	125	136	133	108	107	67.0-149			1.70	20
n-Hexane	25.0	27.2	26.2	109	105	57.0-133			3.59	20
Iodomethane	125	114	112	91.3	89.6	33.0-147			1.84	26
Isopropylbenzene	25.0	29.2	29.5	117	118	76.0-127			0.910	20
p-Isopropyltoluene	25.0	29.9	29.8	120	119	76.0-125			0.271	20
2-Butanone (MEK)	125	110	111	88.2	88.4	44.0-160			0.271	20
Methylene Chloride	25.0	22.9	22.2	91.7	88.8	67.0-120			3.21	20
4-Methyl-2-pentanone (MIBK)	125	129	127	103	101	68.0-142			1.65	20
Methyl tert-butyl ether	25.0	22.8	23.3	91.2	93.0	68.0-125			2.02	20
Naphthalene	25.0	16.4	17.4	65.4	69.4	54.0-135			5.92	20
n-Propylbenzene	25.0	29.3	29.4	117	117	77.0-124			0.138	20
Styrene	25.0	29.0	29.6	116	118	73.0-130			1.75	20
1,1,1,2-Tetrachloroethane	25.0	27.4	26.7	110	107	75.0-125			2.78	20
1,1,2,2-Tetrachloroethane	25.0	26.6	26.9	106	108	65.0-130			1.25	20
1,1,2-Trichlorotrifluoroethane	25.0	23.5	23.2	94.1	93.0	69.0-132			1.23	20
Tetrachloroethene	25.0	27.5	26.9	110	107	72.0-132			2.30	20
Toluene	25.0	25.5	24.8	102	99.0	79.0-120			2.95	20
1,2,3-Trichlorobenzene	25.0	20.7	21.0	82.8	83.8	50.0-138			1.29	20
1,2,4-Trichlorobenzene	25.0	22.3	22.7	89.2	91.0	57.0-137			1.98	20
1,1,1-Trichloroethane	25.0	22.7	22.4	90.8	89.5	73.0-124			1.47	20
1,1,2-Trichloroethane	25.0	26.7	26.3	107	105	80.0-120			1.40	20
Trichloroethene	25.0	25.0	24.9	100	99.6	78.0-124			0.462	20
Trichlorofluoromethane	25.0	18.7	18.2	74.6	72.9	59.0-147			2.35	20
1,2,3-Trichloropropane	25.0	27.0	28.2	108	113	73.0-130			4.08	20
1,2,4-Trimethylbenzene	25.0	29.4	29.7	118	119	76.0-121			0.948	20
1,2,3-Trimethylbenzene	25.0	26.1	26.0	105	104	77.0-120			0.403	20
1,3,5-Trimethylbenzene	25.0	29.7	30.5	119	122	76.0-122			2.63	20
Vinyl acetate	125	149	131	120	105	11.0-160			13.3	20
Vinyl chloride	25.0	24.5	24.8	98.2	99.0	67.0-131			0.844	20
Xylenes, Total	75.0	81.0	78.6	108	105	79.0-123			3.01	20
(S) Toluene-d8				103	101	80.0-120				
(S) Dibromofluoromethane				86.2	87.4	75.0-120				
(S) 4-Bromofluorobenzene				107	112	77.0-126				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc. - WA

L1057965

01/10/19 09:40

23 of 26



Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Qualifier	Description
-----------	-------------

J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: Calibration verification outside of acceptance limits. Result is estimated.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

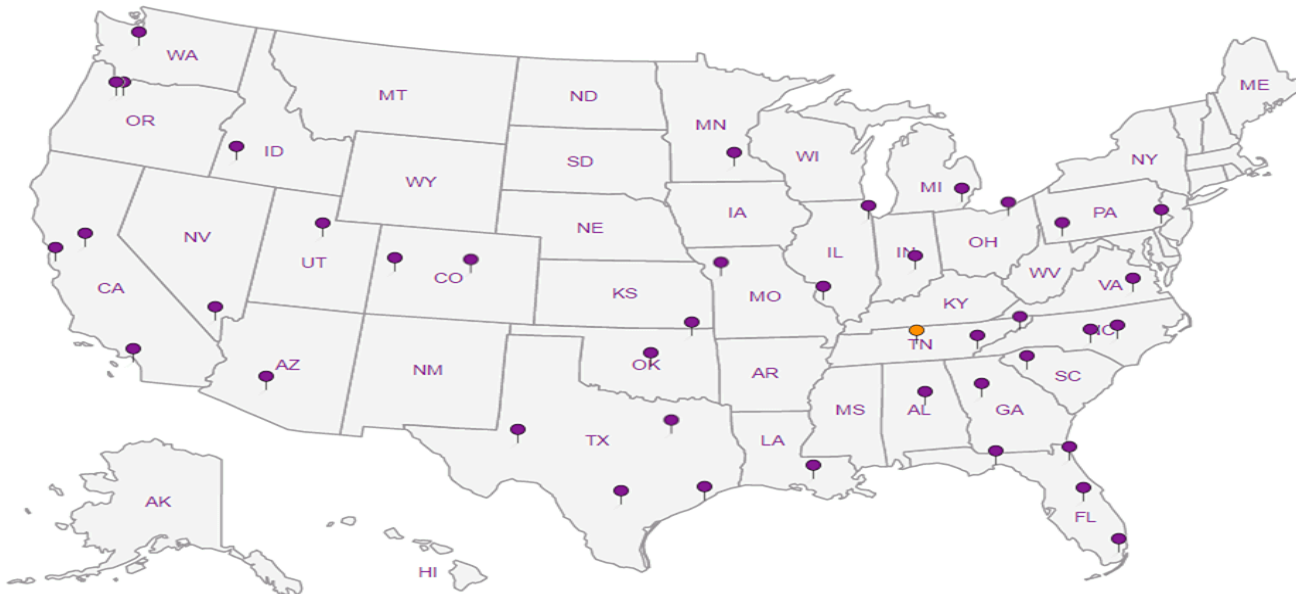
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



CHAIN-OF-CUSTODY Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

Company: **Pes Environmental, Inc. WA**
 Address: **1215 Fourth Ave, Suite 1350 Seattle WA 98101**
 Report To: **Brian Drael / Bill Halldeman**
 Copy To: _____
 Customer Project Name/Number: **American Linen**
 Phone: **206-529-3980**
 Email: **206-529-3980**
 Collected By (Print): **Alyssa Witt**
 Collected By (Signature): *Alyssa Witt*
 Sample Disposal: Dispose as appropriate Return Hold: _____
 Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (O), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Billing Information: **Attn: Accounts Payable 1215 Fourth Ave, Ste 1350 Seattle WA 98101**
 Email To: **donacl@pesenv.com**
 Site Collection Info/Address: _____
 State: **WA** County/City: **Seattle** Time Zone Collected: **PT**
 Compliance Monitoring? Yes No
 DW PWS ID #: _____
 DW Location Code: _____
 Immediately Packed on Ice: Yes No
 Field Filtered (if applicable): Yes No
 Analysis: _____
 Rush: Same Day Next Day 2 Day 3 Day 4 Day 5 Day (expedited charges apply)

Customer Sample ID: **MW-138-010319**
 Matrix: **GW**
 Comp/Grab: **Grab**
 Collected (or Composite Start) Date/Time: **12/19/09 09:35**
 Composite End Date/Time: _____
 Res Cl: **12**
 # of Chgs: **1**
 Customer Remarks / Special Conditions / Possible Hazards: _____

Type of Use:	Wet	Blue	Dry	None
Packing Material Used:				
Radchem sample(s) screened (<500 gmi):	Y	N	NA	

Relinquished by/Company: (Signature) _____ Date/Time: **12/19/09 12:00**
 Relinquished by/Company: (Signature) _____ Date/Time: _____
 Relinquished by/Company: (Signature) _____ Date/Time: _____

LAB USE ONLY - Affix Workorder/Login Label Here or List Pace Workorder Number or MTL Log-in Number Here
ALL SHADED AREAS are for LAB USE ONLY
 Container Preservative Type: _____
 Lab Project Manager: _____

Preservative types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) heptane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other
 Analyte: _____

Lab Profile/Line:	Lab Sample Receipt Checklist:	Lab Project Manager:
Custody Seal Present/Intact Y N Custody Signature Present Y N Collector Signature Present Y N Bottles Intact Y N Correct Bottles Y N Sufficient Volume Y N Samples Received on Ice Y N VOA - Headspace Acceptable Y N BSA - Regulated Gases Y N Samples in Holding Time Y N Residual Chlorine Present Y N Cl Strips: Y N Sample pH Acceptable Y N pH Strips: Y N Solids Present Y N Lead Acetate Strips: Y N	Lab Sample # / Comments: L1057965-01 Trip Blank Received: <input checked="" type="checkbox"/> Y <input type="checkbox"/> N <input type="checkbox"/> NA HCL M ^e OH TSP Other Non-Compliance(s): _____ Page: _____ of: _____	

Lab Tracking #:	SHOULD HOLDS PRESENT (<72 hours):	Y	N	N/A
7466 1466 5214				

Temp Sample Temperature Info:
 Temp Blank Received: Y N NA
 Therm ID#: **1203**
 Cooler 1 Temp Upon Receipt: **23** °C
 Cooler 1 Therm Corr. Factor: **0.0** °C
 Cooler 1 Corrected Temp: **23** °C
 Comments: _____



ANALYTICAL REPORT

January 30, 2019

PES Environmental, Inc.- WA

Sample Delivery Group: L1063581
Samples Received: 01/23/2019
Project Number: 1413.001.05.601
Description: American Linen
Site: AMERICAN LINEN
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Jason Romer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW-155-012119 L1063581-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by Alyssa Witt				Collected date/time 01/21/19 12:15	Received date/time 01/23/19 08:45
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 04:30	01/24/19 04:30	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 12:42	01/24/19 12:42	CAH

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW-154-012119 L1063581-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by Alyssa Witt				Collected date/time 01/21/19 10:45	Received date/time 01/23/19 08:45
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 04:52	01/24/19 04:52	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 13:02	01/24/19 13:02	CAH

MW-159-012119 L1063581-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by Alyssa Witt				Collected date/time 01/21/19 16:10	Received date/time 01/23/19 08:45
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 05:13	01/24/19 05:13	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 13:22	01/24/19 13:22	CAH

MW-9-012119 L1063581-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by Alyssa Witt				Collected date/time 01/21/19 15:15	Received date/time 01/23/19 08:45
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 05:35	01/24/19 05:35	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 13:42	01/24/19 13:42	CAH

MW-125-012119 L1063581-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by Alyssa Witt				Collected date/time 01/21/19 14:25	Received date/time 01/23/19 08:45
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 05:56	01/24/19 05:56	DWR
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 14:02	01/24/19 14:02	CAH

MW-119-012119 L1063581-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by Alyssa Witt				Collected date/time 01/21/19 13:05	Received date/time 01/23/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 14:21	01/24/19 14:21	CAH

MW-153-012219 L1063581-07 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Collected by Alyssa Witt				Collected date/time 01/22/19 12:00	Received date/time 01/23/19 08:45
Wet Chemistry by Method 2320 B-2011	WG1228020	1	01/25/19 14:54	01/25/19 14:54	GB
Wet Chemistry by Method 9056A	WG1227335	1	01/23/19 20:20	01/23/19 20:20	ST
Wet Chemistry by Method 9060A	WG1227775	1	01/24/19 13:17	01/24/19 13:17	EEM
Metals (ICPMS) by Method 6020B	WG1227051	1	01/23/19 20:20	01/24/19 17:57	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 06:17	01/24/19 06:17	DWR
Volatile Organic Compounds (GC) by Method RSK175	WG1227529	1	01/25/19 11:47	01/25/19 11:47	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 14:41	01/24/19 14:41	CAH



MW-147-012219 L1063581-08 GW

Collected by Alyssa Witt
Collected date/time 01/22/19 14:10
Received date/time 01/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1228020	1	01/25/19 15:03	01/25/19 15:03	GB
Wet Chemistry by Method 9056A	WG1227335	1	01/23/19 20:30	01/23/19 20:30	ST
Wet Chemistry by Method 9060A	WG1229248	1	01/28/19 16:27	01/28/19 16:27	EEM
Metals (ICPMS) by Method 6020B	WG1227051	1	01/23/19 20:20	01/24/19 18:01	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 06:39	01/24/19 06:39	DWR
Volatile Organic Compounds (GC) by Method RSK175	WG1227529	1	01/25/19 12:13	01/25/19 12:13	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 15:01	01/24/19 15:01	CAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228835	10	01/27/19 21:34	01/27/19 21:34	ACG

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

MW-146-012219 L1063581-09 GW

Collected by Alyssa Witt
Collected date/time 01/22/19 13:10
Received date/time 01/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1228020	1	01/25/19 15:19	01/25/19 15:19	GB
Wet Chemistry by Method 9056A	WG1227335	1	01/23/19 20:41	01/23/19 20:41	ST
Wet Chemistry by Method 9060A	WG1229248	1	01/28/19 16:56	01/28/19 16:56	EEM
Metals (ICPMS) by Method 6020B	WG1227051	1	01/23/19 20:20	01/24/19 18:06	LD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227572	1	01/24/19 07:00	01/24/19 07:00	DWR
Volatile Organic Compounds (GC) by Method RSK175	WG1227529	1	01/25/19 12:25	01/25/19 12:25	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 15:21	01/24/19 15:21	CAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228835	10	01/27/19 21:55	01/27/19 21:55	ACG

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

MW-126-012219 L1063581-10 GW

Collected by Alyssa Witt
Collected date/time 01/22/19 09:00
Received date/time 01/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 15:41	01/24/19 15:41	CAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228835	1	01/27/19 20:54	01/27/19 20:54	ACG

MW-108-012219 L1063581-11 GW

Collected by Alyssa Witt
Collected date/time 01/22/19 09:50
Received date/time 01/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 16:01	01/24/19 16:01	CAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228835	50	01/27/19 22:15	01/27/19 22:15	ACG

TRIP BLANK-012219 L1063581-12 GW

Collected by Alyssa Witt
Collected date/time 01/22/19 00:00
Received date/time 01/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 12:22	01/24/19 12:22	CAH



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/21/19 12:15

L1063581

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 04:30	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	94.6			78.0-120		01/24/2019 04:30	WG1227572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/24/2019 12:42	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 12:42	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 12:42	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 12:42	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 12:42	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 12:42	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 12:42	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 12:42	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 12:42	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 12:42	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 12:42	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 12:42	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 12:42	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 12:42	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 12:42	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 12:42	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 12:42	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 12:42	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 12:42	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 12:42	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 12:42	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 12:42	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 12:42	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 12:42	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 12:42	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 12:42	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 12:42	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 12:42	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 12:42	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 12:42	WG1227840
cis-1,2-Dichloroethene	0.274	J	0.0933	0.500	1	01/24/2019 12:42	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 12:42	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 12:42	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 12:42	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 12:42	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 12:42	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 12:42	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 12:42	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 12:42	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 12:42	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 12:42	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 12:42	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 12:42	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 12:42	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 12:42	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 12:42	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 12:42	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 12:42	WG1227840



Collected date/time: 01/21/19 12:15

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	01/24/2019 12:42	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 12:42	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 12:42	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 12:42	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 12:42	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 12:42	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 12:42	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 12:42	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 12:42	WG1227840
Tetrachloroethene	3.72		0.199	0.500	1	01/24/2019 12:42	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 12:42	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 12:42	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 12:42	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 12:42	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 12:42	WG1227840
Trichloroethene	0.581		0.153	0.500	1	01/24/2019 12:42	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 12:42	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 12:42	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 12:42	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 12:42	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 12:42	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 12:42	WG1227840
Vinyl chloride	U		0.118	0.500	1	01/24/2019 12:42	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 12:42	WG1227840
(S) Toluene-d8	102			80.0-120		01/24/2019 12:42	WG1227840
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 12:42	WG1227840
(S) a,a,a-Trifluorotoluene	99.1			80.0-120		01/24/2019 12:42	WG1227840
(S) 4-Bromofluorobenzene	94.3			77.0-126		01/24/2019 12:42	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/21/19 10:45

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 04:52	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	94.4			78.0-120		01/24/2019 04:52	WG1227572

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/24/2019 13:02	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 13:02	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 13:02	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 13:02	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 13:02	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 13:02	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 13:02	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 13:02	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 13:02	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 13:02	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 13:02	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 13:02	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 13:02	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 13:02	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 13:02	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 13:02	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 13:02	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 13:02	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 13:02	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 13:02	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 13:02	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 13:02	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 13:02	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 13:02	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 13:02	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 13:02	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 13:02	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 13:02	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 13:02	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 13:02	WG1227840
cis-1,2-Dichloroethene	2.03		0.0933	0.500	1	01/24/2019 13:02	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 13:02	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 13:02	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 13:02	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 13:02	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 13:02	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 13:02	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 13:02	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 13:02	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 13:02	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 13:02	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 13:02	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 13:02	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 13:02	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 13:02	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 13:02	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 13:02	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 13:02	WG1227840

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/21/19 10:45

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	01/24/2019 13:02	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 13:02	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 13:02	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 13:02	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 13:02	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 13:02	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 13:02	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 13:02	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 13:02	WG1227840
Tetrachloroethene	1.70		0.199	0.500	1	01/24/2019 13:02	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 13:02	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 13:02	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 13:02	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 13:02	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 13:02	WG1227840
Trichloroethene	0.330	U	0.153	0.500	1	01/24/2019 13:02	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 13:02	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 13:02	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 13:02	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 13:02	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 13:02	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 13:02	WG1227840
Vinyl chloride	3.52		0.118	0.500	1	01/24/2019 13:02	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 13:02	WG1227840
(S) Toluene-d8	99.6			80.0-120		01/24/2019 13:02	WG1227840
(S) Dibromofluoromethane	103			75.0-120		01/24/2019 13:02	WG1227840
(S) a,a,a-Trifluorotoluene	98.4			80.0-120		01/24/2019 13:02	WG1227840
(S) 4-Bromofluorobenzene	92.3			77.0-126		01/24/2019 13:02	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/21/19 16:10

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 05:13	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	93.9			78.0-120		01/24/2019 05:13	WG1227572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.98	J	1.05	25.0	1	01/24/2019 13:22	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 13:22	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 13:22	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 13:22	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 13:22	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 13:22	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 13:22	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 13:22	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 13:22	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 13:22	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 13:22	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 13:22	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 13:22	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 13:22	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 13:22	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 13:22	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 13:22	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 13:22	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 13:22	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 13:22	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 13:22	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 13:22	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 13:22	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 13:22	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 13:22	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 13:22	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 13:22	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 13:22	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 13:22	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 13:22	WG1227840
cis-1,2-Dichloroethene	0.651		0.0933	0.500	1	01/24/2019 13:22	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 13:22	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 13:22	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 13:22	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 13:22	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 13:22	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 13:22	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 13:22	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 13:22	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 13:22	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 13:22	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 13:22	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 13:22	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 13:22	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 13:22	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 13:22	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 13:22	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 13:22	WG1227840



Collected date/time: 01/21/19 16:10

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	01/24/2019 13:22	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 13:22	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 13:22	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 13:22	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 13:22	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 13:22	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 13:22	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 13:22	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 13:22	WG1227840
Tetrachloroethene	U		0.199	0.500	1	01/24/2019 13:22	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 13:22	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 13:22	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 13:22	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 13:22	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 13:22	WG1227840
Trichloroethene	U		0.153	0.500	1	01/24/2019 13:22	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 13:22	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 13:22	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 13:22	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 13:22	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 13:22	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 13:22	WG1227840
Vinyl chloride	0.666		0.118	0.500	1	01/24/2019 13:22	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 13:22	WG1227840
(S) Toluene-d8	98.8			80.0-120		01/24/2019 13:22	WG1227840
(S) Dibromofluoromethane	105			75.0-120		01/24/2019 13:22	WG1227840
(S) a,a,a-Trifluorotoluene	97.0			80.0-120		01/24/2019 13:22	WG1227840
(S) 4-Bromofluorobenzene	92.6			77.0-126		01/24/2019 13:22	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/21/19 15:15

L1063581

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 05:35	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	94.1			78.0-120		01/24/2019 05:35	WG1227572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/24/2019 13:42	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 13:42	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 13:42	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 13:42	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 13:42	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 13:42	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 13:42	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 13:42	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 13:42	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 13:42	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 13:42	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 13:42	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 13:42	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 13:42	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 13:42	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 13:42	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 13:42	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 13:42	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 13:42	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 13:42	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 13:42	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 13:42	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 13:42	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 13:42	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 13:42	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 13:42	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 13:42	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 13:42	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 13:42	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 13:42	WG1227840
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/24/2019 13:42	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 13:42	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 13:42	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 13:42	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 13:42	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 13:42	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 13:42	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 13:42	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 13:42	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 13:42	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 13:42	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 13:42	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 13:42	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 13:42	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 13:42	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 13:42	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 13:42	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 13:42	WG1227840



Collected date/time: 01/21/19 15:15

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	01/24/2019 13:42	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 13:42	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 13:42	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 13:42	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 13:42	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 13:42	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 13:42	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 13:42	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 13:42	WG1227840
Tetrachloroethene	U		0.199	0.500	1	01/24/2019 13:42	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 13:42	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 13:42	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 13:42	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 13:42	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 13:42	WG1227840
Trichloroethene	U		0.153	0.500	1	01/24/2019 13:42	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 13:42	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 13:42	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 13:42	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 13:42	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 13:42	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 13:42	WG1227840
Vinyl chloride	U		0.118	0.500	1	01/24/2019 13:42	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 13:42	WG1227840
(S) Toluene-d8	98.5			80.0-120		01/24/2019 13:42	WG1227840
(S) Dibromofluoromethane	103			75.0-120		01/24/2019 13:42	WG1227840
(S) a,a,a-Trifluorotoluene	99.2			80.0-120		01/24/2019 13:42	WG1227840
(S) 4-Bromofluorobenzene	94.9			77.0-126		01/24/2019 13:42	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/21/19 14:25

L1063581

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 05:56	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	94.7			78.0-120		01/24/2019 05:56	WG1227572

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.66	J	1.05	25.0	1	01/24/2019 14:02	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 14:02	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 14:02	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 14:02	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 14:02	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 14:02	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 14:02	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 14:02	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 14:02	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 14:02	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 14:02	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 14:02	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 14:02	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 14:02	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 14:02	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 14:02	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 14:02	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 14:02	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 14:02	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 14:02	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 14:02	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 14:02	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 14:02	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 14:02	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 14:02	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 14:02	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 14:02	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 14:02	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 14:02	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 14:02	WG1227840
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/24/2019 14:02	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 14:02	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 14:02	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 14:02	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 14:02	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 14:02	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 14:02	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 14:02	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 14:02	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 14:02	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 14:02	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 14:02	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 14:02	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 14:02	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 14:02	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 14:02	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 14:02	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 14:02	WG1227840



Collected date/time: 01/21/19 14:25

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	01/24/2019 14:02	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 14:02	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 14:02	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 14:02	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 14:02	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 14:02	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 14:02	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 14:02	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 14:02	WG1227840
Tetrachloroethene	U		0.199	0.500	1	01/24/2019 14:02	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 14:02	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 14:02	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 14:02	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 14:02	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 14:02	WG1227840
Trichloroethene	U		0.153	0.500	1	01/24/2019 14:02	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 14:02	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 14:02	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 14:02	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 14:02	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 14:02	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 14:02	WG1227840
Vinyl chloride	U		0.118	0.500	1	01/24/2019 14:02	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 14:02	WG1227840
(S) Toluene-d8	100			80.0-120		01/24/2019 14:02	WG1227840
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 14:02	WG1227840
(S) a,a,a-Trifluorotoluene	98.3			80.0-120		01/24/2019 14:02	WG1227840
(S) 4-Bromofluorobenzene	94.5			77.0-126		01/24/2019 14:02	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.46	J	1.05	25.0	1	01/24/2019 14:21	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 14:21	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 14:21	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 14:21	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 14:21	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 14:21	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 14:21	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 14:21	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 14:21	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 14:21	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 14:21	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 14:21	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 14:21	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 14:21	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 14:21	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 14:21	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 14:21	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 14:21	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 14:21	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 14:21	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 14:21	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 14:21	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 14:21	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 14:21	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 14:21	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 14:21	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 14:21	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 14:21	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 14:21	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 14:21	WG1227840
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/24/2019 14:21	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 14:21	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 14:21	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 14:21	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 14:21	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 14:21	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 14:21	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 14:21	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 14:21	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 14:21	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 14:21	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 14:21	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 14:21	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 14:21	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 14:21	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 14:21	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 14:21	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 14:21	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 14:21	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 14:21	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 14:21	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 14:21	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 14:21	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 14:21	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 14:21	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 14:21	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/21/19 13:05

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 14:21	WG1227840
Tetrachloroethene	1.24		0.199	0.500	1	01/24/2019 14:21	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 14:21	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 14:21	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 14:21	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 14:21	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 14:21	WG1227840
Trichloroethene	U		0.153	0.500	1	01/24/2019 14:21	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 14:21	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 14:21	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 14:21	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 14:21	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 14:21	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 14:21	WG1227840
Vinyl chloride	U		0.118	0.500	1	01/24/2019 14:21	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 14:21	WG1227840
(S) Toluene-d8	100			80.0-120		01/24/2019 14:21	WG1227840
(S) Dibromofluoromethane	103			75.0-120		01/24/2019 14:21	WG1227840
(S) α,α,α-Trifluorotoluene	98.1			80.0-120		01/24/2019 14:21	WG1227840
(S) 4-Bromofluorobenzene	90.8			77.0-126		01/24/2019 14:21	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	156000		2710	20000	1	01/25/2019 14:54	WG1228020

Sample Narrative:

L1063581-07 WG1228020: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	9910		51.9	1000	1	01/23/2019 20:20	WG1227335
Nitrate	U		22.7	100	1	01/23/2019 20:20	WG1227335
Sulfate	13200		77.4	5000	1	01/23/2019 20:20	WG1227335

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1920	<u>B</u>	102	1000	1	01/24/2019 13:17	WG1227775

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3010		15.0	100	1	01/24/2019 17:57	WG1227051
Manganese	299		0.250	5.00	1	01/24/2019 17:57	WG1227051

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 06:17	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	94.2			78.0-120		01/24/2019 06:17	WG1227572

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	387		0.287	0.678	1	01/25/2019 11:47	WG1227529
Ethane	U		0.296	1.29	1	01/25/2019 11:47	WG1227529
Ethene	4.89		0.422	1.27	1	01/25/2019 11:47	WG1227529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/24/2019 14:41	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 14:41	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 14:41	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 14:41	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 14:41	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 14:41	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 14:41	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 14:41	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 14:41	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 14:41	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 14:41	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 14:41	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 14:41	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/22/19 12:00

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/24/2019 14:41	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 14:41	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 14:41	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 14:41	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 14:41	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 14:41	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 14:41	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 14:41	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 14:41	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 14:41	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 14:41	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 14:41	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 14:41	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 14:41	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 14:41	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 14:41	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 14:41	WG1227840
cis-1,2-Dichloroethene	1.41		0.0933	0.500	1	01/24/2019 14:41	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 14:41	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 14:41	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 14:41	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 14:41	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 14:41	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 14:41	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 14:41	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 14:41	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 14:41	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 14:41	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 14:41	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 14:41	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 14:41	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 14:41	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 14:41	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 14:41	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 14:41	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 14:41	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 14:41	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 14:41	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 14:41	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 14:41	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 14:41	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 14:41	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 14:41	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 14:41	WG1227840
Tetrachloroethene	U		0.199	0.500	1	01/24/2019 14:41	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 14:41	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 14:41	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 14:41	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 14:41	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 14:41	WG1227840
Trichloroethene	U		0.153	0.500	1	01/24/2019 14:41	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 14:41	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 14:41	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 14:41	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 14:41	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 14:41	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/22/19 12:00

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/24/2019 14:41	WG1227840
Vinyl chloride	15.9		0.118	0.500	1	01/24/2019 14:41	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 14:41	WG1227840
<i>(S) Toluene-d8</i>	100			80.0-120		01/24/2019 14:41	WG1227840
<i>(S) Dibromofluoromethane</i>	104			75.0-120		01/24/2019 14:41	WG1227840
<i>(S) a,a,a-Trifluorotoluene</i>	98.7			80.0-120		01/24/2019 14:41	WG1227840
<i>(S) 4-Bromofluorobenzene</i>	93.9			77.0-126		01/24/2019 14:41	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	302000		2710	20000	1	01/25/2019 15:03	WG1228020

Sample Narrative:

L1063581-08 WG1228020: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	56200		51.9	1000	1	01/23/2019 20:30	WG1227335
Nitrate	U		22.7	100	1	01/23/2019 20:30	WG1227335
Sulfate	43200		77.4	5000	1	01/23/2019 20:30	WG1227335

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5200		102	1000	1	01/28/2019 16:27	WG1229248

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	6010		15.0	100	1	01/24/2019 18:01	WG1227051
Manganese	646		0.250	5.00	1	01/24/2019 18:01	WG1227051

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	663		31.6	100	1	01/24/2019 06:39	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	95.0			78.0-120		01/24/2019 06:39	WG1227572

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	4210		0.287	0.678	1	01/25/2019 12:13	WG1227529
Ethane	2.10		0.296	1.29	1	01/25/2019 12:13	WG1227529
Ethene	100		0.422	1.27	1	01/25/2019 12:13	WG1227529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.51	J	1.05	25.0	1	01/24/2019 15:01	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 15:01	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 15:01	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 15:01	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 15:01	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 15:01	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 15:01	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 15:01	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 15:01	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 15:01	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 15:01	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 15:01	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 15:01	WG1227840

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 01/22/19 14:10

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/24/2019 15:01	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 15:01	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 15:01	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 15:01	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 15:01	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 15:01	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 15:01	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 15:01	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 15:01	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 15:01	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 15:01	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 15:01	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 15:01	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 15:01	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 15:01	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 15:01	WG1227840
1,1-Dichloroethene	6.83		0.188	0.500	1	01/24/2019 15:01	WG1227840
cis-1,2-Dichloroethene	1230		0.933	5.00	10	01/27/2019 21:34	WG1228835
trans-1,2-Dichloroethene	2.88		0.152	0.500	1	01/24/2019 15:01	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 15:01	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 15:01	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 15:01	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 15:01	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 15:01	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 15:01	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 15:01	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 15:01	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 15:01	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 15:01	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 15:01	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 15:01	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 15:01	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 15:01	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 15:01	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 15:01	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 15:01	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 15:01	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 15:01	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 15:01	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 15:01	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 15:01	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 15:01	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 15:01	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 15:01	WG1227840
Tetrachloroethene	98.2		0.199	0.500	1	01/24/2019 15:01	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 15:01	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 15:01	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 15:01	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 15:01	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 15:01	WG1227840
Trichloroethene	179		0.153	0.500	1	01/24/2019 15:01	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 15:01	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 15:01	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 15:01	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 15:01	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 15:01	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/22/19 14:10

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/24/2019 15:01	WG1227840
Vinyl chloride	738		1.18	5.00	10	01/27/2019 21:34	WG1228835
Xylenes, Total	U		0.316	1.50	1	01/24/2019 15:01	WG1227840
(S) Toluene-d8	106			80.0-120		01/27/2019 21:34	WG1228835
(S) Dibromofluoromethane	99.6			75.0-120		01/27/2019 21:34	WG1228835
(S) 4-Bromofluorobenzene	89.5			77.0-126		01/27/2019 21:34	WG1228835
(S) Toluene-d8	99.3			80.0-120		01/24/2019 15:01	WG1227840
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 15:01	WG1227840
(S) a,a,a-Trifluorotoluene	91.6			80.0-120		01/24/2019 15:01	WG1227840
(S) 4-Bromofluorobenzene	95.0			77.0-126		01/24/2019 15:01	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	249000		2710	20000	1	01/25/2019 15:19	WG1228020

Sample Narrative:

L1063581-09 WG1228020: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15800		51.9	1000	1	01/23/2019 20:41	WG1227335
Nitrate	U		22.7	100	1	01/23/2019 20:41	WG1227335
Sulfate	32100		77.4	5000	1	01/23/2019 20:41	WG1227335

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3430		102	1000	1	01/28/2019 16:56	WG1229248

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1760		15.0	100	1	01/24/2019 18:06	WG1227051
Manganese	560		0.250	5.00	1	01/24/2019 18:06	WG1227051

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	509		31.6	100	1	01/24/2019 07:00	WG1227572
(S) a,a,a-Trifluorotoluene(FID)	94.7			78.0-120		01/24/2019 07:00	WG1227572

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2460		0.287	0.678	1	01/25/2019 12:25	WG1227529
Ethane	1.84		0.296	1.29	1	01/25/2019 12:25	WG1227529
Ethene	107		0.422	1.27	1	01/25/2019 12:25	WG1227529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.98	J	1.05	25.0	1	01/24/2019 15:21	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 15:21	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 15:21	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 15:21	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 15:21	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 15:21	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 15:21	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 15:21	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 15:21	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 15:21	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 15:21	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 15:21	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 15:21	WG1227840

1 Cp

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Collected date/time: 01/22/19 13:10

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/24/2019 15:21	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 15:21	WG1227840
Chloroethane	1.60	J	0.141	2.50	1	01/24/2019 15:21	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 15:21	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 15:21	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 15:21	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 15:21	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 15:21	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 15:21	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 15:21	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 15:21	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 15:21	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 15:21	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 15:21	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 15:21	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 15:21	WG1227840
1,1-Dichloroethene	4.44		0.188	0.500	1	01/24/2019 15:21	WG1227840
cis-1,2-Dichloroethene	1080		0.933	5.00	10	01/27/2019 21:55	WG1228835
trans-1,2-Dichloroethene	7.25		0.152	0.500	1	01/24/2019 15:21	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 15:21	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 15:21	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 15:21	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 15:21	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 15:21	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 15:21	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 15:21	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 15:21	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 15:21	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 15:21	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 15:21	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 15:21	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 15:21	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 15:21	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 15:21	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 15:21	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 15:21	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 15:21	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 15:21	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 15:21	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 15:21	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 15:21	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 15:21	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 15:21	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 15:21	WG1227840
Tetrachloroethene	2.29		0.199	0.500	1	01/24/2019 15:21	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 15:21	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 15:21	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 15:21	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 15:21	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 15:21	WG1227840
Trichloroethene	21.6		0.153	0.500	1	01/24/2019 15:21	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 15:21	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 15:21	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 15:21	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 15:21	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 15:21	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/22/19 13:10

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/24/2019 15:21	WG1227840
Vinyl chloride	1370		1.18	5.00	10	01/27/2019 21:55	WG1228835
Xylenes, Total	U		0.316	1.50	1	01/24/2019 15:21	WG1227840
(S) Toluene-d8	103			80.0-120		01/27/2019 21:55	WG1228835
(S) Dibromofluoromethane	98.9			75.0-120		01/27/2019 21:55	WG1228835
(S) 4-Bromofluorobenzene	88.8			77.0-126		01/27/2019 21:55	WG1228835
(S) Toluene-d8	101			80.0-120		01/24/2019 15:21	WG1227840
(S) Dibromofluoromethane	101			75.0-120		01/24/2019 15:21	WG1227840
(S) a,a,a-Trifluorotoluene	97.2			80.0-120		01/24/2019 15:21	WG1227840
(S) 4-Bromofluorobenzene	94.7			77.0-126		01/24/2019 15:21	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/24/2019 15:41	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 15:41	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 15:41	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 15:41	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 15:41	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 15:41	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 15:41	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 15:41	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 15:41	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 15:41	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 15:41	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 15:41	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 15:41	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 15:41	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 15:41	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 15:41	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 15:41	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 15:41	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 15:41	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 15:41	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 15:41	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 15:41	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 15:41	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 15:41	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 15:41	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 15:41	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 15:41	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 15:41	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 15:41	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 15:41	WG1227840
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/27/2019 20:54	WG1228835
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 15:41	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 15:41	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 15:41	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 15:41	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 15:41	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 15:41	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 15:41	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 15:41	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 15:41	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 15:41	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 15:41	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 15:41	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 15:41	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 15:41	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 15:41	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 15:41	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 15:41	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 15:41	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 15:41	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 15:41	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 15:41	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 15:41	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 15:41	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 15:41	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 15:41	WG1227840

1 Cp

2 Tc

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6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/22/19 09:00

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 15:41	WG1227840
Tetrachloroethene	U		0.199	0.500	1	01/24/2019 15:41	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 15:41	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 15:41	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 15:41	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 15:41	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 15:41	WG1227840
Trichloroethene	U		0.153	0.500	1	01/24/2019 15:41	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 15:41	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 15:41	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 15:41	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 15:41	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 15:41	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 15:41	WG1227840
Vinyl chloride	U		0.118	0.500	1	01/27/2019 20:54	WG1228835
Xylenes, Total	U		0.316	1.50	1	01/24/2019 15:41	WG1227840
(S) Toluene-d8	107			80.0-120		01/27/2019 20:54	WG1228835
(S) Dibromofluoromethane	97.4			75.0-120		01/27/2019 20:54	WG1228835
(S) 4-Bromofluorobenzene	86.2			77.0-126		01/27/2019 20:54	WG1228835
(S) Toluene-d8	101			80.0-120		01/24/2019 15:41	WG1227840
(S) Dibromofluoromethane	105			75.0-120		01/24/2019 15:41	WG1227840
(S) a,a,a-Trifluorotoluene	99.0			80.0-120		01/24/2019 15:41	WG1227840
(S) 4-Bromofluorobenzene	93.6			77.0-126		01/24/2019 15:41	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/24/2019 16:01	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 16:01	WG1227840
Benzene	1.67		0.0896	0.500	1	01/24/2019 16:01	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 16:01	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 16:01	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 16:01	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 16:01	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 16:01	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 16:01	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 16:01	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 16:01	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 16:01	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 16:01	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 16:01	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 16:01	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 16:01	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 16:01	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 16:01	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 16:01	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 16:01	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 16:01	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 16:01	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 16:01	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 16:01	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 16:01	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 16:01	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 16:01	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 16:01	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 16:01	WG1227840
1,1-Dichloroethene	10.1		0.188	0.500	1	01/24/2019 16:01	WG1227840
cis-1,2-Dichloroethene	1180		4.66	25.0	50	01/27/2019 22:15	WG1228835
trans-1,2-Dichloroethene	6.03		0.152	0.500	1	01/24/2019 16:01	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 16:01	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 16:01	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 16:01	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 16:01	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 16:01	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 16:01	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 16:01	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 16:01	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 16:01	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 16:01	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 16:01	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 16:01	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 16:01	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 16:01	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 16:01	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 16:01	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 16:01	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 16:01	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 16:01	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 16:01	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 16:01	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 16:01	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 16:01	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 16:01	WG1227840

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 01/22/19 09:50

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 16:01	WG1227840
Tetrachloroethene	4190		9.95	25.0	50	01/27/2019 22:15	WG1228835
Toluene	0.562		0.412	0.500	1	01/24/2019 16:01	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 16:01	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 16:01	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 16:01	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 16:01	WG1227840
Trichloroethene	587		7.65	25.0	50	01/27/2019 22:15	WG1228835
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 16:01	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 16:01	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 16:01	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 16:01	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 16:01	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 16:01	WG1227840
Vinyl chloride	90.8		0.118	0.500	1	01/24/2019 16:01	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 16:01	WG1227840
(S) Toluene-d8	106			80.0-120		01/27/2019 22:15	WG1228835
(S) Dibromofluoromethane	96.3			75.0-120		01/27/2019 22:15	WG1228835
(S) 4-Bromofluorobenzene	85.1			77.0-126		01/27/2019 22:15	WG1228835
(S) Toluene-d8	108			80.0-120		01/24/2019 16:01	WG1227840
(S) Dibromofluoromethane	102			75.0-120		01/24/2019 16:01	WG1227840
(S) a,a,a-Trifluorotoluene	80.0			80.0-120		01/24/2019 16:01	WG1227840
(S) 4-Bromofluorobenzene	93.7			77.0-126		01/24/2019 16:01	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/22/19 00:00

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/24/2019 12:22	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 12:22	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 12:22	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 12:22	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 12:22	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 12:22	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 12:22	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 12:22	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 12:22	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 12:22	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 12:22	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 12:22	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 12:22	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 12:22	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 12:22	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 12:22	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 12:22	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 12:22	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 12:22	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 12:22	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 12:22	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 12:22	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 12:22	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 12:22	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 12:22	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 12:22	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 12:22	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 12:22	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 12:22	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 12:22	WG1227840
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/24/2019 12:22	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 12:22	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 12:22	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 12:22	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 12:22	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 12:22	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 12:22	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 12:22	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 12:22	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 12:22	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 12:22	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 12:22	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 12:22	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 12:22	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 12:22	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 12:22	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 12:22	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 12:22	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 12:22	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 12:22	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 12:22	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 12:22	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 12:22	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 12:22	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 12:22	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 12:22	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/22/19 00:00

L1063581

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 12:22	WG1227840
Tetrachloroethene	U		0.199	0.500	1	01/24/2019 12:22	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 12:22	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 12:22	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 12:22	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 12:22	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 12:22	WG1227840
Trichloroethene	U		0.153	0.500	1	01/24/2019 12:22	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 12:22	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 12:22	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 12:22	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 12:22	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 12:22	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 12:22	WG1227840
Vinyl chloride	U		0.118	0.500	1	01/24/2019 12:22	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 12:22	WG1227840
(S) Toluene-d8	101			80.0-120		01/24/2019 12:22	WG1227840
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 12:22	WG1227840
(S) α,α,α-Trifluorotoluene	97.7			80.0-120		01/24/2019 12:22	WG1227840
(S) 4-Bromofluorobenzene	94.6			77.0-126		01/24/2019 12:22	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3378729-1 01/25/19 12:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Alkalinity	2880	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1063023-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063023-01 01/25/19 12:34 • (DUP) R3378729-3 01/25/19 12:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Alkalinity	46200	46300	1	0.173		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1063515-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063515-01 01/25/19 15:26 • (DUP) R3378729-6 01/25/19 15:33

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Alkalinity	113000	113000	1	0.555		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3378729-4 01/25/19 13:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	98900	98.9	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3378322-1 01/23/19 13:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1063281-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063281-01 01/23/19 15:26 • (DUP) R3378322-3 01/23/19 15:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	210000	210000	1	0.286	E	15
Nitrate	33800	33800	1	0.144	E	15
Sulfate	583000	585000	1	0.383	E	15

L1063281-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063281-01 01/23/19 16:10 • (DUP) R3378322-6 01/23/19 16:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Nitrate	31500	31600	5	0.285		15

L1063326-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1063326-06 01/23/19 19:14 • (DUP) R3378322-7 01/23/19 19:25

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	20500	20900	1	1.89		15
Nitrate	U	0.000	1	0.000		15
Sulfate	364	0.000	1	200	P1	15

Laboratory Control Sample (LCS)

(LCS) R3378322-2 01/23/19 13:29

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	37500	93.7	80.0-120	
Nitrate	8000	7630	95.4	80.0-120	

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Laboratory Control Sample (LCS)

(LCS) R3378322-2 01/23/19 13:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Sulfate	40000	38500	96.3	80.0-120	

L10633281-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L10633281-01 01/23/19 15:26 • (MS) R33783322-4 01/23/19 15:48 • (MSD) R33783322-5 01/23/19 15:59

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	210000	248000	243000	76.8	66.6	1	80.0-120	<u>EV</u>	<u>EV</u>	2.08	15
Nitrate	5000	33800	38300	35000	91.5	24.2	1	80.0-120	<u>EV</u>	<u>EV</u>	9.18	15
Sulfate	50000	583000	642000	622000	118	77.6	1	80.0-120	<u>EV</u>	<u>EV</u>	3.18	15

L10633326-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L10633326-06 01/23/19 19:14 • (MS) R33783322-8 01/23/19 19:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	20500	66500	92.0	1	80.0-120	
Nitrate	5000	U	4270	85.3	1	80.0-120	
Sulfate	50000	364	45100	89.5	1	80.0-120	

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Method Blank (MB)

(MB) R3378475-1	01/24/19 11:35	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	258	<u>1</u>		102	1000

L1063259-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1063259-04	01/24/19 12:46 • (DUP) R3378475-3	01/24/19 13:06			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	7860	7580	2	3.56	20

Laboratory Control Sample (LCS)

(LCS) R3378475-2	01/24/19 12:05			
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%
TOC (Total Organic Carbon)	75000	78200	104	85.0-115

L1063581-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1063581-07	01/24/19 13:17 • (MS) R3378475-4	01/24/19 13:33 • (MSD) R3378475-5	01/24/19 13:49								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	1920	52600	52900	101	102	1	80.0-120		0.626	20

1 Cp
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Method Blank (MB)

(MB) R3379231-1	01/28/19 12:16	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	222	<u>1</u>		102	1000

L1063581-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1063581-08	01/28/19 16:27 • (DUP) R3379231-3	01/28/19 16:41			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	5200	5260	1	1.13	20

L1064289-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1064289-02	01/28/19 20:02 • (DUP) R3379231-6	01/28/19 20:16			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	4820	4810	1	0.332	20

Laboratory Control Sample (LCS)

(LCS) R3379231-2	01/28/19 13:16			
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%
TOC (Total Organic Carbon)	75000	79200	106	85.0-115

L1063697-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1063697-09	01/28/19 17:50 • (MS) R3379231-4	01/28/19 18:08 • (MSD) R3379231-5	01/28/19 18:25								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	555	56500	56900	112	113	1	80.0-120	0.653	20	

L1064289-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1064289-03	01/28/19 20:30 • (MS) R3379231-7	01/28/19 20:48 • (MSD) R3379231-8	01/28/19 21:05								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	4890	59500	59600	109	110	1	80.0-120	0.235	20	

Metals (ICPMS) by Method 6020B

[L1063581-07.08.09](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3378464-1	01/24/19 14:52			
Analyte	ug/l		ug/l	ug/l
Iron	17.4	J	15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3378464-2	01/24/19 14:56 • (LCSD) R3378464-3	01/24/19 15:01								
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	4930	4660	98.6	93.2	80.0-120			5.57	20
Manganese	50.0	48.8	47.4	97.5	94.8	80.0-120			2.79	20

L1063106-17 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L1063106-17	01/24/19 15:06 • (MS) R3378464-5	01/24/19 15:15 • (MSD) R3378464-6	01/24/19 15:19									
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	50800	54100	54300	66.3	70.2	1	75.0-125	V	V	0.359	20
Manganese	50.0	500	535	535	71.0	70.0	1	75.0-125	V	V	0.0989	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

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Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	U		316	100
^(S) a,a-o-Trifluorotoluene(FID)	94.4		78.0-120	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec. %	LCSD Rec. %	Rec. Limits	LCS Qualifier		LCSD Qualifier		RPD	RPD Limits %
							ug/l	ug/l	ug/l	ug/l		
Gasoline Range Organics-NWTPH	5500	5330	4800	96.9	87.3	70.0-124					10.5	20
^(S) a,a,o-Trifluorotoluene(FID)				111	109	78.0-120						

L1063581-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits	MS Qualifier		MSD Qualifier		RPD	RPD Limits %
									ug/l	ug/l	ug/l	ug/l		
Gasoline Range Organics-NWTPH	5500	509	2220	2100	31.1	29.0	1	10.0-155					5.46	21
^(S) a,a,o-Trifluorotoluene(FID)					94.5	94.8		78.0-120						

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Volatile Organic Compounds (GC) by Method RSK175

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Method Blank (MB)

(MB) R3378764-1 01/25/19 11:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RD1 ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1063310-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063310-01 01/25/19 11:40 • (DUP) R3378764-2 01/25/19 13:47

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	66.9	65.5	1	2.06		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L1063312-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063312-01 01/25/19 11:43 • (DUP) R3378764-3 01/25/19 13:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	78.5	76.4	1	2.79		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L1063700-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063700-01 01/25/19 14:19 • (DUP) R3378764-4 01/25/19 14:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	ND	0.000	1	0.000		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

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Volatile Organic Compounds (GC) by Method RSK175

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378764-5 01/25/19 14:51 • (LCSD) R3378764-6 01/25/19 15:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	71.3	70.4	105	104	85.0-115			1.24	20
Ethane	129	112	113	86.9	87.5	85.0-115			0.741	20
Ethene	127	111	112	87.1	88.2	85.0-115			1.27	20

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Method Blank (MB)

(MB) R3378860-3 01/24/19 09:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Method Blank (MB)

(MB) R3378860-3 01/24/19 09:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.260	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	102			75.0-120
(S) o,o,a-Trifluorotoluene	98.9			80.0-120
(S) 4-Bromofluorobenzene	93.1			77.0-126

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378860-1 01/24/19 08:56 • (LCSD) R3378860-2 01/24/19 09:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	193	168	155	134	19.0-160			14.0	27
Acrylonitrile	125	155	144	124	115	55.0-149			7.57	20
Benzene	25.0	26.2	24.8	105	99.1	70.0-123			5.66	20
Bromobenzene	25.0	24.9	23.9	99.7	95.5	73.0-121			4.32	20
Bromodichloromethane	25.0	27.9	26.1	112	104	75.0-120			6.74	20
Bromochloromethane	25.0	27.1	25.4	109	102	76.0-122			6.60	20
Bromoform	25.0	24.9	23.7	99.5	94.8	68.0-132			4.87	20
Bromomethane	25.0	28.2	26.4	113	105	10.0-160			6.67	25
n-Butylbenzene	25.0	26.8	25.2	107	101	73.0-125			6.14	20
sec-Butylbenzene	25.0	26.8	25.5	107	102	75.0-125			5.21	20
tert-Butylbenzene	25.0	26.1	25.0	104	100	76.0-124			4.01	20
Carbon disulfide	25.0	26.5	25.6	106	102	61.0-128			3.53	20
Carbon tetrachloride	25.0	24.4	23.8	97.6	95.2	68.0-126			2.48	20
Chlorobenzene	25.0	25.2	24.5	101	98.0	80.0-121			2.74	20
Chlorodibromomethane	25.0	26.1	25.3	104	101	77.0-125			3.06	20
Chloroethane	25.0	30.5	28.3	122	113	47.0-150			7.58	20
Chloroform	25.0	27.4	26.1	110	105	73.0-120			4.83	20
Chloromethane	25.0	27.8	27.1	111	108	41.0-142			2.71	20
2-Chlorotoluene	25.0	25.5	24.4	102	97.5	76.0-123			4.34	20
4-Chlorotoluene	25.0	25.8	24.8	103	99.2	75.0-122			3.92	20
1,2-Dibromo-3-Chloropropane	25.0	25.2	24.3	101	97.3	58.0-134			3.35	20
1,2-Dibromoethane	25.0	26.6	25.7	106	103	80.0-122			3.38	20
Dibromomethane	25.0	28.7	27.6	115	111	80.0-120			3.94	20
1,2-Dichlorobenzene	25.0	26.3	24.9	105	99.5	79.0-121			5.75	20
1,3-Dichlorobenzene	25.0	25.6	24.4	102	97.5	79.0-120			5.00	20
1,4-Dichlorobenzene	25.0	25.5	24.7	102	98.8	79.0-120			3.19	20
Dichlorodifluoromethane	25.0	25.4	24.8	101	99.2	51.0-149			2.26	20
1,1-Dichloroethane	25.0	27.7	26.3	111	105	70.0-126			5.23	20
1,2-Dichloroethane	25.0	28.6	27.1	115	108	70.0-128			5.57	20
1,1-Dichloroethene	25.0	25.6	25.3	102	101	71.0-124			1.17	20
cis-1,2-Dichloroethene	25.0	27.5	26.5	110	106	73.0-120			3.74	20
trans-1,2-Dichloroethene	25.0	26.9	26.1	108	104	73.0-120			3.00	20
1,2-Dichloropropane	25.0	28.1	26.7	112	107	77.0-125			4.96	20
1,1-Dichloropropene	25.0	27.8	26.3	111	105	74.0-126			5.36	20
1,3-Dichloropropene	25.0	26.6	25.5	107	102	80.0-120			4.55	20
cis-1,3-Dichloropropene	25.0	26.0	25.0	104	100	80.0-123			4.04	20
trans-1,3-Dichloropropene	25.0	26.8	25.5	107	102	78.0-124			4.72	20
trans-1,4-Dichloro-2-butene	25.0	21.7	20.7	86.9	82.7	33.0-144			4.97	20
2,2-Dichloropropane	25.0	24.0	22.8	96.2	91.3	58.0-130			5.21	20
Di-isopropyl ether	25.0	28.8	27.2	115	109	58.0-138			5.73	20

Public Review Draft

1 Cp
2 Tc
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6 Qc
7 Gl
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PES Environmental, Inc.- WA

1413.001.05.601

L1063581

01/30/19 16:00

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378860-1 01/24/19 08:56 • (LCSD) R3378860-2 01/24/19 09:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	25.8	24.4	103	97.8	79.0-123			5.38	20
Hexachloro-1,3-butadiene	25.0	24.1	22.9	96.4	91.7	54.0-138			4.97	20
2-Hexanone	125	144	138	115	110	67.0-149			4.22	20
n-Hexane	25.0	25.5	24.3	102	97.0	57.0-133			4.91	20
Iodomethane	125	123	120	98.1	96.0	33.0-147			2.11	26
Isopropylbenzene	25.0	25.1	24.1	101	96.6	76.0-127			3.99	20
p-Isopropyltoluene	25.0	26.4	25.1	106	101	76.0-125			4.95	20
2-Butanone (MEK)	125	149	138	119	110	44.0-160			7.94	20
Methylene Chloride	25.0	26.4	25.7	106	103	67.0-120			2.62	20
4-Methyl-2-pentanone (MIBK)	125	143	135	114	108	68.0-142			5.88	20
Methyl tert-butyl ether	25.0	27.6	26.3	111	105	68.0-125			4.92	20
Naphthalene	25.0	23.6	23.4	94.3	93.5	54.0-135			0.895	20
n-Propylbenzene	25.0	25.1	24.1	100	96.2	77.0-124			4.12	20
Styrene	25.0	25.8	25.2	103	101	73.0-130			2.29	20
1,1,1,2-Tetrachloroethane	25.0	25.0	24.1	100	96.6	75.0-125			3.49	20
1,1,2,2-Tetrachloroethane	25.0	24.4	23.7	97.6	94.7	65.0-130			3.07	20
1,1,2-Trichlorotrifluoroethane	25.0	24.9	24.1	99.7	96.4	69.0-132			3.42	20
Tetrachloroethene	25.0	23.6	23.0	94.4	92.2	72.0-132			2.39	20
Toluene	25.0	24.9	24.0	99.7	96.2	79.0-120			3.64	20
1,2,3-Trichlorobenzene	25.0	23.3	22.5	93.2	89.9	50.0-138			3.69	20
1,2,4-Trichlorobenzene	25.0	24.5	23.9	98.0	95.5	57.0-137			2.58	20
1,1,1-Trichloroethane	25.0	27.5	26.2	110	105	73.0-124			4.63	20
1,1,2-Trichloroethane	25.0	26.6	25.7	106	103	80.0-120			3.33	20
Trichloroethene	25.0	26.5	25.1	106	100	78.0-124			5.54	20
Trichlorofluoromethane	25.0	25.8	24.7	103	98.6	59.0-147			4.58	20
1,2,3-Trichloropropane	25.0	26.0	25.3	104	101	73.0-130			2.65	20
1,2,4-Trimethylbenzene	25.0	26.1	24.7	104	98.9	76.0-121			5.51	20
1,2,3-Trimethylbenzene	25.0	25.6	24.4	102	97.7	77.0-120			4.62	20
1,3,5-Trimethylbenzene	25.0	25.4	24.6	101	98.4	76.0-122			3.07	20
Vinyl acetate	125	86.7	93.7	69.3	74.9	11.0-160			7.76	20
Vinyl chloride	25.0	28.0	26.5	112	106	67.0-131			5.34	20
Xylenes, Total	75.0	77.4	74.2	103	98.9	79.0-123			4.22	20
(S) Toluene-d8				97.8	98.7	80.0-120				
(S) Dibromofluoromethane				102	102	75.0-120				
(S) o,o,-Trifluorotoluene				96.7	96.7	80.0-120				
(S) 4-Bromofluorobenzene				93.1	95.3	77.0-126				

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1063581-08.09.10.11](#)

Method Blank (MB)

(MB) R3379557-4 01/27/19 12:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	94.1			75.0-120
(S) 4-Bromofluorobenzene	86.4			77.0-126

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3379557-1 01/27/19 11:18 • (LCSD) R3379557-2 01/27/19 11:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	25.8	25.7	103	103	73.0-120			0.361	20
Tetrachloroethene	25.0	28.1	29.8	112	119	72.0-132			5.82	20
Trichloroethene	25.0	27.6	27.8	110	111	78.0-124			0.679	20
Vinyl chloride	25.0	24.5	24.4	97.9	97.5	67.0-131			0.438	20
(S) Toluene-d8				101	106	80.0-120				
(S) Dibromofluoromethane				97.4	98.9	75.0-120				
(S) 4-Bromofluorobenzene				82.3	86.2	77.0-126				

Public Review Draft

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4 Cn
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6 Qc
7 Gl
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PES Environmental, Inc.- WA

1413.001.05.601

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01/30/19 16:00

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

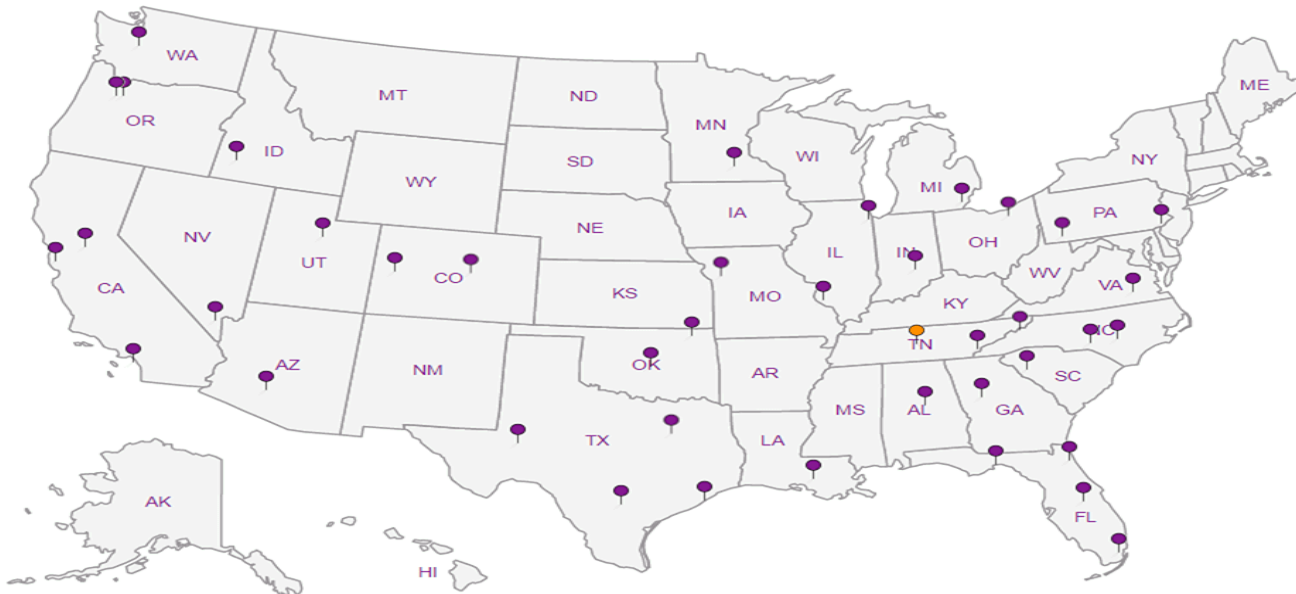
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Report to:
Brian O'Neal/Bill Haldeman

Email To: booneal@pesenv.com;
bhaldeman@pesenv.com;

Project:
Description: **American Linen**

Client Project #
1413.001.05.601

City/State
Collected:

Phone: **206-529-3980**
Fax: **206-529-3985**

Lab Project #
PESENVSWA-ALP

P.O. #

Collected by (print):
Alyssa Wilt

Site/Facility ID #
American Linen

Quote #

Collected by (signature):
Alyssa Wilt

Rush? (Lab MUST be Notified)
Same Day Five Day
Next Day 5 Day (Fad Only)
Two Day 10 Day (Fad Only)
Three Day

Date Results Needed

No. of

Immediately Packed on Ice: N Y

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Crits

NO3,SO4,Cl 125mlHDPE-NoPres

Alkalinity 125mlHDPE-NoPres

EEM (RSK175LL) 40mlAmb-HCl

NWTPHGX 40mlAmb HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

VOCs (8260LLC) 40mlAmb-HCl

Analysis / Container / Preservative

LL2

Chain of Custody

Page ___ of ___



12005 LeBaron Rd
Mount Laurel, TN 37122
Phone: 615-798-5858
Phone: 800-787-5859
Fax: 615-794-5858

L1063581
D212

Account: **PESENVSWA**
Template: **T143845**
Prelogin: **P685358**
TSR: **110 - Brian Ford**
PB: **10/13/18 MR**
Shipped Via: **FedEx Ground**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Crits	*NO3,SO4,Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM (RSK175LL) 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	VOCs (8260LLC) 40mlAmb-HCl
MW-155-012119	Grab	GW	25'	1/21/19	1215	6				X			X
MW-154-012119		GW	30'	1/21/19	1045	6			X	X		X	X
MW-159-012119		GW	25'	1/21/19	1610	6			X	X		X	X
MW-9-012119		GW	15'	1/21/19	1515	6			X	X		X	X
MW-125-012119		GW	23'	1/21/19	1425	6			X	X		X	X
MW-119-012119		GW	40'	1/21/19	1305	3							X
MW-153-012219		GW	125'	1/22/19	1200	12	X	X	X	X	X	X	X
MW-147-012219		GW	75'	1/22/19	1410	12	X	X	X	X	X	X	X
MW-146-012219		GW	44'	1/22/19	1310	12	X	X	X	X	X	X	X
MW-126-012219		GW	90'	1/22/19	0900	3							X

RAD SCREEN: <0.5µm/1µm

Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Biossary
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks: Samples returned via: UPS FedEx Courier

Flow: _____ Other: _____

Tracking # **475750764520**

Temp: **1.450** °C

Date: **1/23/19** Time: **8:45**

Relinquished by: (Signature) *[Signature]* Date: **1/22/18** Time: **1700**

Received by: (Signature) _____

Received for lab by: (Signature) *[Signature]*

Relinquished by: (Signature) _____ Date: _____ Time: _____

Condition: **NCF 1/OK**

QA/QC: Seal Present/Intact: No Yes
COC signed/Account: No Yes
Bottles arrive intact: No Yes
Correct bottles used: No Yes
Sufficient volume sent: No Yes
1. Applicable
VQA zero headspace: No Yes
Preparation correct/checked: No Yes

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to: **Brian O'Neal/Bill Haldeman**
Email To: boneal@pesenv.com; bhaldeman@pesenv.com

Project: **American Linen**
City/State Collected:

Phone: **206-529-3980**
Fax: **206-529-3985**
Client Project #: **1413.001.05.601**
Lab Project #: **PESENVSWA-ALP**

Collected by (Print): **Alyssa With**
Site/Facility ID #: **American Linen**
P.O. #

Collected by (Signature): *[Signature]*
Rush? (Lab MUST be notified)
Same Day Five Day
Next Day 5 Day (Raid Only)
Two Day 10 Day (Raid Only)
Three Day Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Knts
MW108-012219	Grab	GW	45	12/19	0950	3
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				

Analysis / Container / Preservative	Pres Chk
NO3,S04,Cl 125mlHDPE-NoPres	
Alkalinity 125mlHDPE-NoPres	
EEM (RSK175LL) 40mlAmb-HCl	
NWTPHGX 40mlAmb HCl	
TOC 250mlAmb-HCl	
Total Fe Mn 6020 250mlHDPE-HNO3	
VOCs (8260LLC) 40mlAmb-HCl	X

Remarks:
RAD SCREEN: <0.5 mFC/ML
Flow _____ Temp _____
Other _____
Samples returned via:
UPS FedEx Courier Tracking # **475750769520**
Received by: (Signature) *[Signature]*
Received by: (Signature) *[Signature]*
Temp: **14.10** °C
Temp: **14.10** °C
Date: **1/23/14**
Time: **8:45**

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Biossary
WW - Wastewater
DW - Drinking Water
OT - Other _____

Relinquished by: (Signature) *[Signature]* Date: **1/23/14** Time: **8:45**

Relinquished by: (Signature) *[Signature]* Date: _____ Time: _____

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received for Lab by: (Signature) *[Signature]* Date: **1/23/14** Time: **8:45**

Hold: _____ Condition: **NCF 108**

Chain of Custody Page ___ of ___

12065 Lakerton Rd
Maize MIlet, TN 37122
Phone: 615-758-5858
Phone: 800-387-5859
Fax: 615-758-5850

Accnum: **PESENVSWA**
Template: **T143845**
Prelogin: **P685358**
TSR: **110 Brian Ford**
PA: **12/13/19 MWB**
Shipped via: **FedEx Ground**

Remarks: _____ Sample # (lab only) **-11**

QC Seal present/Intact: No Yes
COC Signed/Complete: No Yes
Bottles active/Intact: No Yes
Correct bottles used: No Yes
Sufficient volume sent: No Yes
IL Applicability: No Yes
VQA 1450 Headspace: No Yes
Preservation Correct/Checked: No Yes



Brian Ford

From: Alyssa Witt <AWitt@pesenv.com>
Sent: Tuesday, January 22, 2019 8:18 PM
To: Brian Ford
Cc: Karsten Springstead; Brian O'Neal; Kim Vik
Attachments: new doc 2019-01-22 18.16.26_20190122181649.pdf
Categories: update login/report

Hello,

I shipped samples this afternoon but forgot to include the trip blank on the CoC. See attached for updated carbon copy.

Alyssa

[Get Outlook for iOS](#)

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeaman

Email To: bhoneal@pesenv.com;
bhaldeaman@pesenv.com;

Project Description: American Linen

City/State Collected:

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
Alissa L. Witt

Site/activity ID #
American Linen

P.O. #

Collected by (signature):

Rush? (Lab MUST be notified)

Quote #

Same Day Five Day
Next Day 5 Day (Bad Only)
Ten Day 10 Day (Bad Only)
Three Day

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Chgs

MW108-012419
GW
45
V2219
0950
3

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

GW

* Matrix:

SS - Soil AIR - Air F - Filter

GW - Groundwater B - Biossary

MW - Wastewater

DW - Drinking Water

OT - Other

Remarks:

Samples returned via
UPS FedEx Courier

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

Time:

Received by: (Signature)

Date:

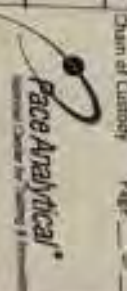
Time:

Received by: (Signature)

Date:

Time:

Chain of Custody Page 1 of 1



10988 Reference Rd.
Maple Valley, WA 98142
Phone: 823-788-3980
Fax: 823-787-3980
Web: 815-784-3885



L.R.

Table #

Acronym: PESENVSWA

Template: T143845

Project #: P685358

SR: 110 - Brian Ford

Shipper: Ms. FedEx Ground

Remarks:

Sample # (Lab only)

Method: EPA 8210-DCU
DOC Dual (Pre-oxid) 20 act: JF JI
DOC 8 (Sediment/Leachate) JF JI
Bottle Rinse (Pre-oxid) JF JI
Catalyst: Potassium Permanganate JF JI
Sulfuric Acid: 10% v/v JF JI
TE: Applicable JF JI
VOC: 2000 (Headspace) JF JI
Preservative: Stripped/Overhead: JF JI

If preservation required by method, Date/Time

Method: JF JI
HCL 1, 2M

Public Review Draft



ANALYTICAL REPORT

January 31, 2019

PES Environmental, Inc.- WA

Sample Delivery Group: L1063697
Samples Received: 01/24/2019
Project Number: 1413.001.05.601
Description: American Linen
Site: AMERICAN LINEN
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Jason Romer
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.



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MW109-012319 L1063697-01 GW

Collected by Alyssa Witt
Collected date/time 01/23/19 14:20
Received date/time 01/24/19 08:45



Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 16:20	01/24/19 16:20	CAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228835	5	01/27/19 22:35	01/27/19 22:35	ACG



MW-148-012319 L1063697-02 GW

Collected by Alyssa Witt
Collected date/time 01/23/19 12:25
Received date/time 01/24/19 08:45



Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1229337	1	01/29/19 13:42	01/29/19 13:42	GB
Wet Chemistry by Method 9056A	WG1227809	1	01/24/19 17:29	01/24/19 17:29	ELN
Wet Chemistry by Method 9056A	WG1227809	5	01/25/19 08:39	01/25/19 08:39	ELN
Wet Chemistry by Method 9060A	WG1229248	2	01/28/19 17:11	01/28/19 17:11	EEM
Metals (ICPMS) by Method 6020B	WG1228207	1	01/25/19 10:24	01/28/19 01:13	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227701	1	01/24/19 20:03	01/24/19 20:03	ACE
Volatile Organic Compounds (GC) by Method RSK175	WG1227529	1	01/25/19 14:13	01/25/19 14:13	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 16:40	01/24/19 16:40	CAH
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228835	1	01/27/19 21:14	01/27/19 21:14	ACG



MW-105-012319 L1063697-03 GW

Collected by Alyssa Witt
Collected date/time 01/23/19 10:30
Received date/time 01/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1229337	1	01/29/19 13:51	01/29/19 13:51	GB
Wet Chemistry by Method 9056A	WG1227809	1	01/24/19 17:45	01/24/19 17:45	ELN
Wet Chemistry by Method 9060A	WG1229248	1	01/28/19 17:24	01/28/19 17:24	EEM
Metals (ICPMS) by Method 6020B	WG1228207	1	01/25/19 10:24	01/28/19 01:18	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227701	1	01/24/19 20:25	01/24/19 20:25	ACE
Volatile Organic Compounds (GC) by Method RSK175	WG1227529	1	01/25/19 14:02	01/25/19 14:02	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 17:00	01/24/19 17:00	CAH

BB-8-012319 L1063697-04 GW

Collected by Alyssa Witt
Collected date/time 01/23/19 11:00
Received date/time 01/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Wet Chemistry by Method 2320 B-2011	WG1229337	1	01/29/19 13:58	01/29/19 13:58	GB
Wet Chemistry by Method 9056A	WG1227809	1	01/24/19 18:01	01/24/19 18:01	ELN
Wet Chemistry by Method 9060A	WG1229248	1	01/28/19 17:37	01/28/19 17:37	EEM
Metals (ICPMS) by Method 6020B	WG1228207	1	01/25/19 10:24	01/28/19 00:55	JPD
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227701	1	01/24/19 20:47	01/24/19 20:47	ACE
Volatile Organic Compounds (GC) by Method RSK175	WG1227529	1	01/25/19 14:07	01/25/19 14:07	MEL
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 17:20	01/24/19 17:20	CAH

MW111-012319 L1063697-05 GW

Collected by Alyssa Witt
Collected date/time 01/23/19 14:00
Received date/time 01/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 17:40	01/24/19 17:40	CAH



MW103-012319 L1063697-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				Alyssa Witt	01/23/19 15:00	01/24/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 18:00	01/24/19 18:00	CAH	

1 Cp

2 Tc

3 Ss

MW110-012319 L1063697-07 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				Alyssa Witt	01/23/19 15:20	01/24/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1227840	1	01/24/19 18:19	01/24/19 18:19	CAH	
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228835	20	01/27/19 22:55	01/27/19 22:55	ACG	

4 Cn

5 Sr

6 Qc

MW-905-012319 L1063697-08 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				Alyssa Witt	01/23/19 16:00	01/24/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228162	1	01/24/19 21:58	01/24/19 21:58	JCP	
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1229996	200	01/30/19 03:14	01/30/19 03:14	JHH	

7 Gl

8 Al

9 Sc

EQ-012319 L1063697-09 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				Alyssa Witt	01/23/19 15:30	01/24/19 08:45
Wet Chemistry by Method 2320 B-2011	WG1229337	1	01/29/19 13:19	01/29/19 13:19	GB	
Wet Chemistry by Method 9056A	WG1227809	1	01/24/19 18:49	01/24/19 18:49	ELN	
Wet Chemistry by Method 9056A	WG1227809	1	01/25/19 08:55	01/25/19 08:55	ELN	
Wet Chemistry by Method 9060A	WG1229248	1	01/28/19 17:50	01/28/19 17:50	EEM	
Metals (ICPMS) by Method 6020B	WG1228207	1	01/25/19 10:24	01/28/19 01:23	JPD	
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1227701	1	01/24/19 21:09	01/24/19 21:09	ACE	
Volatile Organic Compounds (GC) by Method RSK175	WG1227529	1	01/25/19 14:10	01/25/19 14:10	MEL	
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228162	1	01/24/19 22:17	01/24/19 22:17	JCP	
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1229996	1	01/30/19 03:34	01/30/19 03:34	JHH	

TRIP BLANK-012319 L1063697-10 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	
Collected by				Collected date/time	Received date/time	
				Alyssa Witt	01/23/19 00:00	01/24/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1228162	1	01/24/19 20:19	01/24/19 20:19	JCP	
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1229996	1	01/30/19 03:53	01/30/19 03:53	JHH	



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jason Romer
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.54	J	1.05	25.0	1	01/24/2019 16:20	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 16:20	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 16:20	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 16:20	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 16:20	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 16:20	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 16:20	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 16:20	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 16:20	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 16:20	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 16:20	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 16:20	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 16:20	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 16:20	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 16:20	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 16:20	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 16:20	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 16:20	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 16:20	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 16:20	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 16:20	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 16:20	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 16:20	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 16:20	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 16:20	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 16:20	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 16:20	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 16:20	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 16:20	WG1227840
1,1-Dichloroethene	0.739		0.188	0.500	1	01/24/2019 16:20	WG1227840
cis-1,2-Dichloroethene	403		0.466	2.50	5	01/27/2019 22:35	WG1228835
trans-1,2-Dichloroethene	2.08		0.152	0.500	1	01/24/2019 16:20	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 16:20	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 16:20	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 16:20	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 16:20	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 16:20	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 16:20	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 16:20	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 16:20	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 16:20	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 16:20	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 16:20	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 16:20	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 16:20	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 16:20	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 16:20	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 16:20	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 16:20	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 16:20	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 16:20	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 16:20	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 16:20	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 16:20	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 16:20	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 16:20	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 14:20

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 16:20	WG1227840
Tetrachloroethene	U		0.995	2.50	5	01/27/2019 22:35	WG1228835
Toluene	U		0.412	0.500	1	01/24/2019 16:20	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 16:20	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 16:20	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 16:20	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 16:20	WG1227840
Trichloroethene	43.8		0.765	2.50	5	01/27/2019 22:35	WG1228835
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 16:20	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 16:20	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 16:20	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 16:20	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 16:20	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 16:20	WG1227840
Vinyl chloride	36.8		0.118	0.500	1	01/24/2019 16:20	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 16:20	WG1227840
(S) Toluene-d8	105			80.0-120		01/27/2019 22:35	WG1228835
(S) Dibromofluoromethane	97.4			75.0-120		01/27/2019 22:35	WG1228835
(S) 4-Bromofluorobenzene	85.0			77.0-126		01/27/2019 22:35	WG1228835
(S) Toluene-d8	101			80.0-120		01/24/2019 16:20	WG1227840
(S) Dibromofluoromethane	101			75.0-120		01/24/2019 16:20	WG1227840
(S) a,a,a-Trifluorotoluene	96.4			80.0-120		01/24/2019 16:20	WG1227840
(S) 4-Bromofluorobenzene	93.4			77.0-126		01/24/2019 16:20	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	151000		2710	20000	1	01/29/2019 13:42	WG1229337

Sample Narrative:

L1063697-02 WG1229337: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17700		51.9	1000	1	01/24/2019 17:29	WG1227809
Nitrate	U		22.7	100	1	01/24/2019 17:29	WG1227809
Sulfate	154000		387	25000	5	01/25/2019 08:39	WG1227809

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4040	<u>B</u>	204	2000	2	01/28/2019 17:11	WG1229248

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	10100		15.0	100	1	01/28/2019 01:13	WG1228207
Manganese	594		0.250	5.00	1	01/28/2019 01:13	WG1228207

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 20:03	WG1227701
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		01/24/2019 20:03	WG1227701

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1390		0.287	0.678	1	01/25/2019 14:13	WG1227529
Ethane	U		0.296	1.29	1	01/25/2019 14:13	WG1227529
Ethene	2.84		0.422	1.27	1	01/25/2019 14:13	WG1227529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.90	<u>J</u>	1.05	25.0	1	01/24/2019 16:40	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 16:40	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 16:40	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 16:40	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 16:40	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 16:40	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 16:40	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 16:40	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 16:40	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 16:40	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 16:40	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 16:40	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 16:40	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 12:25

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/24/2019 16:40	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 16:40	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 16:40	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 16:40	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 16:40	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 16:40	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 16:40	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 16:40	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 16:40	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 16:40	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 16:40	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 16:40	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 16:40	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 16:40	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 16:40	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 16:40	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 16:40	WG1227840
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/27/2019 21:14	WG1228835
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 16:40	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 16:40	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 16:40	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 16:40	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 16:40	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 16:40	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 16:40	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 16:40	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 16:40	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 16:40	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 16:40	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 16:40	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 16:40	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 16:40	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 16:40	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 16:40	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 16:40	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 16:40	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 16:40	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 16:40	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 16:40	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 16:40	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 16:40	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 16:40	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 16:40	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 16:40	WG1227840
Tetrachloroethene	1.24		0.199	0.500	1	01/24/2019 16:40	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 16:40	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 16:40	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 16:40	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 16:40	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 16:40	WG1227840
Trichloroethene	0.347	U	0.153	0.500	1	01/24/2019 16:40	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 16:40	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 16:40	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 16:40	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 16:40	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 16:40	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 12:25

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/24/2019 16:40	WG1227840
Vinyl chloride	U		0.118	0.500	1	01/24/2019 16:40	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 16:40	WG1227840
(S) Toluene-d8	108			80.0-120		01/27/2019 21:14	WG1228835
(S) Dibromofluoromethane	94.6			75.0-120		01/27/2019 21:14	WG1228835
(S) 4-Bromofluorobenzene	87.5			77.0-126		01/27/2019 21:14	WG1228835
(S) Toluene-d8	100			80.0-120		01/24/2019 16:40	WG1227840
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 16:40	WG1227840
(S) a,a,a-Trifluorotoluene	98.4			80.0-120		01/24/2019 16:40	WG1227840
(S) 4-Bromofluorobenzene	93.4			77.0-126		01/24/2019 16:40	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	210000		2710	20000	1	01/29/2019 13:51	WG1229337

Sample Narrative:

L1063697-03 WG1229337: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	28100		51.9	1000	1	01/24/2019 17:45	WG1227809
Nitrate	U		22.7	100	1	01/24/2019 17:45	WG1227809
Sulfate	11000		77.4	5000	1	01/24/2019 17:45	WG1227809

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1960	<u>B</u>	102	1000	1	01/28/2019 17:24	WG1229248

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	13800		15.0	100	1	01/28/2019 01:18	WG1228207
Manganese	809		0.250	5.00	1	01/28/2019 01:18	WG1228207

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 20:25	WG1227701
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		01/24/2019 20:25	WG1227701

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	286		0.287	0.678	1	01/25/2019 14:02	WG1227529
Ethane	U		0.296	1.29	1	01/25/2019 14:02	WG1227529
Ethene	4.19		0.422	1.27	1	01/25/2019 14:02	WG1227529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.73	<u>J</u>	1.05	25.0	1	01/24/2019 17:00	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 17:00	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 17:00	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 17:00	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 17:00	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 17:00	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 17:00	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 17:00	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 17:00	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 17:00	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 17:00	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 17:00	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 17:00	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 10:30

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/24/2019 17:00	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 17:00	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 17:00	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 17:00	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 17:00	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 17:00	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 17:00	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 17:00	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 17:00	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 17:00	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 17:00	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 17:00	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 17:00	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 17:00	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 17:00	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 17:00	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 17:00	WG1227840
cis-1,2-Dichloroethene	1.51		0.0933	0.500	1	01/24/2019 17:00	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 17:00	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 17:00	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 17:00	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 17:00	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 17:00	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 17:00	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 17:00	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 17:00	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 17:00	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 17:00	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 17:00	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 17:00	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 17:00	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 17:00	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 17:00	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 17:00	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 17:00	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 17:00	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 17:00	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 17:00	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 17:00	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 17:00	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 17:00	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 17:00	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 17:00	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 17:00	WG1227840
Tetrachloroethene	0.790		0.199	0.500	1	01/24/2019 17:00	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 17:00	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 17:00	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 17:00	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 17:00	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 17:00	WG1227840
Trichloroethene	0.317	U	0.153	0.500	1	01/24/2019 17:00	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 17:00	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 17:00	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 17:00	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 17:00	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 17:00	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 10:30

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/24/2019 17:00	WG1227840
Vinyl chloride	0.392	↓	0.118	0.500	1	01/24/2019 17:00	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 17:00	WG1227840
(S) Toluene-d8	100			80.0-120		01/24/2019 17:00	WG1227840
(S) Dibromofluoromethane	101			75.0-120		01/24/2019 17:00	WG1227840
(S) a,a,a-Trifluorotoluene	98.1			80.0-120		01/24/2019 17:00	WG1227840
(S) 4-Bromofluorobenzene	93.0			77.0-126		01/24/2019 17:00	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	280000		2710	20000	1	01/29/2019 13:58	WG1229337

Sample Narrative:

L1063697-04 WG1229337: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	12400		51.9	1000	1	01/24/2019 18:01	WG1227809
Nitrate	891		22.7	100	1	01/24/2019 18:01	WG1227809
Sulfate	93300		77.4	5000	1	01/24/2019 18:01	WG1227809

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3430		102	1000	1	01/28/2019 17:37	WG1229248

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	95.4	J	15.0	100	1	01/28/2019 00:55	WG1228207
Manganese	82.0	O1	0.250	5.00	1	01/28/2019 00:55	WG1228207

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	99.6	J	31.6	100	1	01/24/2019 20:47	WG1227701
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		01/24/2019 20:47	WG1227701

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	111		0.287	0.678	1	01/25/2019 14:07	WG1227529
Ethane	0.735	J	0.296	1.29	1	01/25/2019 14:07	WG1227529
Ethene	U		0.422	1.27	1	01/25/2019 14:07	WG1227529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	01/24/2019 17:20	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 17:20	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 17:20	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 17:20	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 17:20	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 17:20	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 17:20	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 17:20	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 17:20	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 17:20	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 17:20	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 17:20	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 17:20	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 11:00

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/24/2019 17:20	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 17:20	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 17:20	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 17:20	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 17:20	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 17:20	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 17:20	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 17:20	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 17:20	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 17:20	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 17:20	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 17:20	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 17:20	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 17:20	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 17:20	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 17:20	WG1227840
1,1-Dichloroethene	0.403	U	0.188	0.500	1	01/24/2019 17:20	WG1227840
cis-1,2-Dichloroethene	81.5	U	0.0933	0.500	1	01/24/2019 17:20	WG1227840
trans-1,2-Dichloroethene	0.402	U	0.152	0.500	1	01/24/2019 17:20	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 17:20	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 17:20	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 17:20	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 17:20	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 17:20	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 17:20	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 17:20	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 17:20	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 17:20	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 17:20	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 17:20	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 17:20	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 17:20	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 17:20	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 17:20	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 17:20	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 17:20	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 17:20	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 17:20	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 17:20	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 17:20	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 17:20	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 17:20	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 17:20	WG1227840
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 17:20	WG1227840
Tetrachloroethene	133		0.199	0.500	1	01/24/2019 17:20	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 17:20	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 17:20	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 17:20	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 17:20	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 17:20	WG1227840
Trichloroethene	43.1		0.153	0.500	1	01/24/2019 17:20	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 17:20	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 17:20	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 17:20	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 17:20	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 17:20	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 11:00

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/24/2019 17:20	WG1227840
Vinyl chloride	0.618		0.118	0.500	1	01/24/2019 17:20	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 17:20	WG1227840
(S) Toluene-d8	102			80.0-120		01/24/2019 17:20	WG1227840
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 17:20	WG1227840
(S) a,a,a-Trifluorotoluene	97.3			80.0-120		01/24/2019 17:20	WG1227840
(S) 4-Bromofluorobenzene	93.1			77.0-126		01/24/2019 17:20	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/24/2019 17:40	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 17:40	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 17:40	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 17:40	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 17:40	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 17:40	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 17:40	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 17:40	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 17:40	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 17:40	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 17:40	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 17:40	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 17:40	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 17:40	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 17:40	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 17:40	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 17:40	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 17:40	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 17:40	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 17:40	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 17:40	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 17:40	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 17:40	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 17:40	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 17:40	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 17:40	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 17:40	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 17:40	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 17:40	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 17:40	WG1227840
cis-1,2-Dichloroethene	1.70		0.0933	0.500	1	01/24/2019 17:40	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 17:40	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 17:40	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 17:40	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 17:40	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 17:40	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 17:40	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 17:40	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 17:40	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 17:40	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 17:40	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 17:40	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 17:40	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 17:40	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 17:40	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 17:40	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 17:40	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 17:40	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 17:40	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 17:40	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 17:40	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 17:40	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 17:40	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 17:40	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 17:40	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 17:40	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 01/23/19 14:00

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 17:40	WG1227840
Tetrachloroethene	0.492	U	0.199	0.500	1	01/24/2019 17:40	WG1227840
Toluene	U		0.412	0.500	1	01/24/2019 17:40	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 17:40	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 17:40	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 17:40	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 17:40	WG1227840
Trichloroethene	0.176	U	0.153	0.500	1	01/24/2019 17:40	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 17:40	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 17:40	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 17:40	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 17:40	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 17:40	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 17:40	WG1227840
Vinyl chloride	37.6		0.118	0.500	1	01/24/2019 17:40	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 17:40	WG1227840
(S) Toluene-d8	102			80.0-120		01/24/2019 17:40	WG1227840
(S) Dibromofluoromethane	105			75.0-120		01/24/2019 17:40	WG1227840
(S) a,a,a-Trifluorotoluene	98.6			80.0-120		01/24/2019 17:40	WG1227840
(S) 4-Bromofluorobenzene	94.1			77.0-126		01/24/2019 17:40	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	23.0	J	1.05	25.0	1	01/24/2019 18:00	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 18:00	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 18:00	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 18:00	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 18:00	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 18:00	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 18:00	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 18:00	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 18:00	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 18:00	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 18:00	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 18:00	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 18:00	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 18:00	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 18:00	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 18:00	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 18:00	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 18:00	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 18:00	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 18:00	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 18:00	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 18:00	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 18:00	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 18:00	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 18:00	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 18:00	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 18:00	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 18:00	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 18:00	WG1227840
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 18:00	WG1227840
cis-1,2-Dichloroethene	11.4		0.0933	0.500	1	01/24/2019 18:00	WG1227840
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 18:00	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 18:00	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 18:00	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 18:00	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 18:00	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 18:00	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 18:00	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 18:00	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 18:00	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 18:00	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 18:00	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 18:00	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 18:00	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 18:00	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 18:00	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 18:00	WG1227840
2-Butanone (MEK)	8.78		1.28	5.00	1	01/24/2019 18:00	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 18:00	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 18:00	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 18:00	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 18:00	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 18:00	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 18:00	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 18:00	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 18:00	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 15:00

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 18:00	WG1227840
Tetrachloroethene	0.365	J	0.199	0.500	1	01/24/2019 18:00	WG1227840
Toluene	1.35		0.412	0.500	1	01/24/2019 18:00	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 18:00	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 18:00	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 18:00	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 18:00	WG1227840
Trichloroethene	1.48		0.153	0.500	1	01/24/2019 18:00	WG1227840
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 18:00	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 18:00	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 18:00	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 18:00	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 18:00	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 18:00	WG1227840
Vinyl chloride	6.68		0.118	0.500	1	01/24/2019 18:00	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 18:00	WG1227840
(S) Toluene-d8	98.6			80.0-120		01/24/2019 18:00	WG1227840
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 18:00	WG1227840
(S) a,a,a-Trifluorotoluene	98.3			80.0-120		01/24/2019 18:00	WG1227840
(S) 4-Bromofluorobenzene	92.7			77.0-126		01/24/2019 18:00	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	01/24/2019 18:19	WG1227840
Acrylonitrile	U		0.873	5.00	1	01/24/2019 18:19	WG1227840
Benzene	U		0.0896	0.500	1	01/24/2019 18:19	WG1227840
Bromobenzene	U		0.133	0.500	1	01/24/2019 18:19	WG1227840
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 18:19	WG1227840
Bromochloromethane	U		0.145	0.500	1	01/24/2019 18:19	WG1227840
Bromoform	U		0.186	0.500	1	01/24/2019 18:19	WG1227840
Bromomethane	U		0.157	2.50	1	01/24/2019 18:19	WG1227840
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 18:19	WG1227840
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 18:19	WG1227840
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 18:19	WG1227840
Carbon disulfide	U		0.101	0.500	1	01/24/2019 18:19	WG1227840
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 18:19	WG1227840
Chlorobenzene	U		0.140	0.500	1	01/24/2019 18:19	WG1227840
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 18:19	WG1227840
Chloroethane	U		0.141	2.50	1	01/24/2019 18:19	WG1227840
Chloroform	U		0.0860	0.500	1	01/24/2019 18:19	WG1227840
Chloromethane	U		0.153	1.25	1	01/24/2019 18:19	WG1227840
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 18:19	WG1227840
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 18:19	WG1227840
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 18:19	WG1227840
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 18:19	WG1227840
Dibromomethane	U		0.117	0.500	1	01/24/2019 18:19	WG1227840
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 18:19	WG1227840
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 18:19	WG1227840
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 18:19	WG1227840
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 18:19	WG1227840
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 18:19	WG1227840
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 18:19	WG1227840
1,1-Dichloroethene	6.44		0.188	0.500	1	01/24/2019 18:19	WG1227840
cis-1,2-Dichloroethene	673		1.87	10.0	20	01/27/2019 22:55	WG1228835
trans-1,2-Dichloroethene	5.83		0.152	0.500	1	01/24/2019 18:19	WG1227840
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 18:19	WG1227840
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 18:19	WG1227840
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 18:19	WG1227840
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 18:19	WG1227840
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 18:19	WG1227840
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 18:19	WG1227840
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 18:19	WG1227840
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 18:19	WG1227840
Ethylbenzene	U		0.158	0.500	1	01/24/2019 18:19	WG1227840
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 18:19	WG1227840
2-Hexanone	U		0.757	5.00	1	01/24/2019 18:19	WG1227840
n-Hexane	U		0.305	5.00	1	01/24/2019 18:19	WG1227840
Iodomethane	U		0.377	10.0	1	01/24/2019 18:19	WG1227840
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 18:19	WG1227840
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 18:19	WG1227840
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 18:19	WG1227840
Methylene Chloride	U		1.07	2.50	1	01/24/2019 18:19	WG1227840
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 18:19	WG1227840
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 18:19	WG1227840
Naphthalene	U		0.174	2.50	1	01/24/2019 18:19	WG1227840
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 18:19	WG1227840
Styrene	U		0.117	0.500	1	01/24/2019 18:19	WG1227840
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 18:19	WG1227840
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 18:19	WG1227840

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 15:20

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 18:19	WG1227840
Tetrachloroethene	1260		3.98	10.0	20	01/27/2019 22:55	WG1228835
Toluene	U		0.412	0.500	1	01/24/2019 18:19	WG1227840
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 18:19	WG1227840
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 18:19	WG1227840
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 18:19	WG1227840
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 18:19	WG1227840
Trichloroethene	490		3.06	10.0	20	01/27/2019 22:55	WG1228835
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 18:19	WG1227840
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 18:19	WG1227840
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 18:19	WG1227840
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 18:19	WG1227840
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 18:19	WG1227840
Vinyl acetate	U		0.645	5.00	1	01/24/2019 18:19	WG1227840
Vinyl chloride	1.39		0.118	0.500	1	01/24/2019 18:19	WG1227840
Xylenes, Total	U		0.316	1.50	1	01/24/2019 18:19	WG1227840
(S) Toluene-d8	107			80.0-120		01/27/2019 22:55	WG1228835
(S) Dibromofluoromethane	98.8			75.0-120		01/27/2019 22:55	WG1228835
(S) 4-Bromofluorobenzene	85.0			77.0-126		01/27/2019 22:55	WG1228835
(S) Toluene-d8	108			80.0-120		01/24/2019 18:19	WG1227840
(S) Dibromofluoromethane	103			75.0-120		01/24/2019 18:19	WG1227840
(S) a,a,a-Trifluorotoluene	81.7			80.0-120		01/24/2019 18:19	WG1227840
(S) 4-Bromofluorobenzene	93.6			77.0-126		01/24/2019 18:19	WG1227840

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	1.05	25.0	1	01/24/2019 21:58	WG1228162
Acrylonitrile	U		0.873	5.00	1	01/24/2019 21:58	WG1228162
Benzene	U		0.0896	0.500	1	01/24/2019 21:58	WG1228162
Bromobenzene	U		0.133	0.500	1	01/24/2019 21:58	WG1228162
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 21:58	WG1228162
Bromochloromethane	U		0.145	0.500	1	01/24/2019 21:58	WG1228162
Bromoform	U		0.186	0.500	1	01/24/2019 21:58	WG1228162
Bromomethane	U		0.157	2.50	1	01/24/2019 21:58	WG1228162
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 21:58	WG1228162
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 21:58	WG1228162
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 21:58	WG1228162
Carbon disulfide	U		0.101	0.500	1	01/24/2019 21:58	WG1228162
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 21:58	WG1228162
Chlorobenzene	U		0.140	0.500	1	01/24/2019 21:58	WG1228162
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 21:58	WG1228162
Chloroethane	U		0.141	2.50	1	01/24/2019 21:58	WG1228162
Chloroform	U		0.0860	0.500	1	01/24/2019 21:58	WG1228162
Chloromethane	U		0.153	1.25	1	01/24/2019 21:58	WG1228162
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 21:58	WG1228162
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 21:58	WG1228162
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 21:58	WG1228162
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 21:58	WG1228162
Dibromomethane	U		0.117	0.500	1	01/24/2019 21:58	WG1228162
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 21:58	WG1228162
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 21:58	WG1228162
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 21:58	WG1228162
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 21:58	WG1228162
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 21:58	WG1228162
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 21:58	WG1228162
1,1-Dichloroethene	6.88		0.188	0.500	1	01/24/2019 21:58	WG1228162
cis-1,2-Dichloroethene	718		18.7	100	200	01/30/2019 03:14	WG1229996
trans-1,2-Dichloroethene	6.49		0.152	0.500	1	01/24/2019 21:58	WG1228162
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 21:58	WG1228162
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 21:58	WG1228162
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 21:58	WG1228162
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 21:58	WG1228162
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 21:58	WG1228162
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 21:58	WG1228162
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 21:58	WG1228162
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 21:58	WG1228162
Ethylbenzene	U		0.158	0.500	1	01/24/2019 21:58	WG1228162
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 21:58	WG1228162
2-Hexanone	U		0.757	5.00	1	01/24/2019 21:58	WG1228162
n-Hexane	U		0.305	5.00	1	01/24/2019 21:58	WG1228162
Iodomethane	U		0.377	10.0	1	01/24/2019 21:58	WG1228162
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 21:58	WG1228162
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 21:58	WG1228162
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 21:58	WG1228162
Methylene Chloride	U		1.07	2.50	1	01/24/2019 21:58	WG1228162
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 21:58	WG1228162
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 21:58	WG1228162
Naphthalene	U		0.174	2.50	1	01/24/2019 21:58	WG1228162
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 21:58	WG1228162
Styrene	U		0.117	0.500	1	01/24/2019 21:58	WG1228162
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 21:58	WG1228162
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 21:58	WG1228162

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 16:00

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 21:58	WG1228162
Tetrachloroethene	1120		39.8	100	200	01/30/2019 03:14	WG1229996
Toluene	U		0.412	0.500	1	01/24/2019 21:58	WG1228162
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 21:58	WG1228162
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 21:58	WG1228162
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 21:58	WG1228162
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 21:58	WG1228162
Trichloroethene	499		30.6	100	200	01/30/2019 03:14	WG1229996
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 21:58	WG1228162
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 21:58	WG1228162
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 21:58	WG1228162
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 21:58	WG1228162
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 21:58	WG1228162
Vinyl acetate	U		0.645	5.00	1	01/24/2019 21:58	WG1228162
Vinyl chloride	1.51		0.118	0.500	1	01/24/2019 21:58	WG1228162
Xylenes, Total	U		0.316	1.50	1	01/24/2019 21:58	WG1228162
(S) Toluene-d8	108			80.0-120		01/24/2019 21:58	WG1228162
(S) Toluene-d8	85.4			80.0-120		01/30/2019 03:14	WG1229996
(S) Dibromofluoromethane	102			75.0-120		01/24/2019 21:58	WG1228162
(S) 4-Bromofluorobenzene	91.7			77.0-126		01/24/2019 21:58	WG1228162
(S) 4-Bromofluorobenzene	99.0			77.0-126		01/30/2019 03:14	WG1229996
(S) 1,2-Dichloroethane-d4	95.7			70.0-130		01/30/2019 03:14	WG1229996

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	3610	<u>B</u> <u>J</u>	2710	20000	1	01/29/2019 13:19	WG1229337

Sample Narrative:

L1063697-09 WG1229337: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	59.6	<u>J</u>	51.9	1000	1	01/24/2019 18:49	WG1227809
Nitrate	39.8	<u>J</u>	22.7	100	1	01/24/2019 18:49	WG1227809
Sulfate	U		77.4	5000	1	01/25/2019 08:55	WG1227809

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	555	<u>B</u> <u>J</u>	102	1000	1	01/28/2019 17:50	WG1229248

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	37.7	<u>J</u>	15.0	100	1	01/28/2019 01:23	WG1228207
Manganese	1.94	<u>J</u>	0.250	5.00	1	01/28/2019 01:23	WG1228207

Volatile Organic Compounds (GC) by Method NWTPHGX

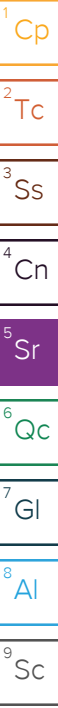
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	01/24/2019 21:09	WG1227701
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		01/24/2019 21:09	WG1227701

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	01/25/2019 14:10	WG1227529
Ethane	U		0.296	1.29	1	01/25/2019 14:10	WG1227529
Ethene	U		0.422	1.27	1	01/25/2019 14:10	WG1227529

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.43	<u>J</u> <u>J4</u>	1.05	25.0	1	01/24/2019 22:17	WG1228162
Acrylonitrile	U		0.873	5.00	1	01/24/2019 22:17	WG1228162
Benzene	U		0.0896	0.500	1	01/24/2019 22:17	WG1228162
Bromobenzene	U		0.133	0.500	1	01/24/2019 22:17	WG1228162
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 22:17	WG1228162
Bromochloromethane	U		0.145	0.500	1	01/24/2019 22:17	WG1228162
Bromoform	U		0.186	0.500	1	01/24/2019 22:17	WG1228162
Bromomethane	U		0.157	2.50	1	01/24/2019 22:17	WG1228162
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 22:17	WG1228162
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 22:17	WG1228162
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 22:17	WG1228162
Carbon disulfide	U		0.101	0.500	1	01/24/2019 22:17	WG1228162
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 22:17	WG1228162





Collected date/time: 01/23/19 15:30

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	01/24/2019 22:17	WG1228162
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 22:17	WG1228162
Chloroethane	U		0.141	2.50	1	01/24/2019 22:17	WG1228162
Chloroform	0.151	U	0.0860	0.500	1	01/24/2019 22:17	WG1228162
Chloromethane	U		0.153	1.25	1	01/24/2019 22:17	WG1228162
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 22:17	WG1228162
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 22:17	WG1228162
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 22:17	WG1228162
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 22:17	WG1228162
Dibromomethane	U		0.117	0.500	1	01/24/2019 22:17	WG1228162
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 22:17	WG1228162
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 22:17	WG1228162
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 22:17	WG1228162
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 22:17	WG1228162
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 22:17	WG1228162
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 22:17	WG1228162
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 22:17	WG1228162
cis-1,2-Dichloroethene	U		0.0933	0.500	1	01/30/2019 03:34	WG1229996
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 22:17	WG1228162
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 22:17	WG1228162
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 22:17	WG1228162
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 22:17	WG1228162
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 22:17	WG1228162
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 22:17	WG1228162
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 22:17	WG1228162
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 22:17	WG1228162
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 22:17	WG1228162
Ethylbenzene	U		0.158	0.500	1	01/24/2019 22:17	WG1228162
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 22:17	WG1228162
2-Hexanone	U		0.757	5.00	1	01/24/2019 22:17	WG1228162
n-Hexane	U		0.305	5.00	1	01/24/2019 22:17	WG1228162
Iodomethane	U		0.377	10.0	1	01/24/2019 22:17	WG1228162
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 22:17	WG1228162
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 22:17	WG1228162
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 22:17	WG1228162
Methylene Chloride	U		1.07	2.50	1	01/24/2019 22:17	WG1228162
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 22:17	WG1228162
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 22:17	WG1228162
Naphthalene	U		0.174	2.50	1	01/24/2019 22:17	WG1228162
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 22:17	WG1228162
Styrene	U		0.117	0.500	1	01/24/2019 22:17	WG1228162
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 22:17	WG1228162
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 22:17	WG1228162
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 22:17	WG1228162
Tetrachloroethene	U		0.199	0.500	1	01/30/2019 03:34	WG1229996
Toluene	U		0.412	0.500	1	01/24/2019 22:17	WG1228162
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 22:17	WG1228162
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 22:17	WG1228162
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 22:17	WG1228162
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 22:17	WG1228162
Trichloroethene	U		0.153	0.500	1	01/30/2019 03:34	WG1229996
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 22:17	WG1228162
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 22:17	WG1228162
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 22:17	WG1228162
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 22:17	WG1228162
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 22:17	WG1228162

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	01/24/2019 22:17	WG1228162
Vinyl chloride	U		0.118	0.500	1	01/24/2019 22:17	WG1228162
Xylenes, Total	U		0.316	1.50	1	01/24/2019 22:17	WG1228162
(S) Toluene-d8	101			80.0-120		01/24/2019 22:17	WG1228162
(S) Toluene-d8	91.4			80.0-120		01/30/2019 03:34	WG1229996
(S) Dibromofluoromethane	105			75.0-120		01/24/2019 22:17	WG1228162
(S) 4-Bromofluorobenzene	93.6			77.0-126		01/24/2019 22:17	WG1228162
(S) 4-Bromofluorobenzene	96.6			77.0-126		01/30/2019 03:34	WG1229996
(S) 1,2-Dichloroethane-d4	92.8			70.0-130		01/30/2019 03:34	WG1229996

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 01/23/19 00:00

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	1.05	25.0	1	01/24/2019 20:19	WG1228162
Acrylonitrile	U		0.873	5.00	1	01/24/2019 20:19	WG1228162
Benzene	U		0.0896	0.500	1	01/24/2019 20:19	WG1228162
Bromobenzene	U		0.133	0.500	1	01/24/2019 20:19	WG1228162
Bromodichloromethane	U		0.0800	0.500	1	01/24/2019 20:19	WG1228162
Bromochloromethane	U		0.145	0.500	1	01/24/2019 20:19	WG1228162
Bromoform	U		0.186	0.500	1	01/24/2019 20:19	WG1228162
Bromomethane	U		0.157	2.50	1	01/24/2019 20:19	WG1228162
n-Butylbenzene	U		0.143	0.500	1	01/24/2019 20:19	WG1228162
sec-Butylbenzene	U		0.134	0.500	1	01/24/2019 20:19	WG1228162
tert-Butylbenzene	U		0.183	0.500	1	01/24/2019 20:19	WG1228162
Carbon disulfide	U		0.101	0.500	1	01/24/2019 20:19	WG1228162
Carbon tetrachloride	U		0.159	0.500	1	01/24/2019 20:19	WG1228162
Chlorobenzene	U		0.140	0.500	1	01/24/2019 20:19	WG1228162
Chlorodibromomethane	U		0.128	0.500	1	01/24/2019 20:19	WG1228162
Chloroethane	U		0.141	2.50	1	01/24/2019 20:19	WG1228162
Chloroform	U		0.0860	0.500	1	01/24/2019 20:19	WG1228162
Chloromethane	U		0.153	1.25	1	01/24/2019 20:19	WG1228162
2-Chlorotoluene	U		0.111	0.500	1	01/24/2019 20:19	WG1228162
4-Chlorotoluene	U		0.0972	0.500	1	01/24/2019 20:19	WG1228162
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	01/24/2019 20:19	WG1228162
1,2-Dibromoethane	U		0.193	0.500	1	01/24/2019 20:19	WG1228162
Dibromomethane	U		0.117	0.500	1	01/24/2019 20:19	WG1228162
1,2-Dichlorobenzene	U		0.101	0.500	1	01/24/2019 20:19	WG1228162
1,3-Dichlorobenzene	U		0.130	0.500	1	01/24/2019 20:19	WG1228162
1,4-Dichlorobenzene	U		0.121	0.500	1	01/24/2019 20:19	WG1228162
Dichlorodifluoromethane	U		0.127	2.50	1	01/24/2019 20:19	WG1228162
1,1-Dichloroethane	U		0.114	0.500	1	01/24/2019 20:19	WG1228162
1,2-Dichloroethane	U		0.108	0.500	1	01/24/2019 20:19	WG1228162
1,1-Dichloroethene	U		0.188	0.500	1	01/24/2019 20:19	WG1228162
cis-1,2-Dichloroethene	0.106	BJ	0.0933	0.500	1	01/24/2019 20:19	WG1228162
trans-1,2-Dichloroethene	U		0.152	0.500	1	01/24/2019 20:19	WG1228162
1,2-Dichloropropane	U		0.190	0.500	1	01/24/2019 20:19	WG1228162
1,1-Dichloropropene	U		0.128	0.500	1	01/24/2019 20:19	WG1228162
1,3-Dichloropropane	U		0.147	1.00	1	01/24/2019 20:19	WG1228162
cis-1,3-Dichloropropene	U		0.0976	0.500	1	01/24/2019 20:19	WG1228162
trans-1,3-Dichloropropene	U		0.222	0.500	1	01/24/2019 20:19	WG1228162
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	01/24/2019 20:19	WG1228162
2,2-Dichloropropane	U		0.0929	0.500	1	01/24/2019 20:19	WG1228162
Di-isopropyl ether	U		0.0924	0.500	1	01/24/2019 20:19	WG1228162
Ethylbenzene	U		0.158	0.500	1	01/24/2019 20:19	WG1228162
Hexachloro-1,3-butadiene	U		0.157	1.00	1	01/24/2019 20:19	WG1228162
2-Hexanone	U		0.757	5.00	1	01/24/2019 20:19	WG1228162
n-Hexane	U		0.305	5.00	1	01/24/2019 20:19	WG1228162
Iodomethane	U		0.377	10.0	1	01/24/2019 20:19	WG1228162
Isopropylbenzene	U		0.126	0.500	1	01/24/2019 20:19	WG1228162
p-Isopropyltoluene	U		0.138	0.500	1	01/24/2019 20:19	WG1228162
2-Butanone (MEK)	U		1.28	5.00	1	01/24/2019 20:19	WG1228162
Methylene Chloride	U		1.07	2.50	1	01/24/2019 20:19	WG1228162
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	01/24/2019 20:19	WG1228162
Methyl tert-butyl ether	U		0.102	0.500	1	01/24/2019 20:19	WG1228162
Naphthalene	U		0.174	2.50	1	01/24/2019 20:19	WG1228162
n-Propylbenzene	U		0.162	0.500	1	01/24/2019 20:19	WG1228162
Styrene	U		0.117	0.500	1	01/24/2019 20:19	WG1228162
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	01/24/2019 20:19	WG1228162
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	01/24/2019 20:19	WG1228162

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 01/23/19 00:00

L1063697

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	01/24/2019 20:19	WG1228162
Tetrachloroethene	U		0.199	0.500	1	01/30/2019 03:53	WG1229996
Toluene	0.427	↓	0.412	0.500	1	01/24/2019 20:19	WG1228162
1,2,3-Trichlorobenzene	U		0.164	0.500	1	01/24/2019 20:19	WG1228162
1,2,4-Trichlorobenzene	U		0.355	0.500	1	01/24/2019 20:19	WG1228162
1,1,1-Trichloroethane	U		0.0940	0.500	1	01/24/2019 20:19	WG1228162
1,1,2-Trichloroethane	U		0.186	0.500	1	01/24/2019 20:19	WG1228162
Trichloroethene	U		0.153	0.500	1	01/24/2019 20:19	WG1228162
Trichlorofluoromethane	U		0.130	2.50	1	01/24/2019 20:19	WG1228162
1,2,3-Trichloropropane	U		0.247	2.50	1	01/24/2019 20:19	WG1228162
1,2,4-Trimethylbenzene	U		0.123	0.500	1	01/24/2019 20:19	WG1228162
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	01/24/2019 20:19	WG1228162
1,3,5-Trimethylbenzene	U		0.124	0.500	1	01/24/2019 20:19	WG1228162
Vinyl acetate	U		0.645	5.00	1	01/24/2019 20:19	WG1228162
Vinyl chloride	U		0.118	0.500	1	01/24/2019 20:19	WG1228162
Xylenes, Total	U		0.316	1.50	1	01/24/2019 20:19	WG1228162
(S) Toluene-d8	100			80.0-120		01/24/2019 20:19	WG1228162
(S) Toluene-d8	91.8			80.0-120		01/30/2019 03:53	WG1229996
(S) Dibromofluoromethane	104			75.0-120		01/24/2019 20:19	WG1228162
(S) 4-Bromofluorobenzene	93.5			77.0-126		01/24/2019 20:19	WG1228162
(S) 4-Bromofluorobenzene	97.2			77.0-126		01/30/2019 03:53	WG1229996
(S) 1,2-Dichloroethane-d4	90.4			70.0-130		01/30/2019 03:53	WG1229996

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3379601-1 01/29/19 12:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	7300	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1063694-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063694-01 01/29/19 12:59 • (DUP) R3379601-2 01/29/19 13:06

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	68500	69500	1	1.43		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1063649-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1063649-02 01/29/19 15:49 • (DUP) R3379601-4 01/29/19 15:56

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	293000	301000	1	2.40		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3379601-3 01/29/19 14:13

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	102000	102	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3378638-1 01/24/19 09:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1063690-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1063690-02 01/24/19 16:26 • (DUP) R3378638-3 01/24/19 16:42

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	
	ug/l	ug/l		%	%	DUP RPD Limits	%
Chloride	76100	76600	1	0.754	15		
Nitrate	6660	6680	1	0.325	15		
Sulfate	96500	96800	1	0.384	15		

L1063738-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063738-01 01/24/19 19:53 • (DUP) R3378638-6 01/24/19 20:09

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	
	ug/l	ug/l		%	%	DUP RPD Limits	%
Chloride	9580	9620	1	0.395	15		
Nitrate	519	511	1	1.48	15		
Sulfate	9540	9610	1	0.690	15		

Laboratory Control Sample (LCS)

(LCS) R3378638-2 01/24/19 10:02

Analyte	Spike Amount		LCS Result	LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	ug/l			%	%	
Chloride	40000	40000	40000	99.9	80.0-120		
Nitrate	8000	8200	8200	102	80.0-120		
Sulfate	40000	41200	41200	103	80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1063690-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	76100	123000	124000	94.2	95.5	1	80.0-120	E	E	0.494	15
Nitrate	5000	6660	11500	11600	97.1	98.3	1	80.0-120	E	E	0.486	15
Sulfate	50000	96500	142000	143000	92.0	93.4	1	80.0-120	E	E	0.492	15

L1063738-01 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	9580	59800	100	1	80.0-120	
Nitrate	5000	519	5660	103	1	80.0-120	
Sulfate	50000	9540	58900	98.7	1	80.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc.- WA

1413.001.05.601

L1063697

01/31/19 15:02

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Method Blank (MB)

(MB) R3379231-1	01/28/19 12:16	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	222	<u>J</u>		102	1000

L1063581-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1063581-08	01/28/19 16:27 • (DUP) R3379231-3	01/28/19 16:41			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%		%
TOC (Total Organic Carbon)	5200	5260	1	1.13	20

L1064289-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1064289-02	01/28/19 20:02 • (DUP) R3379231-6	01/28/19 20:16			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%		%
TOC (Total Organic Carbon)	4820	4810	1	0.332	20

Laboratory Control Sample (LCS)

(LCS) R3379231-2	01/28/19 13:16			
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	
TOC (Total Organic Carbon)	75000	79200	106	85.0-115

L1063697-09 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1063697-09	01/28/19 17:50 • (MS) R3379231-4	01/28/19 18:08 • (MSD) R3379231-5	01/28/19 18:25								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%		%			%	%
TOC (Total Organic Carbon)	50000	555	56500	56900	112	113	80.0-120			0.653	20

L1064289-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1064289-03	01/28/19 20:30 • (MS) R3379231-7	01/28/19 20:48 • (MSD) R3379231-8	01/28/19 21:05								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%		%			%	%
TOC (Total Organic Carbon)	50000	4890	59500	59600	109	110	80.0-120			0.235	20



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3378995-1 01/28/19 00:41				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3378995-2 01/28/19 00:46 • (LCSD) R3378995-3 01/28/19 00:50									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	5450	5380	109	108	80.0-120			1.30	20
Manganese	50.0	54.1	52.9	108	106	80.0-120			2.33	20

L1063697-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1063697-04 01/28/19 00:55 • (MS) R3378995-5 01/28/19 01:04 • (MSD) R3378995-6 01/28/19 01:09											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	95.4	5240	5320	103	105	1	75.0-125			155	20
Manganese	50.0	82.0	134	134	105	104	1	75.0-125			0.371	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1063697-02.03.04.09](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3378909-3 01/24/19 14:43				
Analyte	ug/l		ug/l	ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	103			78.0-120

Laboratory Control Sample (LCS)

	LCS		LCS Rec.	Rec. Limits	LCS Qualifier
(LCS) R3378909-2 01/24/19 14:00					
Analyte	Spike Amount	LCS Result	%		
	ug/l	ug/l			
Gasoline Range Organics-NWTPH	5500	5370	97.6	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			104	78.0-120	

L1063589-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	OS		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L1063589-01 01/24/19 18:35 • (MS) R3378909-6 01/25/19 01:37 • (MSD) R3378909-7 01/25/19 01:59												
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.						
	ug/l	ug/l	ug/l	ug/l	%	%					%	%
Gasoline Range Organics-NWTPH	5500	134	3860	4090	67.8	71.8	1	10.0-155			5.60	21
^(S) <i>a,a</i> -Trifluorotoluene(FID)					104	105		78.0-120				

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Volatile Organic Compounds (GC) by Method RSK175

[L1063697-02.03.04.09](#)

Method Blank (MB)

(MB) R3378764-1 01/25/19 11:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RD1 ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1063310-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063310-01 01/25/19 11:40 • (DUP) R3378764-2 01/25/19 13:47

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	66.9	65.5	1	2.06		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L1063312-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063312-01 01/25/19 11:43 • (DUP) R3378764-3 01/25/19 13:55

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	78.5	76.4	1	2.79		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L1063700-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1063700-01 01/25/19 14:19 • (DUP) R3378764-4 01/25/19 14:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	ND	0.000	1	0.000		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

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Volatile Organic Compounds (GC) by Method RSK175

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378764-5 01/25/19 14:51 • (LCSD) R3378764-6 01/25/19 15:09

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	71.3	70.4	105	104	85.0-115			1.24	20
Ethane	129	112	113	86.9	87.5	85.0-115			0.741	20
Ethene	127	111	112	87.1	88.2	85.0-115			1.27	20

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Method Blank (MB)

(MB) R3378860-3 01/24/19 09:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1063697-01.02.03.04.05.06.07](#)

Method Blank (MB)

(MB) R3378860-3 01/24/19 09:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.260	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	103			80.0-120
(S) Dibromofluoromethane	102			75.0-120
(S) o,o,a-Trifluorotoluene	98.9			80.0-120
(S) 4-Bromofluorobenzene	93.1			77.0-126

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378860-1 01/24/19 08:56 • (LCSD) R3378860-2 01/24/19 09:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	193	168	155	134	19.0-160			14.0	27
Acrylonitrile	125	155	144	124	115	55.0-149			7.57	20
Benzene	25.0	26.2	24.8	105	99.1	70.0-123			5.66	20
Bromobenzene	25.0	24.9	23.9	99.7	95.5	73.0-121			4.32	20
Bromodichloromethane	25.0	27.9	26.1	112	104	75.0-120			6.74	20
Bromochloromethane	25.0	27.1	25.4	109	102	76.0-122			6.60	20
Bromoform	25.0	24.9	23.7	99.5	94.8	68.0-132			4.87	20
Bromomethane	25.0	28.2	26.4	113	105	10.0-160			6.67	25
n-Butylbenzene	25.0	26.8	25.2	107	101	73.0-125			6.14	20
sec-Butylbenzene	25.0	26.8	25.5	107	102	75.0-125			5.21	20
tert-Butylbenzene	25.0	26.1	25.0	104	100	76.0-124			4.01	20
Carbon disulfide	25.0	26.5	25.6	106	102	61.0-128			3.53	20
Carbon tetrachloride	25.0	24.4	23.8	97.6	95.2	68.0-126			2.48	20
Chlorobenzene	25.0	25.2	24.5	101	98.0	80.0-121			2.74	20
Chlorodibromomethane	25.0	26.1	25.3	104	101	77.0-125			3.06	20
Chloroethane	25.0	30.5	28.3	122	113	47.0-150			7.58	20
Chloroform	25.0	27.4	26.1	110	105	73.0-120			4.83	20
Chloromethane	25.0	27.8	27.1	111	108	41.0-142			2.71	20
2-Chlorotoluene	25.0	25.5	24.4	102	97.5	76.0-123			4.34	20
4-Chlorotoluene	25.0	25.8	24.8	103	99.2	75.0-122			3.92	20
1,2-Dibromo-3-Chloropropane	25.0	25.2	24.3	101	97.3	58.0-134			3.35	20
1,2-Dibromoethane	25.0	26.6	25.7	106	103	80.0-122			3.38	20
Dibromomethane	25.0	28.7	27.6	115	111	80.0-120			3.94	20
1,2-Dichlorobenzene	25.0	26.3	24.9	105	99.5	79.0-121			5.75	20
1,3-Dichlorobenzene	25.0	25.6	24.4	102	97.5	79.0-120			5.00	20
1,4-Dichlorobenzene	25.0	25.5	24.7	102	98.8	79.0-120			3.19	20
Dichlorodifluoromethane	25.0	25.4	24.8	101	99.2	51.0-149			2.26	20
1,1-Dichloroethane	25.0	27.7	26.3	111	105	70.0-126			5.23	20
1,2-Dichloroethane	25.0	28.6	27.1	115	108	70.0-128			5.57	20
1,1-Dichloroethene	25.0	25.6	25.3	102	101	71.0-124			1.17	20
cis-1,2-Dichloroethene	25.0	27.5	26.5	110	106	73.0-120			3.74	20
trans-1,2-Dichloroethene	25.0	26.9	26.1	108	104	73.0-120			3.00	20
1,2-Dichloropropane	25.0	28.1	26.7	112	107	77.0-125			4.96	20
1,1-Dichloropropene	25.0	27.8	26.3	111	105	74.0-126			5.36	20
1,3-Dichloropropene	25.0	26.6	25.5	107	102	80.0-120			4.55	20
cis-1,3-Dichloropropene	25.0	26.0	25.0	104	100	80.0-123			4.04	20
trans-1,3-Dichloropropene	25.0	26.8	25.5	107	102	78.0-124			4.72	20
trans-1,4-Dichloro-2-butene	25.0	21.7	20.7	86.9	82.7	33.0-144			4.97	20
2,2-Dichloropropane	25.0	24.0	22.8	96.2	91.3	58.0-130			5.21	20
Di-isopropyl ether	25.0	28.8	27.2	115	109	58.0-138			5.73	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378860-1 01/24/19 08:56 • (LCSD) R3378860-2 01/24/19 09:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	25.8	24.4	103	97.8	79.0-123			5.38	20
Hexachloro-1,3-butadiene	25.0	24.1	22.9	96.4	91.7	54.0-138			4.97	20
2-Hexanone	125	144	138	115	110	67.0-149			4.22	20
n-Hexane	25.0	25.5	24.3	102	97.0	57.0-133			4.91	20
Iodomethane	125	123	120	98.1	96.0	33.0-147			2.11	26
Isopropylbenzene	25.0	25.1	24.1	101	96.6	76.0-127			3.99	20
p-Isopropyltoluene	25.0	26.4	25.1	106	101	76.0-125			4.95	20
2-Butanone (MEK)	125	149	138	119	110	44.0-160			7.94	20
Methylene Chloride	25.0	26.4	25.7	106	103	67.0-120			2.62	20
4-Methyl-2-pentanone (MIBK)	125	143	135	114	108	68.0-142			5.88	20
Methyl tert-butyl ether	25.0	27.6	26.3	111	105	68.0-125			4.92	20
Naphthalene	25.0	23.6	23.4	94.3	93.5	54.0-135			0.895	20
n-Propylbenzene	25.0	25.1	24.1	100	96.2	77.0-124			4.12	20
Styrene	25.0	25.8	25.2	103	101	73.0-130			2.29	20
1,1,1,2-Tetrachloroethane	25.0	25.0	24.1	100	96.6	75.0-125			3.49	20
1,1,2,2-Tetrachloroethane	25.0	24.4	23.7	97.6	94.7	65.0-130			3.07	20
1,1,2-Trichlorotrifluoroethane	25.0	24.9	24.1	99.7	96.4	69.0-132			3.42	20
Tetrachloroethene	25.0	23.6	23.0	94.4	92.2	72.0-132			2.39	20
Toluene	25.0	24.9	24.0	99.7	96.2	79.0-120			3.64	20
1,2,3-Trichlorobenzene	25.0	23.3	22.5	93.2	89.9	50.0-138			3.69	20
1,2,4-Trichlorobenzene	25.0	24.5	23.9	98.0	95.5	57.0-137			2.58	20
1,1,1-Trichloroethane	25.0	27.5	26.2	110	105	73.0-124			4.63	20
1,1,2-Trichloroethane	25.0	26.6	25.7	106	103	80.0-120			3.33	20
Trichloroethene	25.0	26.5	25.1	106	100	78.0-124			5.54	20
Trichlorofluoromethane	25.0	25.8	24.7	103	98.6	59.0-147			4.58	20
1,2,3-Trichloropropane	25.0	26.0	25.3	104	101	73.0-130			2.65	20
1,2,4-Trimethylbenzene	25.0	26.1	24.7	104	98.9	76.0-121			5.51	20
1,2,3-Trimethylbenzene	25.0	25.6	24.4	102	97.7	77.0-120			4.62	20
1,3,5-Trimethylbenzene	25.0	25.4	24.6	101	98.4	76.0-122			3.07	20
Vinyl acetate	125	86.7	93.7	69.3	74.9	11.0-160			7.76	20
Vinyl chloride	25.0	28.0	26.5	112	106	67.0-131			5.34	20
Xylenes, Total	75.0	77.4	74.2	103	98.9	79.0-123			4.22	20
(S) Toluene-d8				97.8	98.7	80.0-120				
(S) Dibromofluoromethane				102	102	75.0-120				
(S) o,o,-Trifluorotoluene				96.7	96.7	80.0-120				
(S) 4-Bromofluorobenzene				93.1	95.3	77.0-126				

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Method Blank (MB)

(MB) R33788613 01/24/19 19:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
Carbon disulfide	U		0.101	0.500
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	0.187	U	0.0933	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
n-Hexane	U		0.305	5.00
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1063697-08.09.10](#)

Method Blank (MB)

(MB) R33788613 01/24/19 19:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iodomethane	U		0.377	10.0
Di-isopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.237	J	0.157	1.00
2-Hexanone	U		0.757	5.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.180	J	0.174	2.50
Vinyl acetate	U		0.645	5.00
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	0.232	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	101			80.0-120
(S) Dibromofluoromethane	104			75.0-120
(S) 4-Bromofluorobenzene	93.8			77.0-126

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378861-1 01/24/19 18:59 • (LCSD) R3378861-2 01/24/19 19:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Carbon disulfide	25.0	25.9	26.3	104	105	61.0-128			146	20
trans-1,4-Dichloro-2-butene	25.0	20.4	20.5	81.4	81.9	33.0-144			0.553	20
n-Hexane	25.0	27.3	25.5	109	102	57.0-133			6.95	20
Iodomethane	125	121	124	96.8	98.8	33.0-147			2.06	26
Acetone	125	218	203	174	162	19.0-160	J4	J4	7.07	27
Acrylonitrile	125	157	151	126	121	55.0-149			3.95	20
Benzene	25.0	26.6	26.1	106	104	70.0-123			1.87	20
Bromobenzene	25.0	24.8	24.9	99.3	99.6	73.0-121			0.281	20
Bromodichloromethane	25.0	27.0	26.8	108	107	75.0-120			1.08	20
Bromochloromethane	25.0	26.6	26.7	106	107	76.0-122			0.423	20
Bromoform	25.0	23.4	23.9	93.7	95.7	68.0-132			2.13	20
Bromomethane	25.0	30.8	27.9	123	112	10.0-160			9.91	25
n-Butylbenzene	25.0	27.4	27.9	110	112	73.0-125			1.67	20
sec-Butylbenzene	25.0	26.8	27.3	107	109	75.0-125			2.00	20
tert-Butylbenzene	25.0	25.8	26.6	103	106	76.0-124			3.11	20
Carbon tetrachloride	25.0	24.9	24.9	99.4	99.5	68.0-126			0.0917	20
Chlorobenzene	25.0	25.6	25.5	102	102	80.0-121			0.479	20
Chlorodibromomethane	25.0	25.5	25.4	102	102	77.0-125			0.500	20
Chloroethane	25.0	30.5	29.6	122	118	47.0-150			3.00	20
Chloroform	25.0	27.9	27.0	112	108	73.0-120			3.38	20
Chloromethane	25.0	27.8	27.5	111	110	41.0-142			1.26	20
2-Chlorotoluene	25.0	25.4	25.6	102	103	76.0-123			0.994	20
Vinyl acetate	125	138	125	110	100	11.0-160			9.62	20
4-Chlorotoluene	25.0	25.8	26.0	103	104	75.0-122			1.03	20
1,2-Dibromo-3-Chloropropane	25.0	24.0	24.7	96.0	98.7	58.0-134			2.79	20
1,2-Dibromoethane	25.0	26.6	26.1	106	104	80.0-122			1.91	20
Dibromomethane	25.0	27.9	27.8	112	111	80.0-120			0.394	20
1,2-Dichlorobenzene	25.0	25.5	26.2	102	105	79.0-121			2.57	20
1,3-Dichlorobenzene	25.0	25.7	25.5	103	102	79.0-120			0.729	20
1,4-Dichlorobenzene	25.0	25.7	25.4	103	101	79.0-120			1.31	20
Dichlorodifluoromethane	25.0	23.6	24.4	94.6	97.4	51.0-149			2.99	20
1,1-Dichloroethane	25.0	27.9	27.7	112	111	70.0-126			0.831	20
1,2-Dichloroethane	25.0	28.3	27.7	113	111	70.0-128			2.15	20
1,1-Dichloroethene	25.0	25.8	25.9	103	104	71.0-124			0.465	20
cis-1,2-Dichloroethene	25.0	28.2	27.8	113	111	73.0-120			1.51	20
trans-1,2-Dichloroethene	25.0	27.1	27.6	108	110	73.0-120			1.83	20
1,2-Dichloropropane	25.0	28.2	27.3	113	109	77.0-125			3.47	20
1,1-Dichloropropene	25.0	28.4	27.5	113	110	74.0-126			2.96	20
1,3-Dichloropropane	25.0	26.7	26.4	107	105	80.0-120			1.39	20
cis-1,3-Dichloropropene	25.0	26.5	26.2	106	105	80.0-123			1.13	20

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3378861-1 01/24/19 18:59 • (LCSD) R3378861-2 01/24/19 19:19

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
trans-1,3-Dichloropropene	25.0	26.8	26.6	107	107	78.0-124			0.645	20
2,2-Dichloropropene	25.0	27.3	27.3	109	109	58.0-130			0.124	20
Di-isopropyl ether	25.0	28.2	28.0	113	112	58.0-138			0.872	20
Ethylbenzene	25.0	26.2	26.2	105	105	79.0-123			0.0242	20
Hexachloro-1,3-butadiene	25.0	24.0	25.6	96.0	102	54.0-138			6.30	20
2-Hexanone	125	142	139	114	112	67.0-149			1.82	20
Isopropylbenzene	25.0	25.1	25.9	100	104	76.0-127			3.16	20
p-Isopropyltoluene	25.0	26.7	26.9	107	108	76.0-125			0.644	20
2-Butanone (MEK)	125	149	143	120	115	44.0-160			4.14	20
Methylene Chloride	25.0	26.8	26.7	107	107	67.0-120			0.124	20
4-Methyl-2-pentanone (MIBK)	125	140	138	112	110	68.0-142			1.92	20
Methyl tert-butyl ether	25.0	26.4	26.5	106	106	68.0-125			0.375	20
Naphthalene	25.0	22.4	24.9	89.8	99.7	54.0-135			10.4	20
n-Propylbenzene	25.0	25.5	25.9	102	104	77.0-124			1.57	20
Styrene	25.0	25.6	26.1	102	104	73.0-130			2.03	20
1,1,1,2-Tetrachloroethane	25.0	25.3	25.7	101	103	75.0-125			1.42	20
1,1,2,2-Tetrachloroethane	25.0	25.3	25.2	101	101	65.0-130			0.697	20
Toluene	25.0	25.3	25.1	101	101	79.0-120			0.615	20
1,1,2-Trichlorotrifluoroethane	25.0	25.8	25.3	103	101	69.0-132			1.65	20
1,2,3-Trichlorobenzene	25.0	22.9	24.9	91.8	99.5	50.0-138			8.12	20
1,2,4-Trichlorobenzene	25.0	24.4	25.5	97.7	102	57.0-137			4.42	20
1,1,1-Trichloroethane	25.0	27.4	27.4	109	109	73.0-124			0.0214	20
1,1,2-Trichloroethane	25.0	26.6	25.9	106	104	80.0-120			2.39	20
Trichloroethene	25.0	25.6	26.0	102	104	78.0-124			1.47	20
Trichlorofluoromethane	25.0	26.5	26.5	106	106	59.0-147			0.160	20
1,2,3-Trichloropropane	25.0	25.0	24.9	100	99.4	73.0-130			0.659	20
1,2,3-Trimethylbenzene	25.0	25.2	26.1	101	104	77.0-120			3.77	20
1,2,4-Trimethylbenzene	25.0	26.1	26.6	104	106	76.0-121			1.96	20
1,3,5-Trimethylbenzene	25.0	25.3	25.9	101	103	76.0-122			2.22	20
Vinyl chloride	25.0	27.9	28.1	112	112	67.0-131			0.529	20
Xylenes, Total	75.0	78.7	78.4	105	105	79.0-123			0.382	20
(S) Toluene-d8				100	99.1	80.0-120				
(S) Dibromofluoromethane				102	102	75.0-120				
(S) 4-Bromofluorobenzene				92.5	93.3	77.0-126				

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Method Blank (MB)

(MB) R3379557-4 01/27/19 12:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	105			80.0-120
(S) Dibromofluoromethane	94.1			75.0-120
(S) 4-Bromofluorobenzene	86.4			77.0-126

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3379557-1 01/27/19 11:18 • (LCSD) R3379557-2 01/27/19 11:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	25.8	25.7	103	103	73.0-120			0.361	20
Tetrachloroethene	25.0	28.1	29.8	112	119	72.0-132			5.82	20
Trichloroethene	25.0	27.6	27.8	110	111	78.0-124			0.679	20
(S) Toluene-d8				101	106	80.0-120				
(S) Dibromofluoromethane				97.4	98.9	75.0-120				
(S) 4-Bromofluorobenzene				82.3	86.2	77.0-126				

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1063697-08.09.10](#)

Method Blank (MB)

(MB) R3379928-3 01/29/19 18:56

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	90.7			80.0-120
(S) 4-Bromofluorobenzene	93.0			77.0-126
(S) 1,2-Dichloroethane-d4	91.7			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3379928-1 01/29/19 17:57 • (LCSD) R3379928-2 01/29/19 18:16

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
cis-1,2-Dichloroethene	25.0	26.9	27.1	107	108	73.0-120			0.815	20
Tetrachloroethene	25.0	25.5	26.2	102	105	72.0-132			2.89	20
Trichloroethene	25.0	26.4	27.0	105	108	78.0-124			2.28	20
(S) Toluene-d8				91.2	90.5	80.0-120				
(S) 4-Bromofluorobenzene				94.8	94.7	77.0-126				
(S) 1,2-Dichloroethane-d4				95.3	90.6	70.0-130				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier	Description
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B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J4	The associated batch QC was outside the established quality control range for accuracy.
O1	The analyte failed the method required serial dilution test and/or subsequent post-spike criteria. These failures indicate matrix interference.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T 104704245-17-14
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

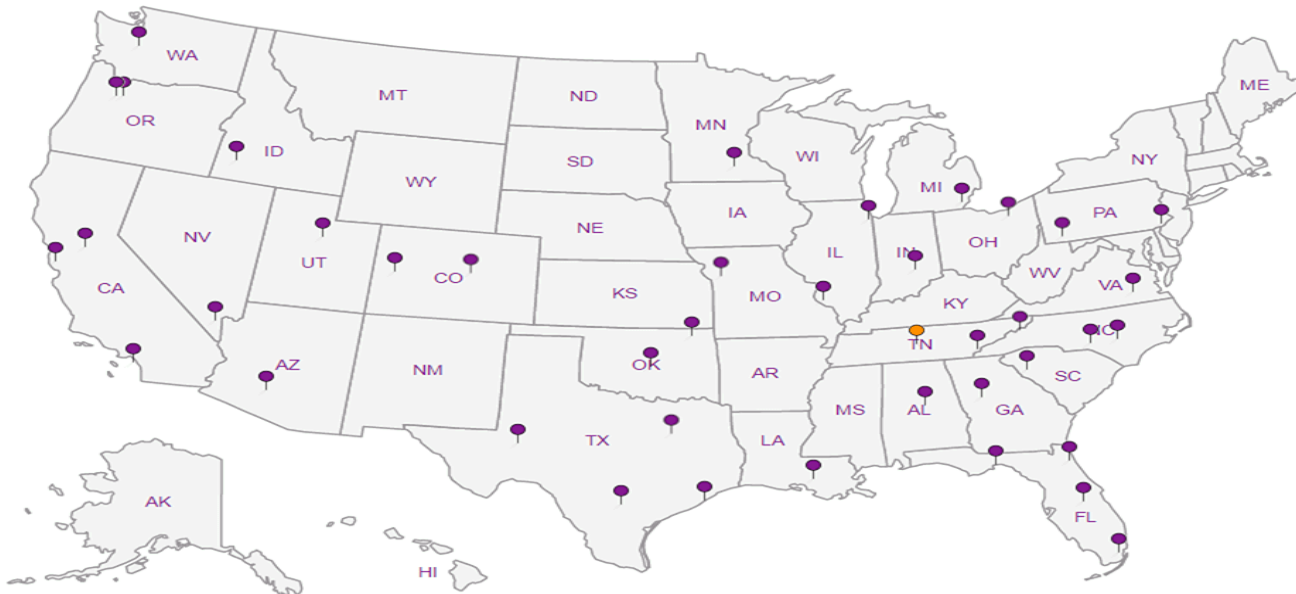
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: bonedal@pesenv.com;
bhaldeman@pesenv.com;

Project
Description: American Linen

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
Alexsa Witt

Site/Facility ID #
American Linen

P.O. #

Collected by (signature):
Alexsa Witt

Rush? (Lab MUST be notified)
Same Day Five Day
Next Day 5 Day (rad only)
Three Day 10 Day (rad only)

Quote #

Immediately Packed on ice N Y X

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of
MW109-012319	Grab	GW	40	1/23/19	1420	3
MW-148-012319		GW	75	1-23-19	1225	12
MW-105-012319		GW	135	1-23-19	1030	12
BB-8-012319		GW	35	1-23-19	1100	12
MW 111-012319		GW	75	1-23-19	1400	3
MW 103-012319		GW	107	1-23-19	1500	3
MW 110-012319		GW	40	1-23-19	1520	3
MW 905-012319		GW	40	1-23-19	1600	3
QR-012319		GW	-	1-23-19	1530	12
TRIP Blank-012319		GW	-	-	-	1

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of	*NO3,SO4,Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM (RSK175LL) 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	VOCs (8260LLC) 40mlAmb-HCl
MW109-012319	Grab	GW	40	1/23/19	1420	3	X	X	X	X	X	X	X
MW-148-012319		GW	75	1-23-19	1225	12	X	X	X	X	X	X	X
MW-105-012319		GW	135	1-23-19	1030	12	X	X	X	X	X	X	X
BB-8-012319		GW	35	1-23-19	1100	12	X	X	X	X	X	X	X
MW 111-012319		GW	75	1-23-19	1400	3	X	X	X	X	X	X	X
MW 103-012319		GW	107	1-23-19	1500	3	X	X	X	X	X	X	X
MW 110-012319		GW	40	1-23-19	1520	3	X	X	X	X	X	X	X
MW 905-012319		GW	40	1-23-19	1600	3	X	X	X	X	X	X	X
QR-012319		GW	-	1-23-19	1530	12	X	X	X	X	X	X	X
TRIP Blank-012319		GW	-	-	-	1	X	X	X	X	X	X	X

Remarks:

Samples returned via:
UPS FedEx Courier

pH _____ Temp _____
Flow _____ Other _____

SAMPLE RECEIPT CHECKLIST
COC Seal Present/Intact: NF
COC Stamped/Accurate: NF
Bottles arrive intact: NF
Correct bottle used: NF
Sufficient volume sent: NF
Vial zero headspace: NF
Preservation Dotted/Checked: NF
RAD SCREEN: <C> M/MPH

Relinquished by: (Signature)
Date: 1/23/19 Time: 17:00

Received by: (Signature)
Date: 1/24/19 Time: 8:45

Tracking # 4757 5076 6531
Trip Blank Received: (Yes/No) (HCL) Mech

Hold: _____ Condition: NCF / OK

Analysis / Container / Preservative
Chain of Custody Page ___ of ___

Pace Analytical
National Center for Testing & Inspection

1205 Webster Rd
Mount Airy, TN 37122
Phone: 615-758-5858
Phone: 800-397-5859
Fax: 615-758-5859

Accnum: PESENVSWA
Template: T1A3845
Pre Origin: P685358
TSR: 110 - Brian Ford
PB: 1211318 VV6
Shipped Via: FedEx Ground

L# L1669097
D231



ANALYTICAL REPORT

May 02, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

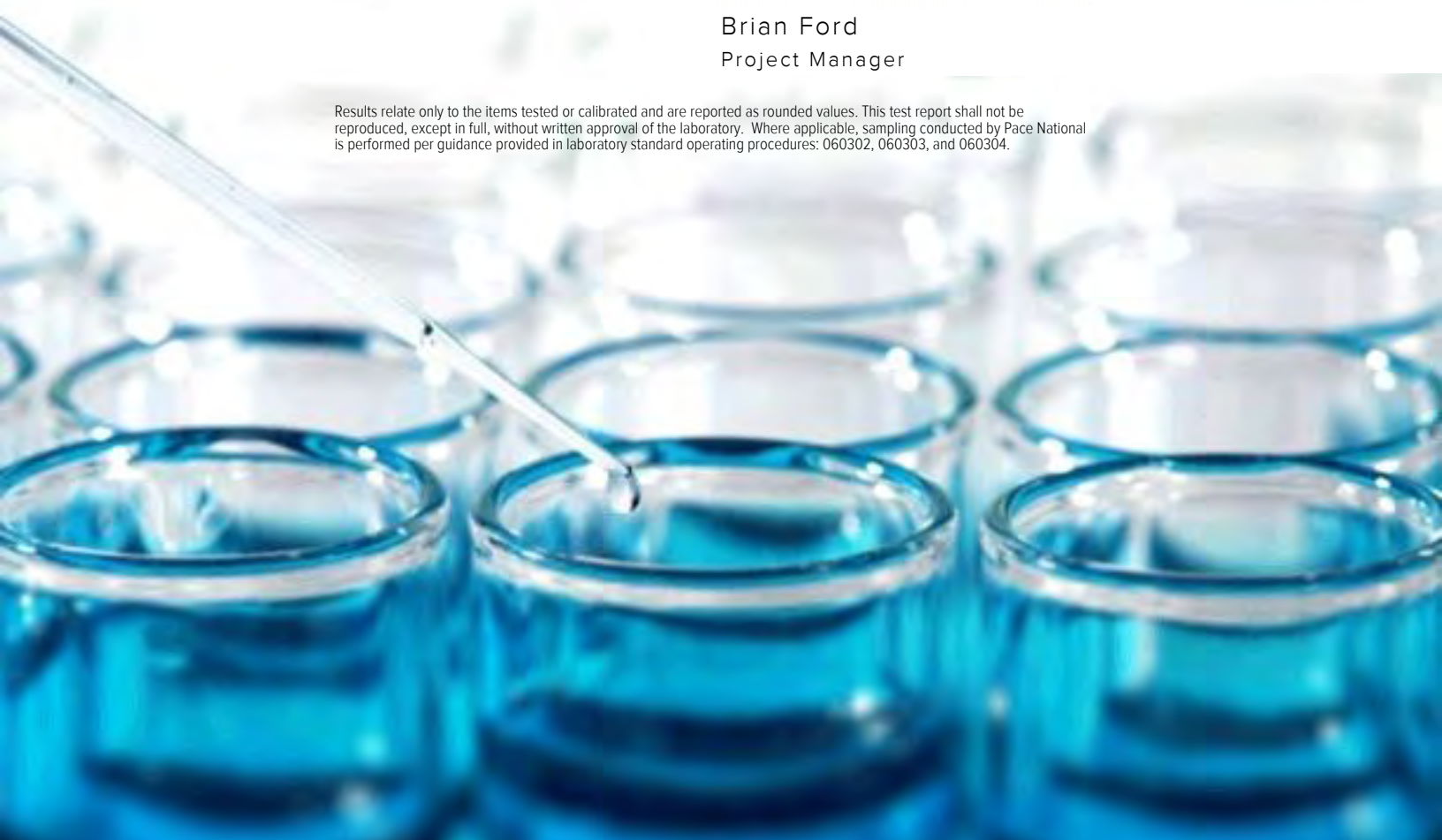
PES Environmental, Inc.- WA

Sample Delivery Group: L1091511
Samples Received: 04/23/2019
Project Number: 1413.001.05.601
Description: American Linen
Site: AMERICAN LINEN
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161










Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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MW-138-042219 L1091511-01 GW

Collected by Shannon McKernan
Collected date/time 04/22/19 10:30
Received date/time 04/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273424	1	04/29/19 16:02	04/29/19 16:02	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1270336	1	04/23/19 18:05	04/23/19 18:05	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1270623	1	04/23/19 22:50	04/23/19 22:50	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271163	10	04/25/19 08:19	05/01/19 19:39	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1270830	1	04/24/19 01:20	04/24/19 01:20	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271117	1	04/24/19 13:51	04/24/19 13:51	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 12:34	04/24/19 12:34	JCP	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

GEI-1-042219 L1091511-02 GW

Collected by Shannon McKernan
Collected date/time 04/22/19 10:40
Received date/time 04/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 12:54	04/24/19 12:54	JCP	Mt. Juliet, TN

GEI-2-042219 L1091511-03 GW

Collected by Shannon McKernan
Collected date/time 04/22/19 11:50
Received date/time 04/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 13:14	04/24/19 13:14	JCP	Mt. Juliet, TN

FMW-131-042219 L1091511-04 GW

Collected by Shannon McKernan
Collected date/time 04/22/19 12:55
Received date/time 04/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 13:34	04/24/19 13:34	JCP	Mt. Juliet, TN

MW112-042219 L1091511-05 GW

Collected by Shannon McKernan
Collected date/time 04/22/19 13:00
Received date/time 04/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273424	1	04/29/19 16:09	04/29/19 16:09	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1270336	1	04/23/19 18:20	04/23/19 18:20	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1270623	1	04/23/19 23:04	04/23/19 23:04	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271163	1	04/25/19 08:19	05/01/19 19:22	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271163	5	04/25/19 08:19	05/01/19 19:44	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1270830	1	04/24/19 01:44	04/24/19 01:44	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271117	1	04/24/19 13:53	04/24/19 13:53	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 13:54	04/24/19 13:54	JCP	Mt. Juliet, TN

TRIP BLANK-042219 L1091511-06 GW

Collected by Shannon McKernan
Collected date/time 04/22/19 00:00
Received date/time 04/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1270830	1	04/23/19 22:57	04/23/19 22:57	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 12:14	04/24/19 12:14	JCP	Mt. Juliet, TN



R-MW5-042219 L1091511-07 GW

Collected by Shannon McKernan
 Collected date/time 04/22/19 11:30
 Received date/time 04/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1270830	1	04/24/19 02:08	04/24/19 02:08	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 14:14	04/24/19 14:14	JCP	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	139000		2710	20000	1	04/29/2019 16:02	WG1273424

Sample Narrative:

L1091511-01 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14200		51.9	1000	1	04/23/2019 18:05	WG1270336
Nitrate	U		22.7	100	1	04/23/2019 18:05	WG1270336
Sulfate	42700		77.4	5000	1	04/23/2019 18:05	WG1270336

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5700		102	1000	1	04/23/2019 22:50	WG1270623

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	13200		150	1000	10	05/01/2019 19:39	WG1271163
Manganese	509		2.50	50.0	10	05/01/2019 19:39	WG1271163

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/24/2019 01:20	WG1270830
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		04/24/2019 01:20	WG1270830

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	164		0.287	0.678	1	04/24/2019 13:51	WG1271117
Ethane	U		0.296	1.29	1	04/24/2019 13:51	WG1271117
Ethene	1.43		0.422	1.27	1	04/24/2019 13:51	WG1271117

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.56	J JO	1.05	25.0	1	04/24/2019 12:34	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 12:34	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 12:34	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 12:34	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 12:34	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 12:34	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 12:34	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 12:34	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 12:34	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 12:34	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 12:34	WG1271083
Carbon disulfide	0.405	J	0.101	0.500	1	04/24/2019 12:34	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 12:34	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/22/19 10:30

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/24/2019 12:34	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 12:34	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 12:34	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 12:34	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 12:34	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 12:34	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 12:34	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 12:34	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 12:34	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 12:34	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 12:34	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 12:34	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 12:34	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 12:34	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 12:34	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 12:34	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 12:34	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 12:34	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 12:34	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 12:34	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 12:34	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 12:34	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 12:34	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 12:34	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 12:34	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 12:34	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 12:34	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 12:34	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 12:34	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 12:34	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 12:34	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 12:34	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 12:34	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 12:34	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 12:34	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 12:34	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 12:34	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 12:34	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 12:34	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 12:34	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 12:34	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 12:34	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 12:34	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 12:34	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 12:34	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 12:34	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 12:34	WG1271083
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/24/2019 12:34	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 12:34	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 12:34	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 12:34	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 12:34	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/22/19 10:30

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 12:34	WG1271083
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/24/2019 12:34	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 12:34	WG1271083
(S) Toluene-d8	101			80.0-120		04/24/2019 12:34	WG1271083
(S) 4-Bromofluorobenzene	106			77.0-126		04/24/2019 12:34	WG1271083
(S) 1,2-Dichloroethane-d4	91.9			70.0-130		04/24/2019 12:34	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.91	J JO	1.05	25.0	1	04/24/2019 12:54	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 12:54	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 12:54	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 12:54	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 12:54	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 12:54	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 12:54	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 12:54	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 12:54	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 12:54	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 12:54	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 12:54	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 12:54	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 12:54	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 12:54	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 12:54	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 12:54	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 12:54	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 12:54	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 12:54	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 12:54	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 12:54	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 12:54	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 12:54	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 12:54	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 12:54	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 12:54	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 12:54	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 12:54	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 12:54	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 12:54	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 12:54	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 12:54	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 12:54	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 12:54	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 12:54	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 12:54	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 12:54	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 12:54	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 12:54	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 12:54	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 12:54	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 12:54	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 12:54	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 12:54	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 12:54	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 12:54	WG1271083
Naphthalene	0.282	J	0.174	2.50	1	04/24/2019 12:54	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 12:54	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 12:54	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 12:54	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 12:54	WG1271083

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/22/19 10:40

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 12:54	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 12:54	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 12:54	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 12:54	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 12:54	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 12:54	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 12:54	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 12:54	WG1271083
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/24/2019 12:54	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 12:54	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 12:54	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 12:54	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 12:54	WG1271083
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 12:54	WG1271083
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/24/2019 12:54	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 12:54	WG1271083
(S) Toluene-d8	97.2			80.0-120		04/24/2019 12:54	WG1271083
(S) 4-Bromofluorobenzene	104			77.0-126		04/24/2019 12:54	WG1271083
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		04/24/2019 12:54	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/24/2019 13:14	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 13:14	WG1271083
Benzene	1.05		0.0896	0.500	1	04/24/2019 13:14	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 13:14	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 13:14	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 13:14	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 13:14	WG1271083
Bromomethane	U	<u>JO</u>	0.157	2.50	1	04/24/2019 13:14	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 13:14	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 13:14	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 13:14	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 13:14	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 13:14	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 13:14	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 13:14	WG1271083
Chloroethane	U	<u>JO</u>	0.141	2.50	1	04/24/2019 13:14	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 13:14	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 13:14	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 13:14	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 13:14	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 13:14	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 13:14	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 13:14	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 13:14	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 13:14	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 13:14	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 13:14	WG1271083
cis-1,2-Dichloroethene	11.5		0.0933	0.500	1	04/24/2019 13:14	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 13:14	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 13:14	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 13:14	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 13:14	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 13:14	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 13:14	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 13:14	WG1271083
Di-isopropyl ether	0.217	<u>J</u>	0.0924	0.500	1	04/24/2019 13:14	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 13:14	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 13:14	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 13:14	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 13:14	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 13:14	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 13:14	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 13:14	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 13:14	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 13:14	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 13:14	WG1271083
Methyl tert-butyl ether	0.154	<u>J</u>	0.102	0.500	1	04/24/2019 13:14	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 13:14	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 13:14	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 13:14	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 13:14	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 13:14	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/22/19 11:50

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 13:14	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 13:14	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 13:14	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 13:14	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 13:14	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 13:14	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 13:14	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 13:14	WG1271083
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/24/2019 13:14	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 13:14	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 13:14	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 13:14	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 13:14	WG1271083
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 13:14	WG1271083
Vinyl chloride	57.7	<u>JO</u>	0.118	0.500	1	04/24/2019 13:14	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 13:14	WG1271083
(S) Toluene-d8	99.6			80.0-120		04/24/2019 13:14	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 13:14	WG1271083
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		04/24/2019 13:14	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.80	J JO	1.05	25.0	1	04/24/2019 13:34	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 13:34	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 13:34	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 13:34	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 13:34	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 13:34	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 13:34	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 13:34	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 13:34	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 13:34	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 13:34	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 13:34	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 13:34	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 13:34	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 13:34	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 13:34	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 13:34	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 13:34	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 13:34	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 13:34	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 13:34	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 13:34	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 13:34	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 13:34	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 13:34	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 13:34	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 13:34	WG1271083
cis-1,2-Dichloroethene	10.8		0.0933	0.500	1	04/24/2019 13:34	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 13:34	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 13:34	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 13:34	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 13:34	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 13:34	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 13:34	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 13:34	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 13:34	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 13:34	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 13:34	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 13:34	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 13:34	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 13:34	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 13:34	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 13:34	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 13:34	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 13:34	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 13:34	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 13:34	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 13:34	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 13:34	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 13:34	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 13:34	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 13:34	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/22/19 12:55

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 13:34	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 13:34	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 13:34	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 13:34	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 13:34	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 13:34	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 13:34	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 13:34	WG1271083
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/24/2019 13:34	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 13:34	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 13:34	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 13:34	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 13:34	WG1271083
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 13:34	WG1271083
Vinyl chloride	0.195	<u>JJO</u>	0.118	0.500	1	04/24/2019 13:34	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 13:34	WG1271083
(S) Toluene-d8	99.2			80.0-120		04/24/2019 13:34	WG1271083
(S) 4-Bromofluorobenzene	104			77.0-126		04/24/2019 13:34	WG1271083
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		04/24/2019 13:34	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	82900		2710	20000	1	04/29/2019 16:09	WG1273424

Sample Narrative:

L1091511-05 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7090		51.9	1000	1	04/23/2019 18:20	WG1270336
Nitrate	U		22.7	100	1	04/23/2019 18:20	WG1270336
Sulfate	7650		77.4	5000	1	04/23/2019 18:20	WG1270336

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6040		102	1000	1	04/23/2019 23:04	WG1270623

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4900		75.0	500	5	05/01/2019 19:44	WG1271163
Manganese	177		0.250	5.00	1	05/01/2019 19:22	WG1271163

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/24/2019 01:44	WG1270830
(S) <i>a,a</i> -Trifluorotoluene(FID)	110			78.0-120		04/24/2019 01:44	WG1270830

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	281		0.287	0.678	1	04/24/2019 13:53	WG1271117
Ethane	1.12	J	0.296	1.29	1	04/24/2019 13:53	WG1271117
Ethene	1.13	J	0.422	1.27	1	04/24/2019 13:53	WG1271117

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.37	J JO	1.05	25.0	1	04/24/2019 13:54	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 13:54	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 13:54	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 13:54	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 13:54	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 13:54	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 13:54	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 13:54	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 13:54	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 13:54	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 13:54	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 13:54	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 13:54	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/22/19 13:00

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/24/2019 13:54	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 13:54	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 13:54	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 13:54	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 13:54	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 13:54	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 13:54	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 13:54	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 13:54	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 13:54	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 13:54	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 13:54	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 13:54	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 13:54	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 13:54	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 13:54	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 13:54	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 13:54	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 13:54	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 13:54	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 13:54	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 13:54	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 13:54	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 13:54	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 13:54	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 13:54	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 13:54	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 13:54	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 13:54	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 13:54	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 13:54	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 13:54	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 13:54	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 13:54	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 13:54	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 13:54	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 13:54	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 13:54	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 13:54	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 13:54	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 13:54	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 13:54	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 13:54	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 13:54	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 13:54	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 13:54	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 13:54	WG1271083
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/24/2019 13:54	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 13:54	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 13:54	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 13:54	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 13:54	WG1271083

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/22/19 13:00

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 13:54	WG1271083
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/24/2019 13:54	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 13:54	WG1271083
<i>(S) Toluene-d8</i>	99.6			80.0-120		04/24/2019 13:54	WG1271083
<i>(S) 4-Bromofluorobenzene</i>	105			77.0-126		04/24/2019 13:54	WG1271083
<i>(S) 1,2-Dichloroethane-d4</i>	95.4			70.0-130		04/24/2019 13:54	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/22/19 00:00

L1091511

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/23/2019 22:57	WG1270830
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/23/2019 22:57	WG1270830

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/24/2019 12:14	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 12:14	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 12:14	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 12:14	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 12:14	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 12:14	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 12:14	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 12:14	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 12:14	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 12:14	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 12:14	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 12:14	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 12:14	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 12:14	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 12:14	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 12:14	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 12:14	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 12:14	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 12:14	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 12:14	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 12:14	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 12:14	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 12:14	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 12:14	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 12:14	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 12:14	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 12:14	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 12:14	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 12:14	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 12:14	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 12:14	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 12:14	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 12:14	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 12:14	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 12:14	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 12:14	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 12:14	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 12:14	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 12:14	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 12:14	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 12:14	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 12:14	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 12:14	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 12:14	WG1271083

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/22/19 00:00

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/24/2019 12:14	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 12:14	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 12:14	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 12:14	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 12:14	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 12:14	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 12:14	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 12:14	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 12:14	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 12:14	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 12:14	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 12:14	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 12:14	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 12:14	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 12:14	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 12:14	WG1271083
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/24/2019 12:14	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 12:14	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 12:14	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 12:14	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 12:14	WG1271083
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 12:14	WG1271083
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/24/2019 12:14	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 12:14	WG1271083
(S) Toluene-d8	99.5			80.0-120		04/24/2019 12:14	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 12:14	WG1271083
(S) 1,2-Dichloroethane-d4	93.6			70.0-130		04/24/2019 12:14	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/22/19 11:30

L1091511

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/24/2019 02:08	WG1270830
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		04/24/2019 02:08	WG1270830

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/24/2019 14:14	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 14:14	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 14:14	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 14:14	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 14:14	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 14:14	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 14:14	WG1271083
Bromomethane	U	<u>JO</u>	0.157	2.50	1	04/24/2019 14:14	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 14:14	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 14:14	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 14:14	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 14:14	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 14:14	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 14:14	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 14:14	WG1271083
Chloroethane	U	<u>JO</u>	0.141	2.50	1	04/24/2019 14:14	WG1271083
Chloroform	1.28		0.0860	0.500	1	04/24/2019 14:14	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 14:14	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 14:14	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 14:14	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 14:14	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 14:14	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 14:14	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 14:14	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 14:14	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 14:14	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 14:14	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 14:14	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 14:14	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 14:14	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 14:14	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 14:14	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 14:14	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 14:14	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 14:14	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 14:14	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 14:14	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 14:14	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 14:14	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 14:14	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 14:14	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 14:14	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 14:14	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 14:14	WG1271083

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/22/19 11:30

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/24/2019 14:14	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 14:14	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 14:14	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 14:14	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 14:14	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 14:14	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 14:14	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 14:14	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 14:14	WG1271083
Tetrachloroethene	0.499	<u>U</u>	0.199	0.500	1	04/24/2019 14:14	WG1271083
Toluene	0.428	<u>U</u>	0.412	0.500	1	04/24/2019 14:14	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 14:14	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 14:14	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 14:14	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 14:14	WG1271083
Trichloroethene	0.155	<u>U</u>	0.153	0.500	1	04/24/2019 14:14	WG1271083
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/24/2019 14:14	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 14:14	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 14:14	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 14:14	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 14:14	WG1271083
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 14:14	WG1271083
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/24/2019 14:14	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 14:14	WG1271083
(S) Toluene-d8	99.5			80.0-120		04/24/2019 14:14	WG1271083
(S) 4-Bromofluorobenzene	104			77.0-126		04/24/2019 14:14	WG1271083
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		04/24/2019 14:14	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3406609-1 04/29/19 15:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	3140	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1091051-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1091051-02 04/29/19 15:25 • (DUP) R3406609-3 04/29/19 15:33

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	171000	172000	1	0.927		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1091709-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1091709-05 04/29/19 18:19 • (DUP) R3406609-6 04/29/19 18:26

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	1070000	1070000	1	0.269		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3406609-5 04/29/19 16:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	102000	102	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3404733-1 04/23/19 09:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1091072-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1091072-01 04/23/19 11:53 • (DUP) R3404733-3 04/23/19 12:07

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	3350	3360	1	0.307			15
Nitrate	ND	65.0	1	0.000			15
Sulfate	ND	347	1	0.000			15

L1091484-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1091484-01 04/23/19 17:20 • (DUP) R3404733-6 04/23/19 17:35

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	65900	65800	1	0.137			15
Nitrate	ND	0.000	1	0.000			15
Sulfate	29900	29900	1	0.0678			15

Laboratory Control Sample (LCS)

(LCS) R3404733-2 04/23/19 10:01

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40300	101	80.0-120	
Nitrate	8000	8280	103	80.0-120	
Sulfate	40000	41100	103	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1091072-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	3350	53400	53500	100	100	1	80.0-120			0.140	15
Nitrate	5000	ND	5070	5090	100	101	1	80.0-120			0.325	15
Sulfate	50000	ND	51000	51100	101	101	1	80.0-120			0.196	15

L1091484-01 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Chloride	50000	65900	114000	95.1	1	80.0-120	E
Nitrate	5000	ND	4970	99.4	1	80.0-120	
Sulfate	50000	29900	79300	98.8	1	80.0-120	

L1087661-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	40000	89700	89600	99.3	99.1	1	80.0-120			0.101	15
Nitrate	5000	U	4800	4800	96.0	95.9	1	80.0-120			0.100	15
Sulfate	50000	725000	733000	733000	15.7	16.1	1	80.0-120	E V	E V	0.0331	15

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- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3404780-1	04/23/19 18:14	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	258	<u>1</u>	102	1000	

L1091249-15 Original Sample (OS) • Duplicate (DUP)

(OS) L1091249-15	04/23/19 19:34	(DUP) R3404780-3	04/23/19 19:50		
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	ND	316	1	0.000	20

L1091616-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1091616-02	04/23/19 23:34	(DUP) R3404780-6	04/23/19 23:47		
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	814000	795000	20	2.37	20

Laboratory Control Sample (LCS)

(LCS) R3404780-2	04/23/19 18:46				
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>	
Analyte	ug/l	ug/l	%	%	
TOC	75000	75300	100	85.0-115	

L1091465-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1091465-01	04/23/19 22:07	(MS) R3404780-4	04/23/19 22:21	(MSD) R3404780-5	04/23/19 22:35
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	4090	51600	95.0	95.0
		Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>
		1	80.0-120	0.0388	20
				RPD	RPD Limits
				%	%

L1091616-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1091616-08	04/24/19 02:16	(MS) R3404780-7	04/24/19 02:30	(MSD) R3404780-8	04/24/19 02:44
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	5250	54800	99.1	98.1
		Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>
		1	80.0-120	0.954	20
				RPD	RPD Limits
				%	%

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3406868-1 05/01/19 00:18				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3406868-2 05/01/19 00:23 • (LCSD) R3406868-3 05/01/19 00:27									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	500	498	488	99.6	97.6	80.0-120	2.06		20	
Manganese	50.0	49.1	47.1	98.1	94.1	80.0-120	4.14		20	

L1090824-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1090824-02 05/01/19 00:32 • (MS) R3406868-5 05/01/19 00:41 • (MSD) R3406868-6 05/01/19 00:46											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	500	899	1380	1480	97.0	117	1	75.0-125			6.95	20
Manganese	50.0	164	207	211	86.9	94.4	1	75.0-125			1.80	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L1091511-01.05.06.07](#)

Method Blank (MB)

(MB) R3405465-2 04/23/19 22:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	U		316 ug/l	100 ug/l

^(S) <i>a,a</i> -Trifluorotoluene(FID)	111			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3405465-1 04/23/19 21:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Gasoline Range Organics-NWTPH	5500 ug/l	6170 ug/l	112 %	70.0-124 %	

^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	
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L1091183-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1091183-01 04/23/19 23:44 • (MS) R3405465-3 04/24/19 06:54 • (MSD) R3405465-4 04/24/19 07:18

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500 ug/l	U	6400 ug/l	5810 ug/l	116 %	106 %	1	10.0-155 %			9.60 %	21 %

^(S) <i>a,a</i> -Trifluorotoluene(FID)					103	102		78.0-120				
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Volatile Organic Compounds (GC) by Method RSK175

[L1091511-01.05](#)

Method Blank (MB)

(MB) R3404989-1 04/24/19 13:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1091477-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1091477-07 04/24/19 13:48 • (DUP) R3404989-2 04/24/19 15:25

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	7640	7300	10	4.64		20
Ethane	U	0.000	10	0.000		20
Ethene	U	0.000	10	0.000		20

L1091573-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1091573-05 04/24/19 13:57 • (DUP) R3404989-3 04/24/19 15:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	15100	15000	10	0.0720		20
Ethane	U	0.000	10	0.000		20
Ethene	U	0.000	10	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3404989-4 04/24/19 15:33 • (LCSD) R3404989-5 04/24/19 15:36

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	76.1	77.2	112	114	85.0-115			1.43	20
Ethane	129	119	121	92.2	93.6	85.0-115			1.54	20
Ethene	127	123	122	96.9	96.3	85.0-115			0.680	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

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Method Blank (MB)

(MB) R34057613 04/24/19 10:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
Carbon disulfide	U		0.101	0.500
sec-Butylbenzene	U		0.134	0.500
Carbon tetrachloride	U		0.159	0.500
tert-Butylbenzene	U		0.183	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R34057613 04/24/19 10:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Hexachloro-1,3-butadiene	0.275	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Isopropylbenzene	U		0.126	0.500
Styrene	U		0.117	0.500
1,1,2-Tetrachloroethane	U		0.120	0.500
p-Isopropyltoluene	U		0.138	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
Methyl tert-butyl ether	U		0.102	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Naphthalene	U		0.174	2.50
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
n-Propylbenzene	U		0.162	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	107			77.0-126
(S) 1,2-Dichloroethane-d4	91.2			70.0-130

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3405761-1 04/24/19 09:19 • (LCSD) R3405761-2 04/24/19 09:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	156	148	124	119	19.0-160			4.69	27
Acrylonitrile	125	150	158	120	126	55.0-149			4.93	20
Bromobenzene	25.0	23.2	23.5	92.9	94.2	73.0-121			1.38	20
Bromodichloromethane	25.0	22.3	22.2	89.3	89.0	75.0-120			0.350	20
Bromochloromethane	25.0	23.7	23.6	94.9	94.5	76.0-122			0.414	20
Bromoform	25.0	27.4	26.8	110	107	68.0-132			2.18	20
Bromomethane	25.0	17.9	17.6	71.5	70.3	10.0-160			1.67	25
Carbon disulfide	25.0	27.9	28.1	111	113	61.0-128			1.03	20
Carbon tetrachloride	25.0	23.3	23.4	93.1	93.6	68.0-126			0.508	20
Chlorobenzene	25.0	23.9	23.7	95.8	94.7	80.0-121			1.19	20
Chlorodibromomethane	25.0	24.3	23.9	97.1	95.6	77.0-125			1.64	20
Chloroethane	25.0	16.6	16.5	66.5	66.1	47.0-150			0.641	20
Chloroform	25.0	21.9	21.9	87.7	87.7	73.0-120			0.0865	20
Chloromethane	25.0	25.8	26.7	103	107	41.0-142			3.31	20
2-Chlorotoluene	25.0	22.1	23.1	88.3	92.4	76.0-123			4.55	20
4-Chlorotoluene	25.0	22.5	23.3	90.2	93.0	75.0-122			3.15	20
1,2-Dibromo-3-Chloropropane	25.0	26.5	28.6	106	114	58.0-134			7.78	20
1,2-Dibromoethane	25.0	23.7	23.5	94.9	94.0	80.0-122			1.05	20
Dibromomethane	25.0	22.8	22.7	91.2	90.7	80.0-120			0.460	20
1,2-Dichlorobenzene	25.0	23.0	23.4	91.9	93.7	79.0-121			1.90	20
1,3-Dichlorobenzene	25.0	22.6	23.1	90.4	92.5	79.0-120			2.30	20
1,4-Dichlorobenzene	25.0	22.0	22.0	88.0	87.9	79.0-120			0.0272	20
Dichlorodifluoromethane	25.0	25.9	25.8	104	103	51.0-149			0.138	20
1,1-Dichloroethane	25.0	24.4	24.7	97.4	98.8	70.0-126			1.36	20
1,2-Dichloroethane	25.0	20.9	21.0	83.4	83.9	70.0-128			0.549	20
1,1-Dichloroethene	25.0	24.6	24.4	98.3	97.6	71.0-124			0.735	20
cis-1,2-Dichloroethene	25.0	24.0	23.7	95.9	94.7	73.0-120			1.21	20
Benzene	25.0	25.9	25.8	104	103	70.0-123			0.330	20
trans-1,2-Dichloroethene	25.0	24.2	24.7	96.8	98.9	73.0-120			2.14	20
1,2-Dichloropropane	25.0	26.3	26.3	105	105	77.0-125			0.163	20
1,1-Dichloropropene	25.0	24.3	24.2	97.0	96.7	74.0-126			0.352	20
1,3-Dichloropropene	25.0	25.1	25.0	101	99.9	80.0-120			0.653	20
cis-1,3-Dichloropropene	25.0	23.5	23.1	93.8	92.5	80.0-123			1.45	20
trans-1,3-Dichloropropene	25.0	22.6	22.5	90.5	89.9	78.0-124			0.668	20
trans-1,4-Dichloro-2-butene	25.0	20.8	21.7	83.3	86.9	33.0-144			4.23	20
2,2-Dichloropropane	25.0	25.9	25.9	104	104	58.0-130			0.0126	20
n-Butylbenzene	25.0	21.5	21.8	85.9	87.4	73.0-125			1.72	20
Diisopropyl ether	25.0	27.9	28.3	111	113	58.0-138			1.53	20
sec-Butylbenzene	25.0	22.4	23.0	89.5	91.9	75.0-125			2.67	20
tert-Butylbenzene	25.0	23.1	24.1	92.3	96.5	76.0-124			4.41	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3405761-1 04/24/19 09:19 • (LCSD) R3405761-2 04/24/19 09:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hexachloro-1,3-butadiene	25.0	27.6	29.3	110	117	54.0-138			6.19	20
2-Hexanone	125	146	148	117	119	67.0-149			1.62	20
n-Hexane	25.0	26.0	24.9	104	99.4	57.0-133			4.59	20
Iodomethane	125	133	133	106	106	33.0-147			0.179	26
2-Butanone (MEK)	125	155	160	124	128	44.0-160			3.27	20
Methylene Chloride	25.0	24.5	25.0	98.1	100	67.0-120			2.09	20
4-Methyl-2-pentanone (MIBK)	125	143	145	115	116	68.0-142			1.19	20
Styrene	25.0	27.4	26.7	110	107	73.0-130			2.64	20
1,1,1,2-Tetrachloroethane	25.0	24.1	24.1	96.3	96.5	75.0-125			0.203	20
1,1,2,2-Tetrachloroethane	25.0	20.9	21.7	83.7	87.0	65.0-130			3.84	20
1,1,2-Trichlorotrifluoroethane	25.0	22.8	22.6	91.1	90.6	69.0-132			0.600	20
Tetrachloroethene	25.0	25.2	24.6	101	98.6	72.0-132			2.13	20
1,2,3-Trichlorobenzene	25.0	23.4	25.1	93.7	100	50.0-138			6.79	20
1,2,4-Trichlorobenzene	25.0	23.9	25.3	95.5	101	57.0-137			6.02	20
1,1,1-Trichloroethane	25.0	23.6	23.6	94.3	94.3	73.0-124			0.0116	20
1,1,2-Trichloroethane	25.0	23.1	22.9	92.6	91.4	80.0-120			1.26	20
Trichloroethene	25.0	26.1	25.9	104	104	78.0-124			0.572	20
Trichlorofluoromethane	25.0	16.0	15.8	64.0	63.3	59.0-147			1.09	20
1,2,3-Trichloropropane	25.0	20.6	21.9	82.6	87.4	73.0-130			5.66	20
1,2,3-Trimethylbenzene	25.0	21.6	22.1	86.6	88.6	77.0-120			2.31	20
Vinyl acetate	125	72.4	73.4	57.9	58.7	11.0-160			1.37	20
Vinyl chloride	25.0	18.3	18.2	73.2	72.7	67.0-131			0.636	20
Xylenes, Total	75.0	73.5	73.4	98.0	97.9	79.0-123			0.136	20
Ethylbenzene	25.0	24.2	24.2	96.8	96.9	79.0-123			0.119	20
Isopropylbenzene	25.0	25.4	25.3	102	101	76.0-127			0.180	20
p-Isopropyltoluene	25.0	22.5	23.2	90.1	92.7	76.0-125			2.85	20
Methyl tert-butyl ether	25.0	23.5	23.7	94.1	94.8	68.0-125			0.771	20
Naphthalene	25.0	23.2	24.8	92.7	99.1	54.0-135			6.76	20
n-Propylbenzene	25.0	22.1	22.4	88.4	89.7	77.0-124			1.48	20
Toluene	25.0	25.8	25.4	103	102	79.0-120			1.62	20
1,2,4-Trimethylbenzene	25.0	22.1	22.5	88.5	90.0	76.0-121			1.68	20
1,3,5-Trimethylbenzene	25.0	22.2	23.0	88.7	92.0	76.0-122			3.67	20
(S) Toluene-d8				101	100	80.0-120				
(S) 4-Bromofluorobenzene				107	106	77.0-126				
(S) 1,2-Dichloroethane-d4				92.9	91.6	70.0-130				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
JO	JO: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.

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Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

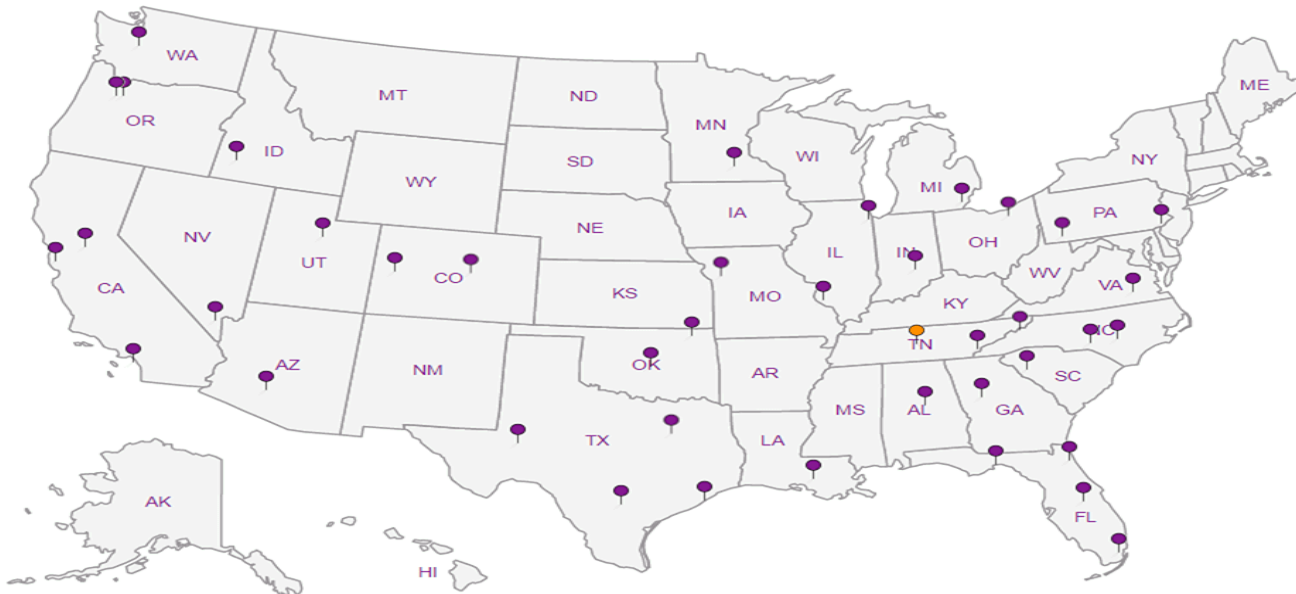
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



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PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
baldeman@pesenv.com;

Project:
Description: American Linen

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
SHANNON MCKERNAN

Site/Facility ID #
AMERICAN LINEN

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST be notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Quote #

Immediately Packed on Ice N Y K

Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
-----------	-----------	----------	-------	------	------	--------------

Analysis / Container / Preservative	Pres Chk
NWTPHGX 40ml Amb HCl	
VOCs (V8260LLC) 40ml Amb-HCl	
Alkalinity (2320 B-2011)	
Cl ⁻ , SO ₄ ²⁻ , NO ₃ ⁻ (9056A)	
TOC (9060A)	
IRON/MANGANESE (6020A)	
Methane/Ethane/Ethene (RSK175)	

Chain of Custody Page 1 of 1

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Accnum: PESENVSWA
Template: T146397
PrlogIn: P694557
TSR: 110 - Brian Ford
PB: 2/15/19 mc

Shipped Via: FedEx Ground

Remarks: Sample # (lab only)

L# L1091511
A047



Trace Analytical
National Center for Testing & Innovation

MW-138-042219	GRAB	GW	110	4/22/19	1030	12
GET-1-042219		GW	31		1040	6
R-MW5-042219		GW	24		1130	12
GET-2-042219		GW	55		1150	6
FMW-131-042219		GW	68		1255	6
MW112-042219		GW	80		1300	12
TRPBLANK-042219		GW		4/22/19		1
R-MW5-042219	GRAB	GW	24	4/22/19	1130	6

Remarks:

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
 UPS FedEx Courier

Relinquished by: (Signature)
[Signature]

Date: 4/22/19

Time: 1530

Received by: (Signature)
[Signature]

Temp: 17.6 °C Bottles Received: 48

Relinquished by: (Signature)
[Signature]

Date:

Time:

Received by: (Signature)

Temp: 4.4 + 1 = 4.5 °C Bottles Received: 48

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)
[Signature]

Date: 4-23-19 Time: 8:45

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: NP N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA zero Headspace: Y N
Preservation Correct/Checked: Y N
RAT: 5/19/19

If preservation required by LogIn: Date/Time

Hold:

Condition: NCF / OK



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	139000		2710	20000	1	04/29/2019 16:02	WG1273424

Sample Narrative:

L1091511-01 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14200		51.9	1000	1	04/23/2019 18:05	WG1270336
Nitrate	U		22.7	100	1	04/23/2019 18:05	WG1270336
Sulfate	42700		77.4	5000	1	04/23/2019 18:05	WG1270336

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5700		102	1000	1	04/23/2019 22:50	WG1270623

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	13200		150	1000	10	05/01/2019 19:39	WG1271163
Manganese	509		2.50	50.0	10	05/01/2019 19:39	WG1271163

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/24/2019 01:20	WG1270830
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		04/24/2019 01:20	WG1270830

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	164		0.287	0.678	1	04/24/2019 13:51	WG1271117
Ethane	U		0.296	1.29	1	04/24/2019 13:51	WG1271117
Ethene	1.43		0.422	1.27	1	04/24/2019 13:51	WG1271117

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch	
Acetone	2.56	J	J JO	1.05	25.0	1	04/24/2019 12:34	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 12:34	WG1271083	
Benzene	U		0.0896	0.500	1	04/24/2019 12:34	WG1271083	
Bromobenzene	U		0.133	0.500	1	04/24/2019 12:34	WG1271083	
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 12:34	WG1271083	
Bromochloromethane	U		0.145	0.500	1	04/24/2019 12:34	WG1271083	
Bromoform	U		0.186	0.500	1	04/24/2019 12:34	WG1271083	
Bromomethane	U	UJ	JO	0.157	2.50	1	04/24/2019 12:34	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 12:34	WG1271083	
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 12:34	WG1271083	
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 12:34	WG1271083	
Carbon disulfide	0.405	J	J	0.101	0.500	1	04/24/2019 12:34	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 12:34	WG1271083	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/22/19 10:30

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/24/2019 12:34	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 12:34	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 12:34	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 12:34	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 12:34	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 12:34	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 12:34	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 12:34	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 12:34	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 12:34	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 12:34	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 12:34	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 12:34	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 12:34	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 12:34	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 12:34	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 12:34	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 12:34	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 12:34	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 12:34	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 12:34	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 12:34	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 12:34	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 12:34	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 12:34	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 12:34	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 12:34	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 12:34	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 12:34	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 12:34	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 12:34	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 12:34	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 12:34	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 12:34	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 12:34	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 12:34	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 12:34	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 12:34	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 12:34	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 12:34	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 12:34	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 12:34	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 12:34	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 12:34	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 12:34	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 12:34	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 12:34	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 12:34	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 12:34	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 12:34	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 12:34	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 12:34	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 12:34	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 12:34	WG1271083
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/24/2019 12:34	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 12:34	WG1271083
(S) Toluene-d8	101			80.0-120		04/24/2019 12:34	WG1271083
(S) 4-Bromofluorobenzene	106			77.0-126		04/24/2019 12:34	WG1271083
(S) 1,2-Dichloroethane-d4	91.9			70.0-130		04/24/2019 12:34	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.91	J JO	1.05	25.0	1	04/24/2019 12:54	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 12:54	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 12:54	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 12:54	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 12:54	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 12:54	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 12:54	WG1271083
Bromomethane	U	UJ JO	0.157	2.50	1	04/24/2019 12:54	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 12:54	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 12:54	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 12:54	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 12:54	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 12:54	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 12:54	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 12:54	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 12:54	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 12:54	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 12:54	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 12:54	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 12:54	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 12:54	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 12:54	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 12:54	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 12:54	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 12:54	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 12:54	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 12:54	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 12:54	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 12:54	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 12:54	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 12:54	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 12:54	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 12:54	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 12:54	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 12:54	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 12:54	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 12:54	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 12:54	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 12:54	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 12:54	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 12:54	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 12:54	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 12:54	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 12:54	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 12:54	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 12:54	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 12:54	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 12:54	WG1271083
Naphthalene	0.282	J J	0.174	2.50	1	04/24/2019 12:54	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 12:54	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 12:54	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 12:54	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 12:54	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Collected date/time: 04/22/19 10:40

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 12:54	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 12:54	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 12:54	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 12:54	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 12:54	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 12:54	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 12:54	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 12:54	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 12:54	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 12:54	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 12:54	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 12:54	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 12:54	WG1271083
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 12:54	WG1271083
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/24/2019 12:54	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 12:54	WG1271083
(S) Toluene-d8	97.2			80.0-120		04/24/2019 12:54	WG1271083
(S) 4-Bromofluorobenzene	104			77.0-126		04/24/2019 12:54	WG1271083
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		04/24/2019 12:54	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/24/2019 13:14	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 13:14	WG1271083
Benzene	1.05		0.0896	0.500	1	04/24/2019 13:14	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 13:14	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 13:14	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 13:14	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 13:14	WG1271083
Bromomethane	U	UJ JO	0.157	2.50	1	04/24/2019 13:14	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 13:14	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 13:14	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 13:14	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 13:14	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 13:14	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 13:14	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 13:14	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 13:14	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 13:14	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 13:14	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 13:14	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 13:14	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 13:14	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 13:14	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 13:14	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 13:14	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 13:14	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 13:14	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 13:14	WG1271083
cis-1,2-Dichloroethene	11.5		0.0933	0.500	1	04/24/2019 13:14	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 13:14	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 13:14	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 13:14	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 13:14	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 13:14	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 13:14	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 13:14	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 13:14	WG1271083
Di-isopropyl ether	0.217	J J	0.0924	0.500	1	04/24/2019 13:14	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 13:14	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 13:14	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 13:14	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 13:14	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 13:14	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 13:14	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 13:14	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 13:14	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 13:14	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 13:14	WG1271083
Methyl tert-butyl ether	0.154	J J	0.102	0.500	1	04/24/2019 13:14	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 13:14	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 13:14	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 13:14	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 13:14	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 13:14	WG1271083

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

JC 5/7/19



Collected date/time: 04/22/19 11:50

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 13:14	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 13:14	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 13:14	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 13:14	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 13:14	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 13:14	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 13:14	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 13:14	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 13:14	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 13:14	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 13:14	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 13:14	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 13:14	WG1271083
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 13:14	WG1271083
Vinyl chloride	57.7	J JO	0.118	0.500	1	04/24/2019 13:14	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 13:14	WG1271083
(S) Toluene-d8	99.6			80.0-120		04/24/2019 13:14	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 13:14	WG1271083
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		04/24/2019 13:14	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.80	J JO	1.05	25.0	1	04/24/2019 13:34	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 13:34	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 13:34	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 13:34	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 13:34	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 13:34	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 13:34	WG1271083
Bromomethane	U	UJ JO	0.157	2.50	1	04/24/2019 13:34	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 13:34	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 13:34	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 13:34	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 13:34	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 13:34	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 13:34	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 13:34	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 13:34	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 13:34	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 13:34	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 13:34	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 13:34	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 13:34	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 13:34	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 13:34	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 13:34	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 13:34	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 13:34	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 13:34	WG1271083
cis-1,2-Dichloroethene	10.8		0.0933	0.500	1	04/24/2019 13:34	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 13:34	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 13:34	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 13:34	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 13:34	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 13:34	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 13:34	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 13:34	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 13:34	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 13:34	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 13:34	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 13:34	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 13:34	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 13:34	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 13:34	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 13:34	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 13:34	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 13:34	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 13:34	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 13:34	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 13:34	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 13:34	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 13:34	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 13:34	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 13:34	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 13:34	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Collected date/time: 04/22/19 12:55

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 13:34	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 13:34	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 13:34	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 13:34	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 13:34	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 13:34	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 13:34	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 13:34	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 13:34	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 13:34	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 13:34	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 13:34	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 13:34	WG1271083
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 13:34	WG1271083
Vinyl chloride	0.195	J JJJO	0.118	0.500	1	04/24/2019 13:34	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 13:34	WG1271083
(S) Toluene-d8	99.2			80.0-120		04/24/2019 13:34	WG1271083
(S) 4-Bromofluorobenzene	104			77.0-126		04/24/2019 13:34	WG1271083
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		04/24/2019 13:34	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	82900		2710	20000	1	04/29/2019 16:09	WG1273424

Sample Narrative:

L1091511-05 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	7090		51.9	1000	1	04/23/2019 18:20	WG1270336
Nitrate	U		22.7	100	1	04/23/2019 18:20	WG1270336
Sulfate	7650		77.4	5000	1	04/23/2019 18:20	WG1270336

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6040		102	1000	1	04/23/2019 23:04	WG1270623

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	4900		75.0	500	5	05/01/2019 19:44	WG1271163
Manganese	177		0.250	5.00	1	05/01/2019 19:22	WG1271163

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/24/2019 01:44	WG1270830
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		04/24/2019 01:44	WG1270830

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	281		0.287	0.678	1	04/24/2019 13:53	WG1271117
Ethane	1.12	J J	0.296	1.29	1	04/24/2019 13:53	WG1271117
Ethene	1.13	J J	0.422	1.27	1	04/24/2019 13:53	WG1271117

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.37	J J JO	1.05	25.0	1	04/24/2019 13:54	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 13:54	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 13:54	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 13:54	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 13:54	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 13:54	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 13:54	WG1271083
Bromomethane	U	UJ JO	0.157	2.50	1	04/24/2019 13:54	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 13:54	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 13:54	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 13:54	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 13:54	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 13:54	WG1271083

JC 5/7/19

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/22/19 13:00

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/24/2019 13:54	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 13:54	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 13:54	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 13:54	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 13:54	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 13:54	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 13:54	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 13:54	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 13:54	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 13:54	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 13:54	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 13:54	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 13:54	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 13:54	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 13:54	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 13:54	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 13:54	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 13:54	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 13:54	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 13:54	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 13:54	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 13:54	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 13:54	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 13:54	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 13:54	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 13:54	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 13:54	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 13:54	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 13:54	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 13:54	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 13:54	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 13:54	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 13:54	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 13:54	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 13:54	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 13:54	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 13:54	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 13:54	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 13:54	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 13:54	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 13:54	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 13:54	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 13:54	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 13:54	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 13:54	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 13:54	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 13:54	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 13:54	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 13:54	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 13:54	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 13:54	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 13:54	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 13:54	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Collected date/time: 04/22/19 13:00

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 13:54	WG1271083
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/24/2019 13:54	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 13:54	WG1271083
(S) Toluene-d8	99.6			80.0-120		04/24/2019 13:54	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 13:54	WG1271083
(S) 1,2-Dichloroethane-d4	95.4			70.0-130		04/24/2019 13:54	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Collected date/time: 04/22/19 00:00

L1091511

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/23/2019 22:57	WG1270830
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/23/2019 22:57	WG1270830

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/24/2019 12:14	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 12:14	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 12:14	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 12:14	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 12:14	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 12:14	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 12:14	WG1271083
Bromomethane	U	UJ JO	0.157	2.50	1	04/24/2019 12:14	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 12:14	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 12:14	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 12:14	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 12:14	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 12:14	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 12:14	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 12:14	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 12:14	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 12:14	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 12:14	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 12:14	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 12:14	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 12:14	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 12:14	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 12:14	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 12:14	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 12:14	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 12:14	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 12:14	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 12:14	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 12:14	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 12:14	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 12:14	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 12:14	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 12:14	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 12:14	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 12:14	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 12:14	WG1271083 JC 5/7/19
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 12:14	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 12:14	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 12:14	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 12:14	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 12:14	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 12:14	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 12:14	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 12:14	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 12:14	WG1271083



Collected date/time: 04/22/19 00:00

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/24/2019 12:14	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 12:14	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 12:14	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 12:14	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 12:14	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 12:14	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 12:14	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 12:14	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 12:14	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 12:14	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 12:14	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 12:14	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 12:14	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 12:14	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 12:14	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 12:14	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 12:14	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 12:14	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 12:14	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 12:14	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 12:14	WG1271083
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 12:14	WG1271083
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/24/2019 12:14	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 12:14	WG1271083
(S) Toluene-d8	99.5			80.0-120		04/24/2019 12:14	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 12:14	WG1271083
(S) 1,2-Dichloroethane-d4	93.6			70.0-130		04/24/2019 12:14	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/7/19



Collected date/time: 04/22/19 11:30

L1091511

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/24/2019 02:08	WG1270830
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		04/24/2019 02:08	WG1270830

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/24/2019 14:14	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 14:14	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 14:14	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 14:14	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 14:14	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 14:14	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 14:14	WG1271083
Bromomethane	U	UJ JO	0.157	2.50	1	04/24/2019 14:14	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 14:14	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 14:14	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 14:14	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 14:14	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 14:14	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 14:14	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 14:14	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 14:14	WG1271083
Chloroform	1.28		0.0860	0.500	1	04/24/2019 14:14	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 14:14	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 14:14	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 14:14	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 14:14	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 14:14	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 14:14	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 14:14	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 14:14	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 14:14	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 14:14	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 14:14	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 14:14	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 14:14	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 14:14	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 14:14	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 14:14	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 14:14	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 14:14	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 14:14	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 14:14	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 14:14	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 14:14	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 14:14	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 14:14	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 14:14	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 14:14	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 14:14	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 14:14	WG1271083

JC 5/7/19



Collected date/time: 04/22/19 11:30

L1091511

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/24/2019 14:14	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 14:14	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 14:14	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 14:14	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 14:14	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 14:14	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 14:14	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 14:14	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 14:14	WG1271083
Tetrachloroethene	0.499	J U	0.199	0.500	1	04/24/2019 14:14	WG1271083
Toluene	0.428	J U	0.412	0.500	1	04/24/2019 14:14	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 14:14	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 14:14	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 14:14	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 14:14	WG1271083
Trichloroethene	0.155	J U	0.153	0.500	1	04/24/2019 14:14	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 14:14	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 14:14	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 14:14	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 14:14	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 14:14	WG1271083
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 14:14	WG1271083
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/24/2019 14:14	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 14:14	WG1271083
(S) Toluene-d8	99.5			80.0-120		04/24/2019 14:14	WG1271083
(S) 4-Bromofluorobenzene	104			77.0-126		04/24/2019 14:14	WG1271083
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		04/24/2019 14:14	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/7/19



ANALYTICAL REPORT

May 08, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

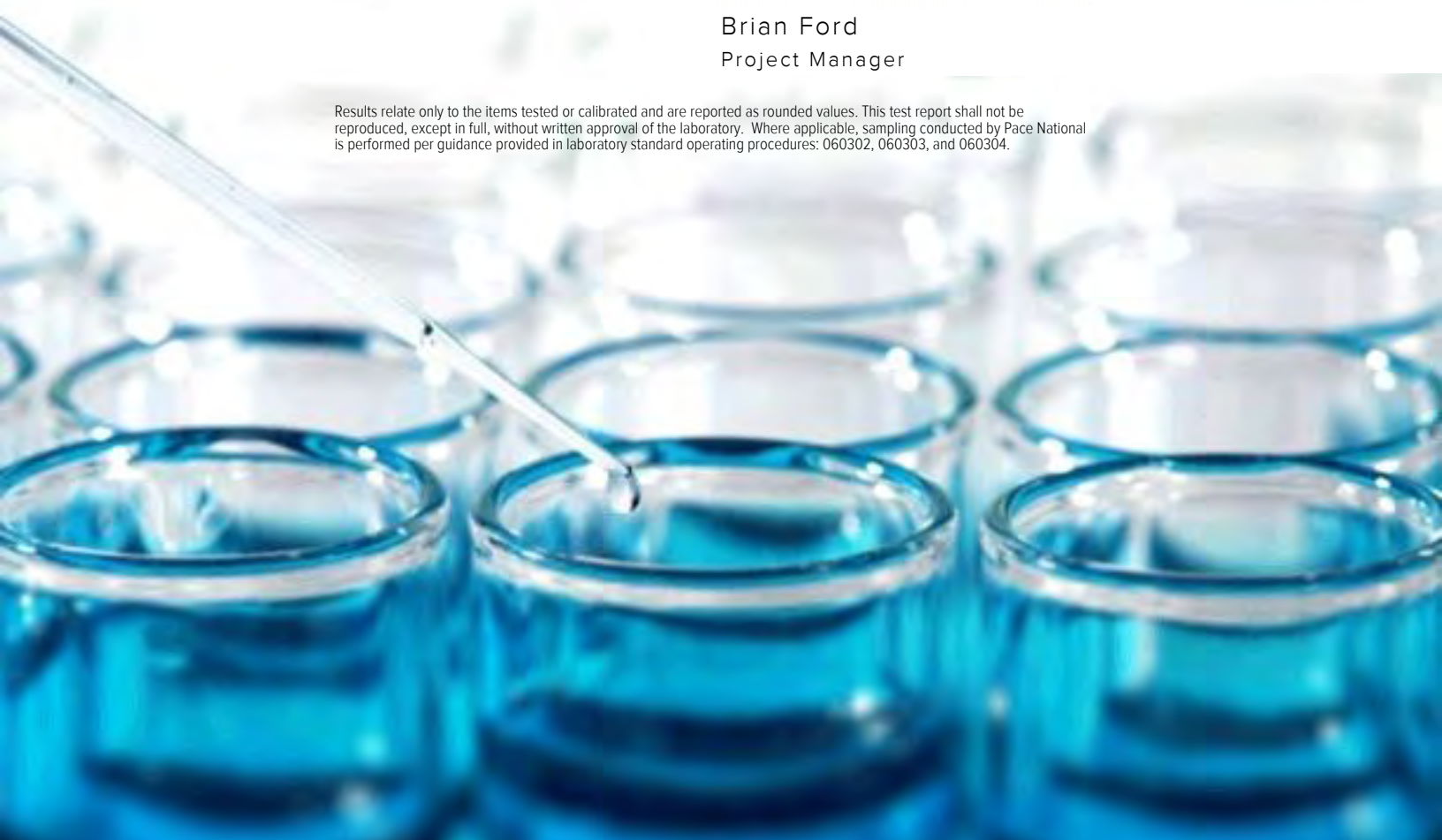
PES Environmental, Inc.- WA

Sample Delivery Group: L1091936
 Samples Received: 04/24/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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MW103-042219 L1091936-01 GW

Collected by KZ/BH
Collected date/time 04/22/19 15:05
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 16:48	04/25/19 16:48	BMB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW111-042219 L1091936-02 GW

Collected by KZ/BH
Collected date/time 04/22/19 15:05
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 17:08	04/25/19 17:08	BMB	Mt. Juliet, TN

4 Cn

5 Sr

MW104-042319 L1091936-03 GW

Collected by KZ/BH
Collected date/time 04/23/19 08:35
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273424	1	04/29/19 17:35	04/29/19 17:35	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271082	1	04/24/19 19:20	04/24/19 19:20	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1271094	1	04/24/19 22:37	04/24/19 22:37	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271169	5	04/26/19 14:47	05/07/19 00:32	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 14:32	04/25/19 14:32	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271298	1	04/26/19 13:42	04/26/19 13:42	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 18:16	04/24/19 18:16	JCP	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

MW105-042319 L1091936-04 GW

Collected by KZ/BH
Collected date/time 04/23/19 10:35
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273424	1	04/29/19 17:43	04/29/19 17:43	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271082	1	04/24/19 19:35	04/24/19 19:35	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1271094	1	04/24/19 23:17	04/24/19 23:17	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271169	5	04/26/19 14:47	05/07/19 00:37	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 14:56	04/25/19 14:56	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271298	1	04/26/19 13:45	04/26/19 13:45	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 18:36	04/24/19 18:36	JCP	Mt. Juliet, TN

MW147-042319 L1091936-05 GW

Collected by KZ/BH
Collected date/time 04/23/19 14:00
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273424	1	04/29/19 17:50	04/29/19 17:50	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271082	1	04/24/19 19:49	04/24/19 19:49	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1271094	1	04/24/19 23:34	04/24/19 23:34	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271169	5	04/26/19 14:47	05/07/19 00:43	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 15:20	04/25/19 15:20	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271298	1	04/26/19 13:49	04/26/19 13:49	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271298	10	04/26/19 14:59	04/26/19 14:59	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 18:56	04/24/19 18:56	JCP	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272362	10	04/26/19 12:43	04/26/19 12:43	ACG	Mt. Juliet, TN



TRIP BLANK-042319 L1091936-06 GW

Collected by: KZ/BH
 Collected date/time: 04/23/19 00:00
 Received date/time: 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 12:32	04/25/19 12:32	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271083	1	04/24/19 16:36	04/24/19 16:36	JCP	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.66	J J0 J3 J4	1.05	25.0	1	04/25/2019 16:48	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 16:48	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 16:48	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 16:48	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 16:48	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 16:48	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 16:48	WG1271705
Bromomethane	U	J0	0.157	2.50	1	04/25/2019 16:48	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 16:48	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 16:48	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 16:48	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 16:48	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 16:48	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 16:48	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 16:48	WG1271705
Chloroethane	U	J0	0.141	2.50	1	04/25/2019 16:48	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 16:48	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 16:48	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 16:48	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 16:48	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 16:48	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 16:48	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 16:48	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 16:48	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 16:48	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 16:48	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 16:48	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 16:48	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 16:48	WG1271705
1,1-Dichloroethene	1.22		0.188	0.500	1	04/25/2019 16:48	WG1271705
cis-1,2-Dichloroethene	88.0		0.0933	0.500	1	04/25/2019 16:48	WG1271705
trans-1,2-Dichloroethene	0.209	J	0.152	0.500	1	04/25/2019 16:48	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 16:48	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 16:48	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 16:48	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 16:48	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 16:48	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 16:48	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 16:48	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 16:48	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 16:48	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 16:48	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 16:48	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 16:48	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 16:48	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 16:48	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 16:48	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 16:48	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 16:48	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 16:48	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 16:48	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 16:48	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 16:48	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 16:48	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 16:48	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 16:48	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/22/19 15:05

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 16:48	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 16:48	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 16:48	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 16:48	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 16:48	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 16:48	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 16:48	WG1271705
Trichloroethene	3.09		0.153	0.500	1	04/25/2019 16:48	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 16:48	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 16:48	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 16:48	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 16:48	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 16:48	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 16:48	WG1271705
Vinyl chloride	32.3	<u>JO</u>	0.118	0.500	1	04/25/2019 16:48	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 16:48	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 16:48	WG1271705
(S) 4-Bromofluorobenzene	105			77.0-126		04/25/2019 16:48	WG1271705
(S) 1,2-Dichloroethane-d4	91.6			70.0-130		04/25/2019 16:48	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.17	J J0 J3 J4	1.05	25.0	1	04/25/2019 17:08	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 17:08	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 17:08	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 17:08	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 17:08	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 17:08	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 17:08	WG1271705
Bromomethane	U	J0	0.157	2.50	1	04/25/2019 17:08	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 17:08	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 17:08	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 17:08	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 17:08	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 17:08	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 17:08	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 17:08	WG1271705
Chloroethane	0.255	J J0	0.141	2.50	1	04/25/2019 17:08	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 17:08	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 17:08	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 17:08	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 17:08	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 17:08	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 17:08	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 17:08	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 17:08	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 17:08	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 17:08	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 17:08	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 17:08	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 17:08	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 17:08	WG1271705
cis-1,2-Dichloroethene	3.18		0.0933	0.500	1	04/25/2019 17:08	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 17:08	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 17:08	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 17:08	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 17:08	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 17:08	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 17:08	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 17:08	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 17:08	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 17:08	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 17:08	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 17:08	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 17:08	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 17:08	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 17:08	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 17:08	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 17:08	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 17:08	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 17:08	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 17:08	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 17:08	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 17:08	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 17:08	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 17:08	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 17:08	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 17:08	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/22/19 15:05

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 17:08	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 17:08	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 17:08	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 17:08	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 17:08	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 17:08	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 17:08	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 17:08	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 17:08	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 17:08	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 17:08	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 17:08	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 17:08	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 17:08	WG1271705
Vinyl chloride	19.5	<u>JO</u>	0.118	0.500	1	04/25/2019 17:08	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 17:08	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 17:08	WG1271705
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 17:08	WG1271705
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		04/25/2019 17:08	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	196000		2710	20000	1	04/29/2019 17:35	WG1273424

Sample Narrative:

L1091936-03 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	18600		51.9	1000	1	04/24/2019 19:20	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 19:20	WG1271082
Sulfate	5960		77.4	5000	1	04/24/2019 19:20	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5970		102	1000	1	04/24/2019 22:37	WG1271094

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5030		75.0	500	5	05/07/2019 00:32	WG1271169
Manganese	285		1.25	25.0	5	05/07/2019 00:32	WG1271169

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	174		31.6	100	1	04/25/2019 14:32	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 14:32	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	437		0.287	0.678	1	04/26/2019 13:42	WG1271298
Ethane	2.60		0.296	1.29	1	04/26/2019 13:42	WG1271298
Ethene	17.7		0.422	1.27	1	04/26/2019 13:42	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	23.4	J JO	1.05	25.0	1	04/24/2019 18:16	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 18:16	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 18:16	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 18:16	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 18:16	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 18:16	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 18:16	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 18:16	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 18:16	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 18:16	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 18:16	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 18:16	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 18:16	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 08:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/24/2019 18:16	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 18:16	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 18:16	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 18:16	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 18:16	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 18:16	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 18:16	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 18:16	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 18:16	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 18:16	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 18:16	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 18:16	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 18:16	WG1271083
1,1-Dichloroethene	5.86		0.188	0.500	1	04/24/2019 18:16	WG1271083
cis-1,2-Dichloroethene	162		0.0933	0.500	1	04/24/2019 18:16	WG1271083
trans-1,2-Dichloroethene	2.49		0.152	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 18:16	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 18:16	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 18:16	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 18:16	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 18:16	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 18:16	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 18:16	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 18:16	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 18:16	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 18:16	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 18:16	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 18:16	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 18:16	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 18:16	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 18:16	WG1271083
2-Butanone (MEK)	4.72	J	1.28	5.00	1	04/24/2019 18:16	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 18:16	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 18:16	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 18:16	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 18:16	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 18:16	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 18:16	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 18:16	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 18:16	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 18:16	WG1271083
Tetrachloroethene	15.9		0.199	0.500	1	04/24/2019 18:16	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 18:16	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 18:16	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 18:16	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 18:16	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 18:16	WG1271083
Trichloroethene	56.9		0.153	0.500	1	04/24/2019 18:16	WG1271083
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/24/2019 18:16	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 18:16	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 18:16	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 18:16	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 18:16	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 08:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 18:16	WG1271083
Vinyl chloride	21.1	<u>JO</u>	0.118	0.500	1	04/24/2019 18:16	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 18:16	WG1271083
<i>(S) Toluene-d8</i>	100			80.0-120		04/24/2019 18:16	WG1271083
<i>(S) 4-Bromofluorobenzene</i>	106			77.0-126		04/24/2019 18:16	WG1271083
<i>(S) 1,2-Dichloroethane-d4</i>	92.0			70.0-130		04/24/2019 18:16	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 10:35

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	275000		2710	20000	1	04/29/2019 17:43	WG1273424

Sample Narrative:

L1091936-04 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	37900		51.9	1000	1	04/24/2019 19:35	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 19:35	WG1271082
Sulfate	5810		77.4	5000	1	04/24/2019 19:35	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4060		102	1000	1	04/24/2019 23:17	WG1271094

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5270		75.0	500	5	05/07/2019 00:37	WG1271169
Manganese	893		1.25	25.0	5	05/07/2019 00:37	WG1271169

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 14:56	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 14:56	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1660		0.287	0.678	1	04/26/2019 13:45	WG1271298
Ethane	U		0.296	1.29	1	04/26/2019 13:45	WG1271298
Ethene	U		0.422	1.27	1	04/26/2019 13:45	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.22	J JO	1.05	25.0	1	04/24/2019 18:36	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 18:36	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 18:36	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 18:36	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 18:36	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 18:36	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 18:36	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 18:36	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 18:36	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 18:36	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 18:36	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 18:36	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 18:36	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 10:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/24/2019 18:36	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 18:36	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 18:36	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 18:36	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 18:36	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 18:36	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 18:36	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 18:36	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 18:36	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 18:36	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 18:36	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 18:36	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 18:36	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 18:36	WG1271083
cis-1,2-Dichloroethene	0.917		0.0933	0.500	1	04/24/2019 18:36	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 18:36	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 18:36	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 18:36	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 18:36	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 18:36	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 18:36	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 18:36	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 18:36	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 18:36	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 18:36	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 18:36	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 18:36	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 18:36	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 18:36	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 18:36	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 18:36	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 18:36	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 18:36	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 18:36	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 18:36	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 18:36	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 18:36	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 18:36	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 18:36	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 18:36	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 18:36	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 18:36	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 18:36	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 18:36	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 18:36	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 18:36	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 18:36	WG1271083
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/24/2019 18:36	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 18:36	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 18:36	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 18:36	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 18:36	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 10:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 18:36	WG1271083
Vinyl chloride	0.238	<u>JJO</u>	0.118	0.500	1	04/24/2019 18:36	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 18:36	WG1271083
<i>(S) Toluene-d8</i>	101			80.0-120		04/24/2019 18:36	WG1271083
<i>(S) 4-Bromofluorobenzene</i>	105			77.0-126		04/24/2019 18:36	WG1271083
<i>(S) 1,2-Dichloroethane-d4</i>	93.1			70.0-130		04/24/2019 18:36	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	346000		2710	20000	1	04/29/2019 17:50	WG1273424

Sample Narrative:

L1091936-05 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	26900		51.9	1000	1	04/24/2019 19:49	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 19:49	WG1271082
Sulfate	28100		77.4	5000	1	04/24/2019 19:49	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	13700		102	1000	1	04/24/2019 23:34	WG1271094

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4390		75.0	500	5	05/07/2019 00:43	WG1271169
Manganese	787		1.25	25.0	5	05/07/2019 00:43	WG1271169

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	139		31.6	100	1	04/25/2019 15:20	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 15:20	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	8110		2.87	6.78	10	04/26/2019 14:59	WG1271298
Ethane	U		0.296	1.29	1	04/26/2019 13:49	WG1271298
Ethene	158		0.422	1.27	1	04/26/2019 13:49	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.91	J JO	1.05	25.0	1	04/24/2019 18:56	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 18:56	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 18:56	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 18:56	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 18:56	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 18:56	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 18:56	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 18:56	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 18:56	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 18:56	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 18:56	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 18:56	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 18:56	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 14:00

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/24/2019 18:56	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 18:56	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 18:56	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 18:56	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 18:56	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 18:56	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 18:56	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 18:56	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 18:56	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 18:56	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 18:56	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 18:56	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 18:56	WG1271083
1,1-Dichloroethene	1.75		0.188	0.500	1	04/24/2019 18:56	WG1271083
cis-1,2-Dichloroethene	322		0.933	5.00	10	04/26/2019 12:43	WG1272362
trans-1,2-Dichloroethene	1.47		0.152	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 18:56	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 18:56	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 18:56	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 18:56	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 18:56	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 18:56	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 18:56	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 18:56	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 18:56	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 18:56	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 18:56	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 18:56	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 18:56	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 18:56	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 18:56	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 18:56	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 18:56	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 18:56	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 18:56	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 18:56	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 18:56	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 18:56	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 18:56	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 18:56	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 18:56	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 18:56	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 18:56	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 18:56	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 18:56	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 18:56	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 18:56	WG1271083
Trichloroethene	5.13		0.153	0.500	1	04/24/2019 18:56	WG1271083
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/24/2019 18:56	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 18:56	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 18:56	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 18:56	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 18:56	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 14:00

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 18:56	WG1271083
Vinyl chloride	499		1.18	5.00	10	04/26/2019 12:43	WG1272362
Xylenes, Total	U	<u>JO</u>	0.316	1.50	1	04/24/2019 18:56	WG1271083
<i>(S) Toluene-d8</i>	100			80.0-120		04/24/2019 18:56	WG1271083
<i>(S) Toluene-d8</i>	98.8			80.0-120		04/26/2019 12:43	WG1272362
<i>(S) 4-Bromofluorobenzene</i>	105			77.0-126		04/24/2019 18:56	WG1271083
<i>(S) 4-Bromofluorobenzene</i>	99.9			77.0-126		04/26/2019 12:43	WG1272362
<i>(S) 1,2-Dichloroethane-d4</i>	94.2			70.0-130		04/24/2019 18:56	WG1271083
<i>(S) 1,2-Dichloroethane-d4</i>	89.2			70.0-130		04/26/2019 12:43	WG1272362

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 00:00

L1091936

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 12:32	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	112			78.0-120		04/25/2019 12:32	WG1271515

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/24/2019 16:36	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 16:36	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 16:36	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 16:36	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 16:36	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 16:36	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 16:36	WG1271083
Bromomethane	U	JO	0.157	2.50	1	04/24/2019 16:36	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 16:36	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 16:36	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 16:36	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 16:36	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 16:36	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 16:36	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 16:36	WG1271083
Chloroethane	U	JO	0.141	2.50	1	04/24/2019 16:36	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 16:36	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 16:36	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 16:36	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 16:36	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 16:36	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 16:36	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 16:36	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 16:36	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 16:36	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 16:36	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 16:36	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 16:36	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 16:36	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 16:36	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 16:36	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 16:36	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 16:36	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 16:36	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 16:36	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 16:36	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 16:36	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 16:36	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 16:36	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 16:36	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 16:36	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 16:36	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 16:36	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 16:36	WG1271083



Collected date/time: 04/23/19 00:00

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/24/2019 16:36	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 16:36	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 16:36	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 16:36	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 16:36	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 16:36	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 16:36	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 16:36	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 16:36	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 16:36	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 16:36	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 16:36	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 16:36	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 16:36	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 16:36	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 16:36	WG1271083
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/24/2019 16:36	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 16:36	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 16:36	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 16:36	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 16:36	WG1271083
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	04/24/2019 16:36	WG1271083
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/24/2019 16:36	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 16:36	WG1271083
(S) Toluene-d8	100			80.0-120		04/24/2019 16:36	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 16:36	WG1271083
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		04/24/2019 16:36	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3406609-1	04/29/19 15:19						
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL				
Analyte	ug/l	ug/l	ug/l				
Alkalinity	3140	<u>J</u>	2710	20000			

Sample Narrative:
BLANK: Endpoint pH 4.5

L1091051-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1091051-02	04/29/19 15:25 • (DUP) R3406609-3	04/29/19 15:33					
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD	DUP RPD	DUP RPD
Analyte	ug/l	ug/l	%	%	%	%	Limits
Alkalinity	171000	172000	1	0.927			20

Sample Narrative:
OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

L1091709-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1091709-05	04/29/19 18:19 • (DUP) R3406609-6	04/29/19 18:26					
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD	DUP RPD	DUP RPD
Analyte	ug/l	ug/l	%	%	%	%	Limits
Alkalinity	1070000	1070000	1	0.269			20

Sample Narrative:
OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3406609-5	04/29/19 16:32						
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>			
Analyte	ug/l	ug/l	%	%			
Alkalinity	100000	102000	102	85.0-115			

Sample Narrative:
LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3405147-1 04/24/19 16:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	26.3	J	22.7	100
Sulfate	U		77.4	5000

L1091917-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1091917-03 04/24/19 18:23 • (DUP) R3405147-3 04/24/19 18:37

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	8410	8430	1	0.285			15
Nitrate	893	900	1	0.714			15
Sulfate	7530	7540	1	0.0770			15

L1091941-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1091941-04 04/24/19 21:44 • (DUP) R3405147-6 04/24/19 21:59

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	U	0.000	1	0.000			15
Nitrate	U	0.000	1	0.000			15
Sulfate	U	0.000	1	0.000			15

Laboratory Control Sample (LCS)

(LCS) R3405147-2 04/24/19 17:12

Analyte	Spike Amount		LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	ug/l		%	%	
Chloride	40000	40200	101	80.0-120		
Nitrate	8000	8290	104	80.0-120		
Sulfate	40000	41100	103	80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1091917-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	8410	58800	58300	101	99.7	1	80.0-120	1		0.943	15
Nitrate	5000	893	5880	5830	99.6	98.7	1	80.0-120	1		0.777	15
Sulfate	50000	7530	57300	56700	99.5	98.4	1	80.0-120	1		0.931	15

L1091941-04 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	U	50700	101	1	80.0-120	
Nitrate	5000	U	5050	101	1	80.0-120	
Sulfate	50000	U	50400	101	1	80.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3405168-1	04/24/19 13:38	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	229	<u>1</u>		102	1000

L1091876-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1091876-03	04/24/19 18:04 • (DUP) R3405168-5	04/24/19 18:24	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l		ug/l	ug/l	%	%		%
TOC (Total Organic Carbon)	9410	7860	1	18.1		20		

L1091936-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1091936-03	04/24/19 22:37 • (DUP) R3405168-8	04/24/19 22:56	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l		ug/l	ug/l	%	%		%
TOC (Total Organic Carbon)	5970	5780	1	3.10		20		

Laboratory Control Sample (LCS)

(LCS) R3405168-2	04/24/19 14:14	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	ug/l	%	%	
TOC (Total Organic Carbon)	75000	76900	102	85.0-115		

L1091790-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1091790-03	04/24/19 15:28 • (MS) R3405168-3	04/24/19 15:44 • (MSD) R3405168-4	04/24/19 16:00	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%			%	%
TOC (Total Organic Carbon)	50000	1580	49600	49500	96.0	95.8	1	80.0-120		1	80.0-120			0.202	20

L1091908-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1091908-04	04/24/19 19:56 • (MS) R3405168-6	04/24/19 20:12 • (MSD) R3405168-7	04/24/19 20:27	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%			%	%
TOC (Total Organic Carbon)	50000	1230	52000	52500	101	102	1	80.0-120		1	80.0-120			0.919	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
(MB) R3408542-1 05/06/19 10:56				
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
(LCS) R3408542-2 05/06/19 11:00 • (LCSD) R3408542-3 05/06/19 11:05										
Iron	500	492	486	98.4	97.2	80.0-120			1.22	20
Manganese	50.0	48.2	49.8	96.4	99.5	80.0-120			3.23	20

L1091790-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
(OS) L1091790-01 05/06/19 11:09 • (MS) R3408542-5 05/06/19 11:18 • (MSD) R3408542-6 05/06/19 11:23												
Iron	500	ND	544	548	96.5	97.4	1	75.0-125			0.780	20
Manganese	50.0	5.40	55.3	54.8	99.9	98.7	1	75.0-125			1.07	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L1091936-03.04.05.06](#)

Method Blank (MB)

(MB) R3405596-2 04/25/19 09:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>o,a</i> -Trifluorotoluene(FID)	111			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3405596-1 04/25/19 08:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5310	96.5	70.0-124	
^(S) <i>o,a</i> -Trifluorotoluene(FID)			103	78.0-120	

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2 Tc
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Volatile Organic Compounds (GC) by Method RSK175

[L1091936-03.04.05](#)

Method Blank (MB)

(MB) R3405886-1 04/26/19 13:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1091915-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1091915-02 04/26/19 13:40 • (DUP) R3405886-2 04/26/19 14:13

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	248	245	1	1.48			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

L1091952-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1091952-01 04/26/19 14:46 • (DUP) R3405886-3 04/26/19 15:02

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	ND	0.000	1	0.000			20
Ethane	ND	0.000	1	0.000			20
Ethene	ND	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3405886-4 04/26/19 15:04 • (LCSD) R3405886-5 04/26/19 15:10

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	
Methane	67.8	75.7	75.7	76.9	112	113					85.0-115			1.59		20				
Ethane	129	121	121	119	93.4	92.5					85.0-115			0.991		20				
Ethene	127	120	120	121	94.1	95.5					85.0-115			1.51		20				

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Method Blank (MB)

(MB) R34057613 04/24/19 10:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
Carbon disulfide	U		0.101	0.500
sec-Butylbenzene	U		0.134	0.500
Carbon tetrachloride	U		0.159	0.500
tert-Butylbenzene	U		0.183	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
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Method Blank (MB)

(MB) R34057613 04/24/19 10:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Hexachloro-1,3-butadiene	0.275	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Isopropylbenzene	U		0.126	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
p-Isopropyltoluene	U		0.138	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	U		0.199	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
Methyl tert-butyl ether	U		0.102	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Naphthalene	U		0.174	2.50
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
n-Propylbenzene	U		0.162	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Toluene	U		0.412	0.500
Xylenes, Total	U		0.316	1.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	107			77.0-126
(S) 1,2-Dichloroethane-d4	91.2			70.0-130

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3405761-1 04/24/19 09:19 • (LCSD) R3405761-2 04/24/19 09:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	156	148	124	119	19.0-160			4.69	27
Acrylonitrile	125	150	158	120	126	55.0-149			4.93	20
Bromobenzene	25.0	23.2	23.5	92.9	94.2	73.0-121			1.38	20
Bromodichloromethane	25.0	22.3	22.2	89.3	89.0	75.0-120			0.350	20
Bromochloromethane	25.0	23.7	23.6	94.9	94.5	76.0-122			0.414	20
Bromoform	25.0	27.4	26.8	110	107	68.0-132			2.18	20
Bromomethane	25.0	17.9	17.6	71.5	70.3	10.0-160			1.67	25
Carbon disulfide	25.0	27.9	28.1	111	113	61.0-128			1.03	20
Carbon tetrachloride	25.0	23.3	23.4	93.1	93.6	68.0-126			0.508	20
Chlorobenzene	25.0	23.9	23.7	95.8	94.7	80.0-121			1.19	20
Chlorodibromomethane	25.0	24.3	23.9	97.1	95.6	77.0-125			1.64	20
Chloroethane	25.0	16.6	16.5	66.5	66.1	47.0-150			0.641	20
Chloroform	25.0	21.9	21.9	87.7	87.7	73.0-120			0.0865	20
Chloromethane	25.0	25.8	26.7	103	107	41.0-142			3.31	20
2-Chlorotoluene	25.0	22.1	23.1	88.3	92.4	76.0-123			4.55	20
4-Chlorotoluene	25.0	22.5	23.3	90.2	93.0	75.0-122			3.15	20
1,2-Dibromo-3-Chloropropane	25.0	26.5	28.6	106	114	58.0-134			7.78	20
1,2-Dibromoethane	25.0	23.7	23.5	94.9	94.0	80.0-122			1.05	20
Dibromomethane	25.0	22.8	22.7	91.2	90.7	80.0-120			0.460	20
1,2-Dichlorobenzene	25.0	23.0	23.4	91.9	93.7	79.0-121			1.90	20
1,3-Dichlorobenzene	25.0	22.6	23.1	90.4	92.5	79.0-120			2.30	20
1,4-Dichlorobenzene	25.0	22.0	22.0	88.0	87.9	79.0-120			0.0272	20
Dichlorodifluoromethane	25.0	25.9	25.8	104	103	51.0-149			0.138	20
1,1-Dichloroethane	25.0	24.4	24.7	97.4	98.8	70.0-126			1.36	20
1,2-Dichloroethane	25.0	20.9	21.0	83.4	83.9	70.0-128			0.549	20
1,1-Dichloroethene	25.0	24.6	24.4	98.3	97.6	71.0-124			0.735	20
cis-1,2-Dichloroethene	25.0	24.0	23.7	95.9	94.7	73.0-120			1.21	20
Benzene	25.0	25.9	25.8	104	103	70.0-123			0.330	20
trans-1,2-Dichloroethene	25.0	24.2	24.7	96.8	98.9	73.0-120			2.14	20
1,2-Dichloropropane	25.0	26.3	26.3	105	105	77.0-125			0.163	20
1,1-Dichloropropene	25.0	24.3	24.2	97.0	96.7	74.0-126			0.352	20
1,3-Dichloropropene	25.0	25.1	25.0	101	99.9	80.0-120			0.653	20
cis-1,3-Dichloropropene	25.0	23.5	23.1	93.8	92.5	80.0-123			1.45	20
trans-1,3-Dichloropropene	25.0	22.6	22.5	90.5	89.9	78.0-124			0.668	20
trans-1,4-Dichloro-2-butene	25.0	20.8	21.7	83.3	86.9	33.0-144			4.23	20
2,2-Dichloropropane	25.0	25.9	25.9	104	104	58.0-130			0.0126	20
n-Butylbenzene	25.0	21.5	21.8	85.9	87.4	73.0-125			1.72	20
Diisopropyl ether	25.0	27.9	28.3	111	113	58.0-138			1.53	20
sec-Butylbenzene	25.0	22.4	23.0	89.5	91.9	75.0-125			2.67	20
tert-Butylbenzene	25.0	23.1	24.1	92.3	96.5	76.0-124			4.41	20

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1 Cp
2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3405761-1 04/24/19 09:19 • (LCSD) R3405761-2 04/24/19 09:39

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Hexachloro-1,3-butadiene	25.0	27.6	29.3	110	117	54.0-138			6.19	20
2-Hexanone	125	146	148	117	119	67.0-149			1.62	20
n-Hexane	25.0	26.0	24.9	104	99.4	57.0-133			4.59	20
Iodomethane	125	133	133	106	106	33.0-147			0.179	26
2-Butanone (MEK)	125	155	160	124	128	44.0-160			3.27	20
Methylene Chloride	25.0	24.5	25.0	98.1	100	67.0-120			2.09	20
4-Methyl-2-pentanone (MIBK)	125	143	145	115	116	68.0-142			1.19	20
Styrene	25.0	27.4	26.7	110	107	73.0-130			2.64	20
1,1,1,2-Tetrachloroethane	25.0	24.1	24.1	96.3	96.5	75.0-125			0.203	20
1,1,2,2-Tetrachloroethane	25.0	20.9	21.7	83.7	87.0	65.0-130			3.84	20
1,1,2-Trichlorotrifluoroethane	25.0	22.8	22.6	91.1	90.6	69.0-132			0.600	20
Tetrachloroethene	25.0	25.2	24.6	101	98.6	72.0-132			2.13	20
1,2,3-Trichlorobenzene	25.0	23.4	25.1	93.7	100	50.0-138			6.79	20
1,2,4-Trichlorobenzene	25.0	23.9	25.3	95.5	101	57.0-137			6.02	20
1,1,1-Trichloroethane	25.0	23.6	23.6	94.3	94.3	73.0-124			0.0116	20
1,1,2-Trichloroethane	25.0	23.1	22.9	92.6	91.4	80.0-120			1.26	20
Trichloroethene	25.0	26.1	25.9	104	104	78.0-124			0.572	20
Trichlorofluoromethane	25.0	16.0	15.8	64.0	63.3	59.0-147			1.09	20
1,2,3-Trichloropropane	25.0	20.6	21.9	82.6	87.4	73.0-130			5.66	20
1,2,3-Trimethylbenzene	25.0	21.6	22.1	86.6	88.6	77.0-120			2.31	20
Vinyl acetate	125	72.4	73.4	57.9	58.7	11.0-160			1.37	20
Vinyl chloride	25.0	18.3	18.2	73.2	72.7	67.0-131			0.636	20
Xylenes, Total	75.0	73.5	73.4	98.0	97.9	79.0-123			0.136	20
Ethylbenzene	25.0	24.2	24.2	96.8	96.9	79.0-123			0.119	20
Isopropylbenzene	25.0	25.4	25.3	102	101	76.0-127			0.180	20
p-Isopropyltoluene	25.0	22.5	23.2	90.1	92.7	76.0-125			2.85	20
Methyl tert-butyl ether	25.0	23.5	23.7	94.1	94.8	68.0-125			0.771	20
Naphthalene	25.0	23.2	24.8	92.7	99.1	54.0-135			6.76	20
n-Propylbenzene	25.0	22.1	22.4	88.4	89.7	77.0-124			1.48	20
Toluene	25.0	25.8	25.4	103	102	79.0-120			1.62	20
1,2,4-Trimethylbenzene	25.0	22.1	22.5	88.5	90.0	76.0-121			1.68	20
1,3,5-Trimethylbenzene	25.0	22.2	23.0	88.7	92.0	76.0-122			3.67	20
(S) Toluene-d8				101	100	80.0-120				
(S) 4-Bromofluorobenzene				107	106	77.0-126				
(S) 1,2-Dichloroethane-d4				92.9	91.6	70.0-130				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
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7 Gl
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9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

[L1091936-01.02](#)

Method Blank (MB)

(MB) R3406794-3 04/25/19 10:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1091936-01.02](#)

Method Blank (MB)

(MB) R3406794-3 04/25/19 10:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.239	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	101			80.0-120
(S) 4-Bromofluorobenzene	105			77.0-126
(S) 1,2-Dichloroethane-d4	94.7			70.0-130

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3406794-1 04/25/19 09:03 • (LCSD) R3406794-2 04/25/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	205	144	164	115	19.0-160	J4	J3	34.8	27
Acrylonitrile	125	160	156	128	125	55.0-149			2.36	20
Benzene	25.0	26.0	26.1	104	104	70.0-123			0.383	20
Bromobenzene	25.0	23.4	23.6	93.5	94.5	73.0-121			1.10	20
Bromodichloromethane	25.0	22.3	22.3	89.3	89.2	75.0-120			0.142	20
Bromochloromethane	25.0	23.5	23.3	94.2	93.0	76.0-122			1.20	20
Bromoform	25.0	26.4	27.0	106	108	68.0-132			2.26	20
Bromomethane	25.0	17.7	17.6	70.8	70.5	10.0-160			0.433	25
n-Butylbenzene	25.0	23.2	22.8	92.7	91.2	73.0-125			1.67	20
sec-Butylbenzene	25.0	23.9	23.3	95.6	93.1	75.0-125			2.69	20
tert-Butylbenzene	25.0	24.5	24.0	98.0	96.1	76.0-124			1.94	20
Carbon disulfide	25.0	28.4	31.0	113	124	61.0-128			8.82	20
Carbon tetrachloride	25.0	23.9	23.9	95.5	95.5	68.0-126			0.0359	20
Chlorobenzene	25.0	24.0	24.2	96.1	96.6	80.0-121			0.523	20
Chlorodibromomethane	25.0	23.5	24.0	94.2	96.0	77.0-125			1.90	20
Chloroethane	25.0	15.0	17.2	60.1	69.0	47.0-150			13.7	20
Chloroform	25.0	22.0	21.9	87.8	87.8	73.0-120			0.0352	20
Chloromethane	25.0	26.3	26.2	105	105	41.0-142			0.338	20
2-Chlorotoluene	25.0	23.1	22.8	92.6	91.0	76.0-123			1.66	20
4-Chlorotoluene	25.0	23.4	23.2	93.5	93.0	75.0-122			0.522	20
1,2-Dibromo-3-Chloropropane	25.0	28.4	27.7	114	111	58.0-134			2.76	20
1,2-Dibromoethane	25.0	23.3	23.7	93.0	94.8	80.0-122			1.90	20
Dibromomethane	25.0	22.7	22.5	90.7	90.0	80.0-120			0.716	20
1,2-Dichlorobenzene	25.0	23.9	23.4	95.5	93.5	79.0-121			2.08	20
1,3-Dichlorobenzene	25.0	23.5	23.2	94.0	93.0	79.0-120			1.05	20
1,4-Dichlorobenzene	25.0	22.7	22.5	91.0	89.9	79.0-120			1.15	20
Dichlorodifluoromethane	25.0	26.3	26.2	105	105	51.0-149			0.238	20
1,1-Dichloroethane	25.0	24.8	24.6	99.4	98.3	70.0-126			1.12	20
1,2-Dichloroethane	25.0	20.8	20.8	83.1	83.1	70.0-128			0.0641	20
1,1-Dichloroethene	25.0	25.0	25.4	100	102	71.0-124			1.62	20
cis-1,2-Dichloroethene	25.0	23.9	23.7	95.7	94.7	73.0-120			1.11	20
trans-1,2-Dichloroethene	25.0	24.9	24.9	99.6	99.4	73.0-120			0.115	20
1,2-Dichloropropane	25.0	26.5	26.5	106	106	77.0-125			0.267	20
1,1-Dichloropropene	25.0	24.9	24.8	99.4	99.1	74.0-126			0.298	20
1,3-Dichloropropane	25.0	24.6	25.1	98.6	100	80.0-120			1.86	20
cis-1,3-Dichloropropene	25.0	24.0	24.2	96.2	96.7	80.0-123			0.513	20
trans-1,3-Dichloropropene	25.0	23.3	23.5	93.2	94.1	78.0-124			0.936	20
trans-1,4-Dichloro-2-butene	25.0	20.7	19.7	83.0	78.6	33.0-144			5.42	20
2,2-Dichloropropane	25.0	32.0	31.4	128	126	58.0-130			2.05	20
Diisopropyl ether	25.0	27.7	27.6	111	110	58.0-138			0.601	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3406794-1 04/25/19 09:03 • (LCSD) R3406794-2 04/25/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.4	24.7	97.5	98.9	79.0-123			1.46	20
Hexachloro-1,3-butadiene	25.0	31.2	30.4	125	122	54.0-138			2.57	20
2-Hexanone	125	147	146	117	117	67.0-149			0.700	20
n-Hexane	25.0	29.2	28.6	117	114	57.0-133			2.29	20
Iodomethane	125	134	128	107	102	33.0-147			4.64	26
Isopropylbenzene	25.0	25.6	26.1	103	104	76.0-127			1.66	20
p-Isopropyltoluene	25.0	24.2	23.8	96.8	95.1	76.0-125			1.85	20
2-Butanone (MEK)	125	165	156	132	125	44.0-160			5.34	20
Methylene Chloride	25.0	24.7	24.5	98.8	98.1	67.0-120			0.726	20
4-Methyl-2-pentanone (MIBK)	125	143	142	114	114	68.0-142			0.369	20
Methyl tert-butyl ether	25.0	23.7	23.4	94.7	93.6	68.0-125			1.16	20
Naphthalene	25.0	25.1	24.5	100	98.1	54.0-135			2.40	20
n-Propylbenzene	25.0	23.0	23.0	92.1	91.9	77.0-124			0.261	20
Styrene	25.0	26.6	27.4	106	110	73.0-130			3.12	20
1,1,1,2-Tetrachloroethane	25.0	24.1	24.0	96.2	96.2	75.0-125			0.0553	20
1,1,2,2-Tetrachloroethane	25.0	22.8	22.7	91.3	90.8	65.0-130			0.553	20
1,1,2-Trichlorotrifluoroethane	25.0	23.4	24.1	93.6	96.5	69.0-132			3.14	20
Tetrachloroethene	25.0	25.8	25.8	103	103	72.0-132			0.287	20
Toluene	25.0	25.9	26.1	103	104	79.0-120			0.981	20
1,2,3-Trichlorobenzene	25.0	25.7	24.4	103	97.5	50.0-138			5.36	20
1,2,4-Trichlorobenzene	25.0	26.6	25.2	107	101	57.0-137			5.53	20
1,1,1-Trichloroethane	25.0	23.7	23.8	94.9	95.3	73.0-124			0.433	20
1,1,2-Trichloroethane	25.0	22.8	22.6	91.3	90.4	80.0-120			0.971	20
Trichloroethene	25.0	25.1	25.2	100	101	78.0-124			0.572	20
Trichlorofluoromethane	25.0	15.2	16.5	60.9	65.9	59.0-147			7.93	20
1,2,3-Trichloropropane	25.0	21.1	20.9	84.4	83.5	73.0-130			1.11	20
1,2,4-Trimethylbenzene	25.0	22.8	22.6	91.2	90.5	76.0-121			0.774	20
1,2,3-Trimethylbenzene	25.0	22.4	21.8	89.8	87.2	77.0-120			2.96	20
1,3,5-Trimethylbenzene	25.0	23.4	22.6	93.5	90.5	76.0-122			3.16	20
Vinyl acetate	125	119	120	95.4	95.7	11.0-160			0.361	20
Vinyl chloride	25.0	17.8	17.9	71.3	71.7	67.0-131			0.499	20
Xylenes, Total	75.0	74.9	75.0	99.9	100	79.0-123			0.133	20
(S) Toluene-d8				101	100	80.0-120				
(S) 4-Bromofluorobenzene				105	107	77.0-126				
(S) 1,2-Dichloroethane-d4				92.7	99.9	70.0-130				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3405838-4 04/26/19 11:26

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	98.0		80.0-120	80.0-120
(S) 4-Bromofluorobenzene	100		77.0-126	77.0-126
(S) 1,2-Dichloroethane-d4	90.2		70.0-130	70.0-130

Laboratory Control Sample (LCS)

(LCS) R3405838-1 04/26/19 09:29

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	26.4	105	73.0-120	
Vinyl chloride	25.0	27.1	108	67.0-131	
(S) Toluene-d8			95.5	80.0-120	
(S) 4-Bromofluorobenzene			101	77.0-126	
(S) 1,2-Dichloroethane-d4			89.3	70.0-130	

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1 Cp
2 Tc
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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
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Qualifier	Description
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

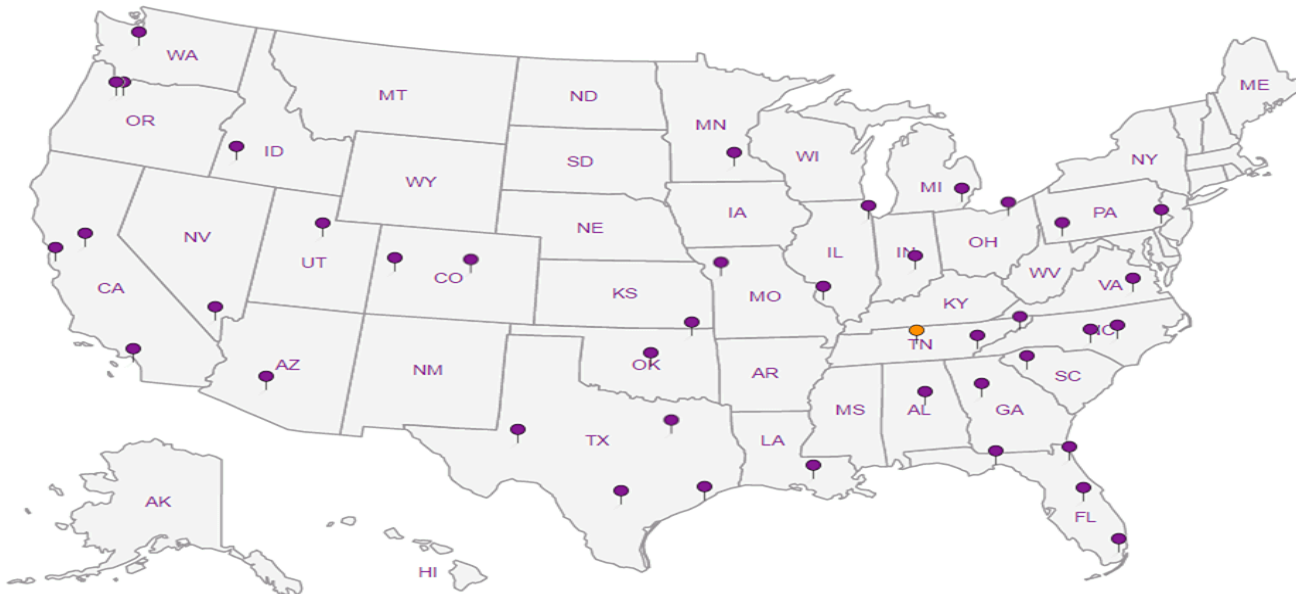
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: boneal@pesenv.com;
bhaldeaman@pesenv.com;

KVILKE@RESENU.COM
KSPAW@STAD@PESENV.COM

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Report to:
Brian O'Neal/Bill Haldeman

Project:
Description: **American Loven**

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
K. Ezyss/B. Hecht

Site/Facility ID #
American Loven

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST be Notified)

Quote #

Immediately Packed on Ice N ___ Y ___ X ___

Same Day ___ Five Day ___
Next Day ___ 10 Day (Rad Only) ___
Two Day ___ Three Day ___
Standard TAT

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

Pres Chk

Analysis / Container / Preservative

NO3,S04,Cl 125mlHDPE-NoPres

Alkalinity 125mlHDPE-NoPres

EEM (RSK175LL) 40mlAmb-HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

VOCs (8260C)

NWTPH-Gx

Chain of Custody

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Pres Chk	Analysis / Container / Preservative
MW103-042219	Grab	GW	108	4-22-19	1505	3	X	*NO3,S04,Cl* 125mlHDPE-NoPres
MW111-042219		GW	75	4-22-19	1505	3	X	Alkalinity 125mlHDPE-NoPres
MW104-042319		GW	75	4-23-19	0835	11	X	EEM (RSK175LL) 40mlAmb-HCl
MW105-042319		GW	135		1035	11	X	TOC 250mlAmb-HCl
MW147-042319		GW	75		1400	11	X	Total Fe Mn 6020 250mlHDPE-HNO3
TRIP Blank-042319		GW				1	X	VOCs (8260C)
		GW					X	NWTPH-Gx

Remarks: Tier 2 QA/QC for all

Matrix: AIR - Air F - Filter
SS - Soil B - Bioassay
GW - Groundwater
WW - Waste Water
DW - Drinking Water
OT - Other

Tracking # 98326 1086 1910
Received by: (Signature)

Temp: 0.9 ± 0.04 °C
Bottles Received: 39
Date: 4/24/19 0845

Sample Receipt Checklist
COC Seal Present/Intact: NP Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature) *[Signature]* Date: 04-23-19 Time: 1700

Relinquished by: (Signature) _____ Date: _____ Time: _____

Received for Lab by: (Signature) *[Signature]* Date: 4/24/19 Time: 0845

Condition: NCF / _____

Brian Ford

From: Kim Vilk <KVilk@pesenv.com>
Sent: Wednesday, April 24, 2019 11:51 AM
To: Brian Ford
Cc: Bill Haldeman; Karsten Springstead
Subject: American Linen - Groundwater Samples - COC - CORRECTION
Attachments: COC_20190424.pdf

Importance: High

Hi Brian,
I was reviewing the COC for the samples that were shipped to you yesterday (see attached) and I need to make some corrections. They are shown on the mark up attached, but will write them here too:

Sample MW-155-042319 should be analyzed for VOCs and gasoline only
Sample MW103-042219 should be analyzed for VOCs only
Sample MW111-042219 should be analyzed for VOCs only
Sample MW104-042319 should also be analyzed for gasoline (add that analysis)
Sample MW105-042319 should also be analyzed for gasoline (add that analysis)
Sample MW147-042319 should also be analyzed for gasoline (add that analysis)

Let me know if you have any questions.

Thanks!

Kim Vilk, L.G.
Senior Geologist

PES Environmental, Inc.
1215 Fourth Avenue, Suite 1350
Seattle, Washington 98161-1012
kvilk@pesenv.com

Office: (206) 529-3980, Ext. 110

Troy Dunlap



Login #: L1091936	Client: PESENVSWA	Date: 4/24/19	Evaluated by: Troy Dunlap.
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Non-Conformance (check applicable items)

Sample Integrity		Chain of Custody Clarification	
Parameter(s) past holding time	X	Login Clarification Needed	If Broken Container:
Temperature not in range		Chain of custody is incomplete	Insufficient packing material around container
Improper container type		Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range.		Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.		Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.		Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.		Trip Blank not received.	If no Chain of Custody:
Broken container		Client did not "X" analysis.	Received by:
Broken container:		Chain of Custody is missing	Date/Time:
Sufficient sample remains			Temp./Cont. Rec./pH:
			Carrier:
			Tracking#

Login Comments: For ID MW103 and MW111 the client marked all analysis but only sent three 40ml-HCL vials.

Client informed by:	Call	Email X	Voice Mail	Date:04/24/19	Time:1220
TSR Initials:bjf	Client Contact: Kim Vik				

Login Instructions:

Log MW103 and MW111 for V8260LLC only.
Add NWTPHGX to MW104, MW105, MW147.



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.66	J	J J0 J3 J4	1.05	25.0	1	04/25/2019 16:48 WG1271705
Acrylonitrile	U			0.873	5.00	1	04/25/2019 16:48 WG1271705
Benzene	U			0.0896	0.500	1	04/25/2019 16:48 WG1271705
Bromobenzene	U			0.133	0.500	1	04/25/2019 16:48 WG1271705
Bromodichloromethane	U			0.0800	0.500	1	04/25/2019 16:48 WG1271705
Bromochloromethane	U			0.145	0.500	1	04/25/2019 16:48 WG1271705
Bromoform	U			0.186	0.500	1	04/25/2019 16:48 WG1271705
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 16:48 WG1271705
n-Butylbenzene	U			0.143	0.500	1	04/25/2019 16:48 WG1271705
sec-Butylbenzene	U			0.134	0.500	1	04/25/2019 16:48 WG1271705
tert-Butylbenzene	U			0.183	0.500	1	04/25/2019 16:48 WG1271705
Carbon disulfide	U			0.101	0.500	1	04/25/2019 16:48 WG1271705
Carbon tetrachloride	U			0.159	0.500	1	04/25/2019 16:48 WG1271705
Chlorobenzene	U			0.140	0.500	1	04/25/2019 16:48 WG1271705
Chlorodibromomethane	U			0.128	0.500	1	04/25/2019 16:48 WG1271705
Chloroethane	U	UJ	J0	0.141	2.50	1	04/25/2019 16:48 WG1271705
Chloroform	U			0.0860	0.500	1	04/25/2019 16:48 WG1271705
Chloromethane	U			0.153	1.25	1	04/25/2019 16:48 WG1271705
2-Chlorotoluene	U			0.111	0.500	1	04/25/2019 16:48 WG1271705
4-Chlorotoluene	U			0.0972	0.500	1	04/25/2019 16:48 WG1271705
1,2-Dibromo-3-Chloropropane	U			0.325	2.50	1	04/25/2019 16:48 WG1271705
1,2-Dibromoethane	U			0.193	0.500	1	04/25/2019 16:48 WG1271705
Dibromomethane	U			0.117	0.500	1	04/25/2019 16:48 WG1271705
1,2-Dichlorobenzene	U			0.101	0.500	1	04/25/2019 16:48 WG1271705
1,3-Dichlorobenzene	U			0.130	0.500	1	04/25/2019 16:48 WG1271705
1,4-Dichlorobenzene	U			0.121	0.500	1	04/25/2019 16:48 WG1271705
Dichlorodifluoromethane	U			0.127	2.50	1	04/25/2019 16:48 WG1271705
1,1-Dichloroethane	U			0.114	0.500	1	04/25/2019 16:48 WG1271705
1,2-Dichloroethane	U			0.108	0.500	1	04/25/2019 16:48 WG1271705
1,1-Dichloroethene	1.22			0.188	0.500	1	04/25/2019 16:48 WG1271705
cis-1,2-Dichloroethene	88.0			0.0933	0.500	1	04/25/2019 16:48 WG1271705
trans-1,2-Dichloroethene	0.209	J	J	0.152	0.500	1	04/25/2019 16:48 WG1271705
1,2-Dichloropropane	U			0.190	0.500	1	04/25/2019 16:48 WG1271705
1,1-Dichloropropene	U			0.128	0.500	1	04/25/2019 16:48 WG1271705
1,3-Dichloropropane	U			0.147	1.00	1	04/25/2019 16:48 WG1271705
cis-1,3-Dichloropropene	U			0.0976	0.500	1	04/25/2019 16:48 WG1271705
trans-1,3-Dichloropropene	U			0.222	0.500	1	04/25/2019 16:48 WG1271705
trans-1,4-Dichloro-2-butene	U			0.257	5.00	1	04/25/2019 16:48 WG1271705
2,2-Dichloropropane	U			0.0929	0.500	1	04/25/2019 16:48 WG1271705
Di-isopropyl ether	U			0.0924	0.500	1	04/25/2019 16:48 WG1271705
Ethylbenzene	U			0.158	0.500	1	04/25/2019 16:48 WG1271705
Hexachloro-1,3-butadiene	U			0.157	1.00	1	04/25/2019 16:48 WG1271705
2-Hexanone	U			0.757	5.00	1	04/25/2019 16:48 WG1271705
n-Hexane	U			0.305	5.00	1	04/25/2019 16:48 WG1271705
Iodomethane	U			0.377	10.0	1	04/25/2019 16:48 WG1271705
Isopropylbenzene	U			0.126	0.500	1	04/25/2019 16:48 WG1271705
p-Isopropyltoluene	U			0.138	0.500	1	04/25/2019 16:48 WG1271705
2-Butanone (MEK)	U			1.28	5.00	1	04/25/2019 16:48 WG1271705
Methylene Chloride	U			1.07	2.50	1	04/25/2019 16:48 WG1271705
4-Methyl-2-pentanone (MIBK)	U			0.823	5.00	1	04/25/2019 16:48 WG1271705
Methyl tert-butyl ether	U			0.102	0.500	1	04/25/2019 16:48 WG1271705
Naphthalene	U			0.174	2.50	1	04/25/2019 16:48 WG1271705
n-Propylbenzene	U			0.162	0.500	1	04/25/2019 16:48 WG1271705
Styrene	U			0.117	0.500	1	04/25/2019 16:48 WG1271705
1,1,1,2-Tetrachloroethane	U			0.120	0.500	1	04/25/2019 16:48 WG1271705
1,1,2,2-Tetrachloroethane	U			0.130	0.500	1	04/25/2019 16:48 WG1271705

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/22/19 15:05

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 16:48	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 16:48	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 16:48	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 16:48	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 16:48	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 16:48	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 16:48	WG1271705
Trichloroethene	3.09		0.153	0.500	1	04/25/2019 16:48	WG1271705
Trichlorofluoromethane	U	UJ <u>JO</u>	0.130	2.50	1	04/25/2019 16:48	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 16:48	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 16:48	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 16:48	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 16:48	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 16:48	WG1271705
Vinyl chloride	32.3	J <u>JO</u>	0.118	0.500	1	04/25/2019 16:48	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 16:48	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 16:48	WG1271705
(S) 4-Bromofluorobenzene	105			77.0-126		04/25/2019 16:48	WG1271705
(S) 1,2-Dichloroethane-d4	91.6			70.0-130		04/25/2019 16:48	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.17	J	J J0 J3 J4	1.05	25.0	1	04/25/2019 17:08 WG1271705
Acrylonitrile	U			0.873	5.00	1	04/25/2019 17:08 WG1271705
Benzene	U			0.0896	0.500	1	04/25/2019 17:08 WG1271705
Bromobenzene	U			0.133	0.500	1	04/25/2019 17:08 WG1271705
Bromodichloromethane	U			0.0800	0.500	1	04/25/2019 17:08 WG1271705
Bromochloromethane	U			0.145	0.500	1	04/25/2019 17:08 WG1271705
Bromoform	U			0.186	0.500	1	04/25/2019 17:08 WG1271705
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 17:08 WG1271705
n-Butylbenzene	U			0.143	0.500	1	04/25/2019 17:08 WG1271705
sec-Butylbenzene	U			0.134	0.500	1	04/25/2019 17:08 WG1271705
tert-Butylbenzene	U			0.183	0.500	1	04/25/2019 17:08 WG1271705
Carbon disulfide	U			0.101	0.500	1	04/25/2019 17:08 WG1271705
Carbon tetrachloride	U			0.159	0.500	1	04/25/2019 17:08 WG1271705
Chlorobenzene	U			0.140	0.500	1	04/25/2019 17:08 WG1271705
Chlorodibromomethane	U			0.128	0.500	1	04/25/2019 17:08 WG1271705
Chloroethane	0.255	J	J J0	0.141	2.50	1	04/25/2019 17:08 WG1271705
Chloroform	U			0.0860	0.500	1	04/25/2019 17:08 WG1271705
Chloromethane	U			0.153	1.25	1	04/25/2019 17:08 WG1271705
2-Chlorotoluene	U			0.111	0.500	1	04/25/2019 17:08 WG1271705
4-Chlorotoluene	U			0.0972	0.500	1	04/25/2019 17:08 WG1271705
1,2-Dibromo-3-Chloropropane	U			0.325	2.50	1	04/25/2019 17:08 WG1271705
1,2-Dibromoethane	U			0.193	0.500	1	04/25/2019 17:08 WG1271705
Dibromomethane	U			0.117	0.500	1	04/25/2019 17:08 WG1271705
1,2-Dichlorobenzene	U			0.101	0.500	1	04/25/2019 17:08 WG1271705
1,3-Dichlorobenzene	U			0.130	0.500	1	04/25/2019 17:08 WG1271705
1,4-Dichlorobenzene	U			0.121	0.500	1	04/25/2019 17:08 WG1271705
Dichlorodifluoromethane	U			0.127	2.50	1	04/25/2019 17:08 WG1271705
1,1-Dichloroethane	U			0.114	0.500	1	04/25/2019 17:08 WG1271705
1,2-Dichloroethane	U			0.108	0.500	1	04/25/2019 17:08 WG1271705
1,1-Dichloroethene	U			0.188	0.500	1	04/25/2019 17:08 WG1271705
cis-1,2-Dichloroethene	3.18			0.0933	0.500	1	04/25/2019 17:08 WG1271705
trans-1,2-Dichloroethene	U			0.152	0.500	1	04/25/2019 17:08 WG1271705
1,2-Dichloropropane	U			0.190	0.500	1	04/25/2019 17:08 WG1271705
1,1-Dichloropropene	U			0.128	0.500	1	04/25/2019 17:08 WG1271705
1,3-Dichloropropane	U			0.147	1.00	1	04/25/2019 17:08 WG1271705
cis-1,3-Dichloropropene	U			0.0976	0.500	1	04/25/2019 17:08 WG1271705
trans-1,3-Dichloropropene	U			0.222	0.500	1	04/25/2019 17:08 WG1271705
trans-1,4-Dichloro-2-butene	U			0.257	5.00	1	04/25/2019 17:08 WG1271705
2,2-Dichloropropane	U			0.0929	0.500	1	04/25/2019 17:08 WG1271705
Di-isopropyl ether	U			0.0924	0.500	1	04/25/2019 17:08 WG1271705
Ethylbenzene	U			0.158	0.500	1	04/25/2019 17:08 WG1271705
Hexachloro-1,3-butadiene	U			0.157	1.00	1	04/25/2019 17:08 WG1271705
2-Hexanone	U			0.757	5.00	1	04/25/2019 17:08 WG1271705
n-Hexane	U			0.305	5.00	1	04/25/2019 17:08 WG1271705
Iodomethane	U			0.377	10.0	1	04/25/2019 17:08 WG1271705
Isopropylbenzene	U			0.126	0.500	1	04/25/2019 17:08 WG1271705
p-Isopropyltoluene	U			0.138	0.500	1	04/25/2019 17:08 WG1271705
2-Butanone (MEK)	U			1.28	5.00	1	04/25/2019 17:08 WG1271705
Methylene Chloride	U			1.07	2.50	1	04/25/2019 17:08 WG1271705
4-Methyl-2-pentanone (MIBK)	U			0.823	5.00	1	04/25/2019 17:08 WG1271705
Methyl tert-butyl ether	U			0.102	0.500	1	04/25/2019 17:08 WG1271705
Naphthalene	U			0.174	2.50	1	04/25/2019 17:08 WG1271705
n-Propylbenzene	U			0.162	0.500	1	04/25/2019 17:08 WG1271705
Styrene	U			0.117	0.500	1	04/25/2019 17:08 WG1271705
1,1,1,2-Tetrachloroethane	U			0.120	0.500	1	04/25/2019 17:08 WG1271705
1,1,2,2-Tetrachloroethane	U			0.130	0.500	1	04/25/2019 17:08 WG1271705

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/22/19 15:05

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 17:08	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 17:08	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 17:08	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 17:08	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 17:08	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 17:08	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 17:08	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 17:08	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 17:08	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 17:08	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 17:08	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 17:08	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 17:08	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 17:08	WG1271705
Vinyl chloride	19.5	J JO	0.118	0.500	1	04/25/2019 17:08	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 17:08	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 17:08	WG1271705
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 17:08	WG1271705
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		04/25/2019 17:08	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	196000		2710	20000	1	04/29/2019 17:35	WG1273424

Sample Narrative:

L1091936-03 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	18600		51.9	1000	1	04/24/2019 19:20	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 19:20	WG1271082
Sulfate	5960		77.4	5000	1	04/24/2019 19:20	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5970		102	1000	1	04/24/2019 22:37	WG1271094

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5030		75.0	500	5	05/07/2019 00:32	WG1271169
Manganese	285		1.25	25.0	5	05/07/2019 00:32	WG1271169

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	174	J+	31.6	100	1	04/25/2019 14:32	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 14:32	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	437		0.287	0.678	1	04/26/2019 13:42	WG1271298
Ethane	2.60		0.296	1.29	1	04/26/2019 13:42	WG1271298
Ethene	17.7		0.422	1.27	1	04/26/2019 13:42	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	23.4	J	J JO	1.05	25.0	1	04/24/2019 18:16	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 18:16	WG1271083	
Benzene	U		0.0896	0.500	1	04/24/2019 18:16	WG1271083	
Bromobenzene	U		0.133	0.500	1	04/24/2019 18:16	WG1271083	
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 18:16	WG1271083	
Bromochloromethane	U		0.145	0.500	1	04/24/2019 18:16	WG1271083	
Bromoform	U		0.186	0.500	1	04/24/2019 18:16	WG1271083	
Bromomethane	U	UJ	JO	0.157	2.50	1	04/24/2019 18:16	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 18:16	WG1271083	
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 18:16	WG1271083	
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 18:16	WG1271083	
Carbon disulfide	U		0.101	0.500	1	04/24/2019 18:16	WG1271083	
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 18:16	WG1271083	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 08:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/24/2019 18:16	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 18:16	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 18:16	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 18:16	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 18:16	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 18:16	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 18:16	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 18:16	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 18:16	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 18:16	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 18:16	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 18:16	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 18:16	WG1271083
1,1-Dichloroethene	5.86		0.188	0.500	1	04/24/2019 18:16	WG1271083
cis-1,2-Dichloroethene	162		0.0933	0.500	1	04/24/2019 18:16	WG1271083
trans-1,2-Dichloroethene	2.49		0.152	0.500	1	04/24/2019 18:16	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 18:16	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 18:16	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 18:16	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 18:16	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 18:16	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 18:16	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 18:16	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 18:16	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 18:16	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 18:16	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 18:16	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 18:16	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 18:16	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 18:16	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 18:16	WG1271083
2-Butanone (MEK)	4.72	J U	1.28	5.00	1	04/24/2019 18:16	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 18:16	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 18:16	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 18:16	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 18:16	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 18:16	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 18:16	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 18:16	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 18:16	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 18:16	WG1271083
Tetrachloroethene	15.9		0.199	0.500	1	04/24/2019 18:16	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 18:16	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 18:16	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 18:16	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 18:16	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 18:16	WG1271083
Trichloroethene	56.9		0.153	0.500	1	04/24/2019 18:16	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 18:16	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 18:16	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 18:16	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 18:16	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 18:16	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 08:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 18:16	WG1271083
Vinyl chloride	21.1	J JO	0.118	0.500	1	04/24/2019 18:16	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 18:16	WG1271083
(S) Toluene-d8	100			80.0-120		04/24/2019 18:16	WG1271083
(S) 4-Bromofluorobenzene	106			77.0-126		04/24/2019 18:16	WG1271083
(S) 1,2-Dichloroethane-d4	92.0			70.0-130		04/24/2019 18:16	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 10:35

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	275000		2710	20000	1	04/29/2019 17:43	WG1273424

Sample Narrative:

L1091936-04 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	37900		51.9	1000	1	04/24/2019 19:35	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 19:35	WG1271082
Sulfate	5810		77.4	5000	1	04/24/2019 19:35	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4060		102	1000	1	04/24/2019 23:17	WG1271094

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5270		75.0	500	5	05/07/2019 00:37	WG1271169
Manganese	893		1.25	25.0	5	05/07/2019 00:37	WG1271169

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 14:56	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 14:56	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1660		0.287	0.678	1	04/26/2019 13:45	WG1271298
Ethane	U		0.296	1.29	1	04/26/2019 13:45	WG1271298
Ethene	U		0.422	1.27	1	04/26/2019 13:45	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	1.22	J	J JO	1.05	25.0	1	04/24/2019 18:36	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 18:36	WG1271083	
Benzene	U		0.0896	0.500	1	04/24/2019 18:36	WG1271083	
Bromobenzene	U		0.133	0.500	1	04/24/2019 18:36	WG1271083	
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 18:36	WG1271083	
Bromochloromethane	U		0.145	0.500	1	04/24/2019 18:36	WG1271083	
Bromoform	U		0.186	0.500	1	04/24/2019 18:36	WG1271083	
Bromomethane	U	UJ	JO	0.157	2.50	1	04/24/2019 18:36	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 18:36	WG1271083	
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 18:36	WG1271083	
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 18:36	WG1271083	
Carbon disulfide	U		0.101	0.500	1	04/24/2019 18:36	WG1271083	
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 18:36	WG1271083	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 10:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/24/2019 18:36	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 18:36	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 18:36	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 18:36	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 18:36	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 18:36	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 18:36	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 18:36	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 18:36	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 18:36	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 18:36	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 18:36	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 18:36	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 18:36	WG1271083
cis-1,2-Dichloroethene	0.917		0.0933	0.500	1	04/24/2019 18:36	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 18:36	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 18:36	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 18:36	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 18:36	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 18:36	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 18:36	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 18:36	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 18:36	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 18:36	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 18:36	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 18:36	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 18:36	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 18:36	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 18:36	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 18:36	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 18:36	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 18:36	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 18:36	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 18:36	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 18:36	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 18:36	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 18:36	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 18:36	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 18:36	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 18:36	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 18:36	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 18:36	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 18:36	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 18:36	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 18:36	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 18:36	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 18:36	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 18:36	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 18:36	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 18:36	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 18:36	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 18:36	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 18:36	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 10:35

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 18:36	WG1271083
Vinyl chloride	0.238	J JJ0	0.118	0.500	1	04/24/2019 18:36	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 18:36	WG1271083
(S) Toluene-d8	101			80.0-120		04/24/2019 18:36	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 18:36	WG1271083
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		04/24/2019 18:36	WG1271083

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 14:00

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	346000		2710	20000	1	04/29/2019 17:50	WG1273424

Sample Narrative:

L1091936-05 WG1273424: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	26900		51.9	1000	1	04/24/2019 19:49	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 19:49	WG1271082
Sulfate	28100		77.4	5000	1	04/24/2019 19:49	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	13700		102	1000	1	04/24/2019 23:34	WG1271094

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	4390		75.0	500	5	05/07/2019 00:43	WG1271169
Manganese	787		1.25	25.0	5	05/07/2019 00:43	WG1271169

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	139	J+	31.6	100	1	04/25/2019 15:20	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 15:20	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	8110		2.87	6.78	10	04/26/2019 14:59	WG1271298
Ethane	U		0.296	1.29	1	04/26/2019 13:49	WG1271298
Ethene	158		0.422	1.27	1	04/26/2019 13:49	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.91	J JJO	1.05	25.0	1	04/24/2019 18:56	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 18:56	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 18:56	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 18:56	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 18:56	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 18:56	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 18:56	WG1271083
Bromomethane	U UJ	JO	0.157	2.50	1	04/24/2019 18:56	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 18:56	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 18:56	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 18:56	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 18:56	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 18:56	WG1271083

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/23/19 14:00

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/24/2019 18:56	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 18:56	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 18:56	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 18:56	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 18:56	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 18:56	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 18:56	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 18:56	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 18:56	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 18:56	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 18:56	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 18:56	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 18:56	WG1271083
1,1-Dichloroethene	1.75		0.188	0.500	1	04/24/2019 18:56	WG1271083
cis-1,2-Dichloroethene	322		0.933	5.00	10	04/26/2019 12:43	WG1272362
trans-1,2-Dichloroethene	1.47		0.152	0.500	1	04/24/2019 18:56	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 18:56	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 18:56	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 18:56	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 18:56	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 18:56	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 18:56	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 18:56	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 18:56	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 18:56	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 18:56	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 18:56	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 18:56	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 18:56	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 18:56	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 18:56	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 18:56	WG1271083
Methylene Chloride	U		1.07	2.50	1	04/24/2019 18:56	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 18:56	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 18:56	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 18:56	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 18:56	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 18:56	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 18:56	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 18:56	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 18:56	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 18:56	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 18:56	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 18:56	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 18:56	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 18:56	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 18:56	WG1271083
Trichloroethene	5.13		0.153	0.500	1	04/24/2019 18:56	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 18:56	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 18:56	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 18:56	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 18:56	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 18:56	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 14:00

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 18:56	WG1271083
Vinyl chloride	499		1.18	5.00	10	04/26/2019 12:43	WG1272362
Xylenes, Total	U	UJ JO	0.316	1.50	1	04/24/2019 18:56	WG1271083
(S) Toluene-d8	100			80.0-120		04/24/2019 18:56	WG1271083
(S) Toluene-d8	98.8			80.0-120		04/26/2019 12:43	WG1272362
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 18:56	WG1271083
(S) 4-Bromofluorobenzene	99.9			77.0-126		04/26/2019 12:43	WG1272362
(S) 1,2-Dichloroethane-d4	94.2			70.0-130		04/24/2019 18:56	WG1271083
(S) 1,2-Dichloroethane-d4	89.2			70.0-130		04/26/2019 12:43	WG1272362

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 00:00

L1091936

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 12:32	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	112			78.0-120		04/25/2019 12:32	WG1271515

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/24/2019 16:36	WG1271083
Acrylonitrile	U		0.873	5.00	1	04/24/2019 16:36	WG1271083
Benzene	U		0.0896	0.500	1	04/24/2019 16:36	WG1271083
Bromobenzene	U		0.133	0.500	1	04/24/2019 16:36	WG1271083
Bromodichloromethane	U		0.0800	0.500	1	04/24/2019 16:36	WG1271083
Bromochloromethane	U		0.145	0.500	1	04/24/2019 16:36	WG1271083
Bromoform	U		0.186	0.500	1	04/24/2019 16:36	WG1271083
Bromomethane	U	UJ JO	0.157	2.50	1	04/24/2019 16:36	WG1271083
n-Butylbenzene	U		0.143	0.500	1	04/24/2019 16:36	WG1271083
sec-Butylbenzene	U		0.134	0.500	1	04/24/2019 16:36	WG1271083
tert-Butylbenzene	U		0.183	0.500	1	04/24/2019 16:36	WG1271083
Carbon disulfide	U		0.101	0.500	1	04/24/2019 16:36	WG1271083
Carbon tetrachloride	U		0.159	0.500	1	04/24/2019 16:36	WG1271083
Chlorobenzene	U		0.140	0.500	1	04/24/2019 16:36	WG1271083
Chlorodibromomethane	U		0.128	0.500	1	04/24/2019 16:36	WG1271083
Chloroethane	U	UJ JO	0.141	2.50	1	04/24/2019 16:36	WG1271083
Chloroform	U		0.0860	0.500	1	04/24/2019 16:36	WG1271083
Chloromethane	U		0.153	1.25	1	04/24/2019 16:36	WG1271083
2-Chlorotoluene	U		0.111	0.500	1	04/24/2019 16:36	WG1271083
4-Chlorotoluene	U		0.0972	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/24/2019 16:36	WG1271083
1,2-Dibromoethane	U		0.193	0.500	1	04/24/2019 16:36	WG1271083
Dibromomethane	U		0.117	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dichlorobenzene	U		0.101	0.500	1	04/24/2019 16:36	WG1271083
1,3-Dichlorobenzene	U		0.130	0.500	1	04/24/2019 16:36	WG1271083
1,4-Dichlorobenzene	U		0.121	0.500	1	04/24/2019 16:36	WG1271083
Dichlorodifluoromethane	U		0.127	2.50	1	04/24/2019 16:36	WG1271083
1,1-Dichloroethane	U		0.114	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dichloroethane	U		0.108	0.500	1	04/24/2019 16:36	WG1271083
1,1-Dichloroethene	U		0.188	0.500	1	04/24/2019 16:36	WG1271083
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/24/2019 16:36	WG1271083
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/24/2019 16:36	WG1271083
1,2-Dichloropropane	U		0.190	0.500	1	04/24/2019 16:36	WG1271083
1,1-Dichloropropene	U		0.128	0.500	1	04/24/2019 16:36	WG1271083
1,3-Dichloropropane	U		0.147	1.00	1	04/24/2019 16:36	WG1271083
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/24/2019 16:36	WG1271083
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/24/2019 16:36	WG1271083
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/24/2019 16:36	WG1271083
2,2-Dichloropropane	U		0.0929	0.500	1	04/24/2019 16:36	WG1271083
Di-isopropyl ether	U		0.0924	0.500	1	04/24/2019 16:36	WG1271083
Ethylbenzene	U		0.158	0.500	1	04/24/2019 16:36	WG1271083
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/24/2019 16:36	WG1271083
2-Hexanone	U		0.757	5.00	1	04/24/2019 16:36	WG1271083
n-Hexane	U		0.305	5.00	1	04/24/2019 16:36	WG1271083
Iodomethane	U		0.377	10.0	1	04/24/2019 16:36	WG1271083
Isopropylbenzene	U		0.126	0.500	1	04/24/2019 16:36	WG1271083
p-Isopropyltoluene	U		0.138	0.500	1	04/24/2019 16:36	WG1271083
2-Butanone (MEK)	U		1.28	5.00	1	04/24/2019 16:36	WG1271083



Collected date/time: 04/23/19 00:00

L1091936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/24/2019 16:36	WG1271083
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/24/2019 16:36	WG1271083
Methyl tert-butyl ether	U		0.102	0.500	1	04/24/2019 16:36	WG1271083
Naphthalene	U		0.174	2.50	1	04/24/2019 16:36	WG1271083
n-Propylbenzene	U		0.162	0.500	1	04/24/2019 16:36	WG1271083
Styrene	U		0.117	0.500	1	04/24/2019 16:36	WG1271083
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/24/2019 16:36	WG1271083
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/24/2019 16:36	WG1271083
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/24/2019 16:36	WG1271083
Tetrachloroethene	U		0.199	0.500	1	04/24/2019 16:36	WG1271083
Toluene	U		0.412	0.500	1	04/24/2019 16:36	WG1271083
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/24/2019 16:36	WG1271083
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/24/2019 16:36	WG1271083
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/24/2019 16:36	WG1271083
1,1,2-Trichloroethane	U		0.186	0.500	1	04/24/2019 16:36	WG1271083
Trichloroethene	U		0.153	0.500	1	04/24/2019 16:36	WG1271083
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/24/2019 16:36	WG1271083
1,2,3-Trichloropropane	U		0.247	2.50	1	04/24/2019 16:36	WG1271083
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/24/2019 16:36	WG1271083
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/24/2019 16:36	WG1271083
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/24/2019 16:36	WG1271083
Vinyl acetate	U	UJ JO	0.645	5.00	1	04/24/2019 16:36	WG1271083
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/24/2019 16:36	WG1271083
Xylenes, Total	U		0.316	1.50	1	04/24/2019 16:36	WG1271083
(S) Toluene-d8	100			80.0-120		04/24/2019 16:36	WG1271083
(S) 4-Bromofluorobenzene	105			77.0-126		04/24/2019 16:36	WG1271083
(S) 1,2-Dichloroethane-d4	92.9			70.0-130		04/24/2019 16:36	WG1271083

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



ANALYTICAL REPORT

May 08, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

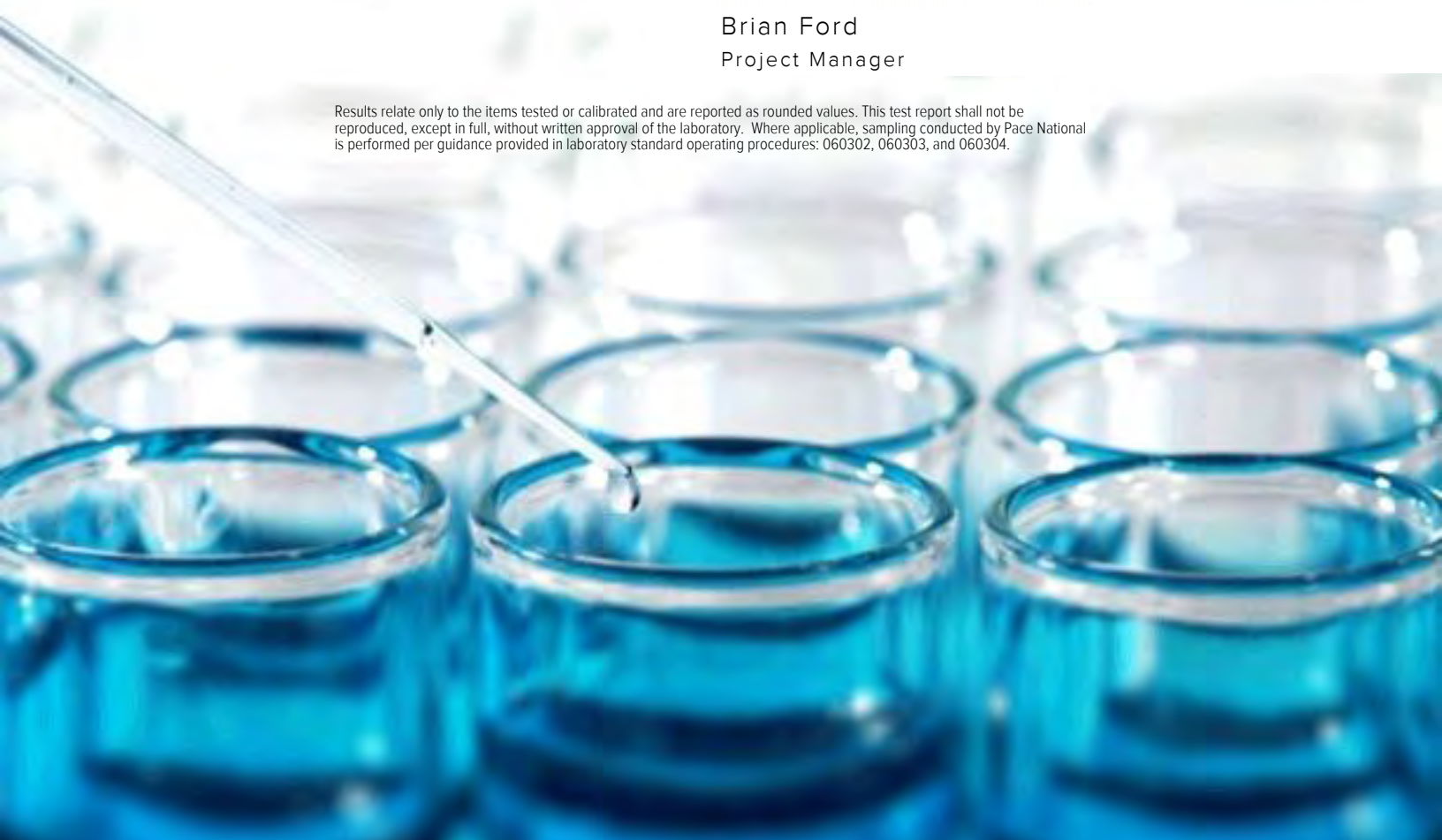
PES Environmental, Inc.- WA

Sample Delivery Group: L1091958
 Samples Received: 04/24/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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W-MW-02-042319 L1091958-01 GW

Collected by KZ/BH
Collected date/time 04/23/19 07:45
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273427	1	04/30/19 17:24	04/30/19 17:24	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271082	1	04/24/19 23:40	04/24/19 23:40	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1271096	1	04/24/19 17:57	04/24/19 17:57	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271171	20	04/27/19 14:10	05/07/19 00:48	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 15:43	04/25/19 15:43	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271298	1	04/26/19 14:48	04/26/19 14:48	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1273649	20	04/30/19 14:04	04/30/19 14:04	MBF	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 17:28	04/25/19 17:28	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1274056	10	05/01/19 02:42	05/01/19 02:42	JHH	Mt. Juliet, TN

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

BB-8-042319 L1091958-02 GW

Collected by KZ/BH
Collected date/time 04/23/19 10:05
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273427	1	04/30/19 17:31	04/30/19 17:31	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271082	1	04/25/19 00:09	04/25/19 00:09	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1271096	1	04/24/19 18:18	04/24/19 18:18	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271171	1	04/27/19 14:10	05/06/19 00:10	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 16:07	04/25/19 16:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271298	1	04/26/19 14:51	04/26/19 14:51	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 17:48	04/25/19 17:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1274056	1	05/01/19 01:36	05/01/19 01:36	JHH	Mt. Juliet, TN

MW-155-042319 L1091958-03 GW

Collected by KZ/BH
Collected date/time 04/23/19 11:45
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 16:31	04/25/19 16:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 18:09	04/25/19 18:09	BMB	Mt. Juliet, TN

MW144-042319 L1091958-04 GW

Collected by KZ/BH
Collected date/time 04/23/19 14:05
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273427	1	04/30/19 17:37	04/30/19 17:37	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271082	1	04/25/19 00:23	04/25/19 00:23	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271082	5	04/25/19 00:37	04/25/19 00:37	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1271096	1	04/24/19 19:53	04/24/19 19:53	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271171	1	04/27/19 14:10	05/06/19 00:14	LAT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271171	10	04/27/19 14:10	05/07/19 00:53	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 16:55	04/25/19 16:55	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1271298	1	04/26/19 14:56	04/26/19 14:56	MEL	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1274563	20	05/02/19 08:44	05/02/19 08:44	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 18:29	04/25/19 18:29	BMB	Mt. Juliet, TN

TRIP BLANK-042319 L1091958-05 GW

Collected by KZ/BH
Collected date/time 04/23/19 00:00
Received date/time 04/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1271515	1	04/25/19 12:56	04/25/19 12:56	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 16:08	04/25/19 16:08	BMB	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	799000		2710	20000	1	04/30/2019 17:24	WG1273427

Sample Narrative:

L1091958-01 WG1273427: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	86700		51.9	1000	1	04/24/2019 23:40	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 23:40	WG1271082
Sulfate	U		77.4	5000	1	04/24/2019 23:40	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	26100		102	1000	1	04/24/2019 17:57	WG1271096

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	13400		300	2000	20	05/07/2019 00:48	WG1271171
Manganese	3430		5.00	100	20	05/07/2019 00:48	WG1271171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	429		31.6	100	1	04/25/2019 15:43	WG1271515
(S) <i>o,a,o</i> -Trifluorotoluene(FID)	111			78.0-120		04/25/2019 15:43	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	10600		5.74	13.6	20	04/30/2019 14:04	WG1273649
Ethane	45.2		0.296	1.29	1	04/26/2019 14:48	WG1271298
Ethene	37.4		0.422	1.27	1	04/26/2019 14:48	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.25	J J0 J3 J4	1.05	25.0	1	04/25/2019 17:28	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 17:28	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 17:28	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 17:28	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 17:28	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 17:28	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 17:28	WG1271705
Bromomethane	U	J0	0.157	2.50	1	04/25/2019 17:28	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 17:28	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 17:28	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 17:28	WG1271705
Carbon disulfide	0.160	J	0.101	0.500	1	04/25/2019 17:28	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 17:28	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 07:45

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 17:28	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 17:28	WG1271705
Chloroethane	U	<u>JO</u>	0.141	2.50	1	04/25/2019 17:28	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 17:28	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 17:28	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 17:28	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 17:28	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 17:28	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 17:28	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 17:28	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 17:28	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 17:28	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 17:28	WG1271705
1,1-Dichloroethene	1.96		0.188	0.500	1	04/25/2019 17:28	WG1271705
cis-1,2-Dichloroethene	672		0.933	5.00	10	05/01/2019 02:42	WG1274056
trans-1,2-Dichloroethene	2.35		0.152	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 17:28	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 17:28	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 17:28	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 17:28	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 17:28	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 17:28	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 17:28	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 17:28	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 17:28	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 17:28	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 17:28	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 17:28	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 17:28	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 17:28	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 17:28	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 17:28	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 17:28	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 17:28	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 17:28	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 17:28	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 17:28	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 17:28	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 17:28	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 17:28	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 17:28	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 17:28	WG1271705
Toluene	0.560		0.412	0.500	1	04/25/2019 17:28	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 17:28	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 17:28	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 17:28	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 17:28	WG1271705
Trichloroethene	40.1		0.153	0.500	1	04/25/2019 17:28	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 17:28	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 17:28	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 17:28	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 17:28	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 17:28	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 07:45

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 17:28	WG1271705
Vinyl chloride	81.0	<u>JO</u>	0.118	0.500	1	04/25/2019 17:28	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 17:28	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 17:28	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 02:42	WG1274056
(S) 4-Bromofluorobenzene	106			77.0-126		04/25/2019 17:28	WG1271705
(S) 4-Bromofluorobenzene	99.6			77.0-126		05/01/2019 02:42	WG1274056
(S) 1,2-Dichloroethane-d4	93.5			70.0-130		04/25/2019 17:28	WG1271705
(S) 1,2-Dichloroethane-d4	100			70.0-130		05/01/2019 02:42	WG1274056

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	227000		2710	20000	1	04/30/2019 17:31	WG1273427

Sample Narrative:

L1091958-02 WG1273427: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28100		51.9	1000	1	04/25/2019 00:09	WG1271082
Nitrate	2770		22.7	100	1	04/25/2019 00:09	WG1271082
Sulfate	44400		77.4	5000	1	04/25/2019 00:09	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2710	<u>B</u>	102	1000	1	04/24/2019 18:18	WG1271096

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	315		15.0	100	1	05/06/2019 00:10	WG1271171
Manganese	63.7		0.250	5.00	1	05/06/2019 00:10	WG1271171

Volatile Organic Compounds (GC) by Method NWTPHGX

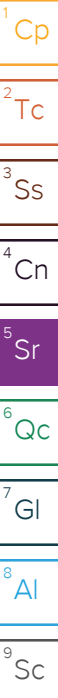
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 16:07	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	112			78.0-120		04/25/2019 16:07	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	04/26/2019 14:51	WG1271298
Ethane	U		0.296	1.29	1	04/26/2019 14:51	WG1271298
Ethene	U		0.422	1.27	1	04/26/2019 14:51	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.03	<u>J J0 J3 J4</u>	1.05	25.0	1	04/25/2019 17:48	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 17:48	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 17:48	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 17:48	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 17:48	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 17:48	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 17:48	WG1271705
Bromomethane	U	<u>J0</u>	0.157	2.50	1	04/25/2019 17:48	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 17:48	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 17:48	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 17:48	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 17:48	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 17:48	WG1271705





Collected date/time: 04/23/19 10:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 17:48	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 17:48	WG1271705
Chloroethane	U	<u>JO</u>	0.141	2.50	1	04/25/2019 17:48	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 17:48	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 17:48	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 17:48	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 17:48	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 17:48	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 17:48	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 17:48	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 17:48	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 17:48	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 17:48	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 17:48	WG1271705
cis-1,2-Dichloroethene	7.57		0.0933	0.500	1	05/01/2019 01:36	WG1274056
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 17:48	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 17:48	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 17:48	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 17:48	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 17:48	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 17:48	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 17:48	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 17:48	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 17:48	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 17:48	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 17:48	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 17:48	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 17:48	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 17:48	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 17:48	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 17:48	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 17:48	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 17:48	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 17:48	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 17:48	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 17:48	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 17:48	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 17:48	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 17:48	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 17:48	WG1271705
Tetrachloroethene	48.8		0.199	0.500	1	04/25/2019 17:48	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 17:48	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 17:48	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 17:48	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 17:48	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 17:48	WG1271705
Trichloroethene	9.09		0.153	0.500	1	04/25/2019 17:48	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 17:48	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 17:48	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 17:48	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 17:48	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 17:48	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 10:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	04/25/2019 17:48	WG1271705
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/25/2019 17:48	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 17:48	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 17:48	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 01:36	WG1274056
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 17:48	WG1271705
(S) 4-Bromofluorobenzene	101			77.0-126		05/01/2019 01:36	WG1274056
(S) 1,2-Dichloroethane-d4	108			70.0-130		04/25/2019 17:48	WG1271705
(S) 1,2-Dichloroethane-d4	102			70.0-130		05/01/2019 01:36	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 11:45

L1091958

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 16:31	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 16:31	WG1271515

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.86	J JO J3 J4	1.05	25.0	1	04/25/2019 18:09	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 18:09	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 18:09	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 18:09	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 18:09	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 18:09	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 18:09	WG1271705
Bromomethane	U	JO	0.157	2.50	1	04/25/2019 18:09	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 18:09	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 18:09	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 18:09	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 18:09	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 18:09	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 18:09	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 18:09	WG1271705
Chloroethane	U	JO	0.141	2.50	1	04/25/2019 18:09	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 18:09	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 18:09	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 18:09	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 18:09	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 18:09	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 18:09	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 18:09	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 18:09	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 18:09	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 18:09	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 18:09	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 18:09	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 18:09	WG1271705
1,1-Dichloroethene	0.249	J	0.188	0.500	1	04/25/2019 18:09	WG1271705
cis-1,2-Dichloroethene	71.9		0.0933	0.500	1	04/25/2019 18:09	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 18:09	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 18:09	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 18:09	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 18:09	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 18:09	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 18:09	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 18:09	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 18:09	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 18:09	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 18:09	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 18:09	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 18:09	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 18:09	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 18:09	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 18:09	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 18:09	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 18:09	WG1271705

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 11:45

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 18:09	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 18:09	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 18:09	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 18:09	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 18:09	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 18:09	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 18:09	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 18:09	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 18:09	WG1271705
Tetrachloroethene	14.6		0.199	0.500	1	04/25/2019 18:09	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 18:09	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 18:09	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 18:09	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 18:09	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 18:09	WG1271705
Trichloroethene	4.75		0.153	0.500	1	04/25/2019 18:09	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 18:09	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 18:09	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 18:09	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 18:09	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 18:09	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 18:09	WG1271705
Vinyl chloride	6.54	<u>JO</u>	0.118	0.500	1	04/25/2019 18:09	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 18:09	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 18:09	WG1271705
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 18:09	WG1271705
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		04/25/2019 18:09	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	733000		2710	20000	1	04/30/2019 17:37	WG1273427

Sample Narrative:

L1091958-04 WG1273427: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	144000		260	5000	5	04/25/2019 00:37	WG1271082
Nitrate	U		22.7	100	1	04/25/2019 00:23	WG1271082
Sulfate	U		77.4	5000	1	04/25/2019 00:23	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	11400		102	1000	1	04/24/2019 19:53	WG1271096

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1220		15.0	100	1	05/06/2019 00:14	WG1271171
Manganese	1480		2.50	50.0	10	05/07/2019 00:53	WG1271171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 16:55	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 16:55	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	13000		5.74	13.6	20	05/02/2019 08:44	WG1274563
Ethane	771		0.296	1.29	1	04/26/2019 14:56	WG1271298
Ethene	699		0.422	1.27	1	04/26/2019 14:56	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.38	J J0 J3 J4	1.05	25.0	1	04/25/2019 18:29	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 18:29	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 18:29	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 18:29	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 18:29	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 18:29	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 18:29	WG1271705
Bromomethane	U	J0	0.157	2.50	1	04/25/2019 18:29	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 18:29	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 18:29	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 18:29	WG1271705
Carbon disulfide	0.210	J	0.101	0.500	1	04/25/2019 18:29	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 18:29	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 14:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 18:29	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 18:29	WG1271705
Chloroethane	U	JO	0.141	2.50	1	04/25/2019 18:29	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 18:29	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 18:29	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 18:29	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 18:29	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 18:29	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 18:29	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 18:29	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 18:29	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 18:29	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 18:29	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 18:29	WG1271705
cis-1,2-Dichloroethene	4.09		0.0933	0.500	1	04/25/2019 18:29	WG1271705
trans-1,2-Dichloroethene	0.472	J	0.152	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 18:29	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 18:29	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 18:29	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 18:29	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 18:29	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 18:29	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 18:29	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 18:29	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 18:29	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 18:29	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 18:29	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 18:29	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 18:29	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 18:29	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 18:29	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 18:29	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 18:29	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 18:29	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 18:29	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 18:29	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 18:29	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 18:29	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 18:29	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 18:29	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 18:29	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 18:29	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 18:29	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 18:29	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 18:29	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 18:29	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 18:29	WG1271705
Trichloroethene	0.158	J	0.153	0.500	1	04/25/2019 18:29	WG1271705
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/25/2019 18:29	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 18:29	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 18:29	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 18:29	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 18:29	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 14:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 18:29	WG1271705
Vinyl chloride	7.30	<u>JO</u>	0.118	0.500	1	04/25/2019 18:29	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 18:29	WG1271705
<i>(S) Toluene-d8</i>	101			80.0-120		04/25/2019 18:29	WG1271705
<i>(S) 4-Bromofluorobenzene</i>	104			77.0-126		04/25/2019 18:29	WG1271705
<i>(S) 1,2-Dichloroethane-d4</i>	95.9			70.0-130		04/25/2019 18:29	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 00:00

L1091958

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 12:56	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 12:56	WG1271515

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	J3 J4	1.05	25.0	1	04/25/2019 16:08	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 16:08	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 16:08	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 16:08	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 16:08	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 16:08	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 16:08	WG1271705
Bromomethane	U	JO	0.157	2.50	1	04/25/2019 16:08	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 16:08	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 16:08	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 16:08	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 16:08	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 16:08	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 16:08	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 16:08	WG1271705
Chloroethane	U	JO	0.141	2.50	1	04/25/2019 16:08	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 16:08	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 16:08	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 16:08	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 16:08	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 16:08	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 16:08	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 16:08	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 16:08	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 16:08	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 16:08	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 16:08	WG1271705
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/25/2019 16:08	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 16:08	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 16:08	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 16:08	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 16:08	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 16:08	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 16:08	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 16:08	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 16:08	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 16:08	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 16:08	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 16:08	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 16:08	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 16:08	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 16:08	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 16:08	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 16:08	WG1271705

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 00:00

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 16:08	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 16:08	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 16:08	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 16:08	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 16:08	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 16:08	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 16:08	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 16:08	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 16:08	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 16:08	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 16:08	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 16:08	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 16:08	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 16:08	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 16:08	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 16:08	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 16:08	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 16:08	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 16:08	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 16:08	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 16:08	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 16:08	WG1271705
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/25/2019 16:08	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 16:08	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 16:08	WG1271705
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 16:08	WG1271705
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		04/25/2019 16:08	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3406989-1 04/30/19 16:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	3360	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1091944-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1091944-01 04/30/19 16:47 • (DUP) R3406989-2 04/30/19 16:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	302000	304000	1	0.663		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1092381-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1092381-01 04/30/19 19:25 • (DUP) R3406989-4 04/30/19 19:32

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	1540000	1520000	1	1.19		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3406989-3 04/30/19 17:52

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	102000	102	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3405147-1 04/24/19 16:57

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	26.3	J	22.7	100
Sulfate	U		77.4	5000

L1091917-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1091917-03 04/24/19 18:23 • (DUP) R3405147-3 04/24/19 18:37

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Chloride	8410	8430	1	0.285				15
Nitrate	893	900	1	0.714				15
Sulfate	7530	7540	1	0.0770				15

L1091941-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1091941-04 04/24/19 21:44 • (DUP) R3405147-6 04/24/19 21:59

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Chloride	U	0.000	1	0.000				15
Nitrate	U	0.000	1	0.000				15
Sulfate	U	0.000	1	0.000				15

Laboratory Control Sample (LCS)

(LCS) R3405147-2 04/24/19 17:12

Analyte	Spike Amount		LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	ug/l		%	%	
Chloride	40000	40200	101	80.0-120		
Nitrate	8000	8290	104	80.0-120		
Sulfate	40000	41100	103	80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1091917-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1091917-03 04/24/19 18:23 • (MS) R3405147-4 04/24/19 18:51 • (MSD) R3405147-5 04/24/19 19:06

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	8410	58800	58300	101	99.7	1	80.0-120	1		0.943	15
Nitrate	5000	893	5880	5830	99.6	98.7	1	80.0-120	1		0.777	15
Sulfate	50000	7530	57300	56700	99.5	98.4	1	80.0-120	1		0.931	15

L1091941-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1091941-04 04/24/19 21:44 • (MS) R3405147-7 04/24/19 22:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	U	50700	101	1	80.0-120	
Nitrate	5000	U	5050	101	1	80.0-120	
Sulfate	50000	U	50400	101	1	80.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3405166-1 04/24/19 15:02	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	485	<u>1</u>	102	1000

L1091944-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1091944-05 04/24/19 17:18 • (DUP) R3405166-3 04/24/19 17:39	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	117000	121000	5	277		20

Laboratory Control Sample (LCS)

(LCS) R3405166-2 04/24/19 15:38	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	70300	93.7	85.0-115	

L1091958-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1091958-04 04/24/19 19:53 • (MS) R3405166-4 04/24/19 20:12 • (MSD) R3405166-5 04/24/19 20:31	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
TOC (Total Organic Carbon)	50000	11400	59200	58100	95.5	93.3	1	80.0-120			1.83	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3406516-1 04/30/19 00:01				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	LCS		LCSD		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
Analyte	Spike Amount	LCSD Result	LCSD Result	LCSD Result	%	%	%	%	%	%	%	%
(LCS) R3406516-2 04/30/19 00:06 • (LCSD) R3406516-3 04/30/19 00:12												
Iron	500	480	486	96.1	97.1	80.0-120	1.12	20				
Manganese	50.0	45.7	46.5	91.3	93.0	80.0-120	1.80	20				

L1092138-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	OS		MS		MSD		Rec. Limits		MS Qualifier		MSD Qualifier		RPD	
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	%	%	%	%	%	%	%	%
(OS) L1092138-03 04/30/19 00:17 • (MS) R3406516-5 04/30/19 00:28 • (MSD) R3406516-6 04/30/19 00:33														
Iron	500	369	842	869	94.6	100	75.0-125	3.23	20					
Manganese	50.0	17.0	62.8	65.9	91.6	97.9	75.0-125	4.85	20					

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L1091958-01.02.03.04.05](#)

Method Blank (MB)

(MB) R3405596-2 04/25/19 09:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	111			78.0-120

^(S) <i>a,a</i> -Trifluorotoluene(FID)	111			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3405596-1 04/25/19 08:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5310	96.5	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	

^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	
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Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc- WA

PROJECT:

1413.001.05.601

SDG:

L1091958

DATE/TIME:

05/08/19 13:53

PAGE:

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Volatile Organic Compounds (GC) by Method RSK175

[L1091958-01.02.04](#)

Method Blank (MB)

(MB) R3405886-1 04/26/19 13:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1091915-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1091915-02 04/26/19 13:40 • (DUP) R3405886-2 04/26/19 14:13

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	248	245	1	1.48			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

L1091952-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1091952-01 04/26/19 14:46 • (DUP) R3405886-3 04/26/19 15:02

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	ND	0.000	1	0.000			20
Ethane	ND	0.000	1	0.000			20
Ethene	ND	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3405886-4 04/26/19 15:04 • (LCSD) R3405886-5 04/26/19 15:10

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Methane	67.8	75.7	76.9	112	113			85.0-115			1.59	20								
Ethane	129	121	119	93.4	92.5			85.0-115			0.991	20								
Ethene	127	120	121	94.1	95.5			85.0-115			1.51	20								



Volatile Organic Compounds (GC) by Method RSK175

[L1091958-01](#)

Method Blank (MB)

(MB) R3406766-1 04/30/19 13:42			
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l
Methane	U	0.287	0.678

L1092207-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1092207-05 04/30/19 14:07 • (DUP) R3406766-2 04/30/19 14:40			
Original Result	DUP Result	Dilution	DUP RPD
Analyte	ug/l	ug/l	%
Methane	U	0.000	0.000
			DUP RPD Limits
			20

L1092404-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1092404-03 04/30/19 14:51 • (DUP) R3406766-3 04/30/19 15:31			
Original Result	DUP Result	Dilution	DUP RPD
Analyte	ug/l	ug/l	%
Methane	U	0.000	0.000
			DUP RPD Limits
			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3406766-4 04/30/19 15:33 • (LCSD) R3406766-5 04/30/19 15:37			
Spike Amount	LCS Result	LCSD Result	LCS Rec.
Analyte	ug/l	ug/l	%
Methane	67.8	76.5	113
			LCSD Rec. %
			114
			Rec. Limits %
			85.0-115
			<u>LCS Qualifier</u>
			<u>LCSD Qualifier</u>
			RPD %
			1.40
			RPD Limits %
			20

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Volatile Organic Compounds (GC) by Method RSK175

[L1091958-04](#)

Method Blank (MB)

(MB) R3407462-1 05/02/19 08:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Methane	U	ug/l	0.287	0.678

L1092426-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1092426-09 05/02/19 09:09 • (DUP) R3407462-2 05/02/19 10:16

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Methane	U	ug/l	1	0.000	%	20

L1092440-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1092440-05 05/02/19 11:12 • (DUP) R3407462-3 05/02/19 11:36

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Methane	1720	ug/l	1	0.589	%	20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3407462-4 05/02/19 11:40 • (LCSD) R3407462-5 05/02/19 11:52

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits				
Methane	67.8	ug/l	77.2	ug/l	77.1	%	114	%	114	%	85.0-115	0.205	%	20

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Method Blank (MB)

(MB) R3406794-3 04/25/19 10:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3406794-3 04/25/19 10:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.239	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	101			80.0-120
(S) 4-Bromofluorobenzene	105			77.0-126
(S) 1,2-Dichloroethane-d4	94.7			70.0-130

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3406794-1 04/25/19 09:03 • (LCSD) R3406794-2 04/25/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	205	144	164	115	19.0-160	J4	J3	34.8	27
Acrylonitrile	125	160	156	128	125	55.0-149			2.36	20
Benzene	25.0	26.0	26.1	104	104	70.0-123			0.383	20
Bromobenzene	25.0	23.4	23.6	93.5	94.5	73.0-121			1.10	20
Bromodichloromethane	25.0	22.3	22.3	89.3	89.2	75.0-120			0.142	20
Bromochloromethane	25.0	23.5	23.3	94.2	93.0	76.0-122			1.20	20
Bromoform	25.0	26.4	27.0	106	108	68.0-132			2.26	20
Bromomethane	25.0	17.7	17.6	70.8	70.5	10.0-160			0.433	25
n-Butylbenzene	25.0	23.2	22.8	92.7	91.2	73.0-125			1.67	20
sec-Butylbenzene	25.0	23.9	23.3	95.6	93.1	75.0-125			2.69	20
tert-Butylbenzene	25.0	24.5	24.0	98.0	96.1	76.0-124			1.94	20
Carbon disulfide	25.0	28.4	31.0	113	124	61.0-128			8.82	20
Carbon tetrachloride	25.0	23.9	23.9	95.5	95.5	68.0-126			0.0359	20
Chlorobenzene	25.0	24.0	24.2	96.1	96.6	80.0-121			0.523	20
Chlorodibromomethane	25.0	23.5	24.0	94.2	96.0	77.0-125			1.90	20
Chloroethane	25.0	15.0	17.2	60.1	69.0	47.0-150			13.7	20
Chloroform	25.0	22.0	21.9	87.8	87.8	73.0-120			0.0352	20
Chloromethane	25.0	26.3	26.2	105	105	41.0-142			0.338	20
2-Chlorotoluene	25.0	23.1	22.8	92.6	91.0	76.0-123			1.66	20
4-Chlorotoluene	25.0	23.4	23.2	93.5	93.0	75.0-122			0.522	20
1,2-Dibromo-3-Chloropropane	25.0	28.4	27.7	114	111	58.0-134			2.76	20
1,2-Dibromoethane	25.0	23.3	23.7	93.0	94.8	80.0-122			1.90	20
Dibromomethane	25.0	22.7	22.5	90.7	90.0	80.0-120			0.716	20
1,2-Dichlorobenzene	25.0	23.9	23.4	95.5	93.5	79.0-121			2.08	20
1,3-Dichlorobenzene	25.0	23.5	23.2	94.0	93.0	79.0-120			1.05	20
1,4-Dichlorobenzene	25.0	22.7	22.5	91.0	89.9	79.0-120			1.15	20
Dichlorodifluoromethane	25.0	26.3	26.2	105	105	51.0-149			0.238	20
1,1-Dichloroethane	25.0	24.8	24.6	99.4	98.3	70.0-126			1.12	20
1,2-Dichloroethane	25.0	20.8	20.8	83.1	83.1	70.0-128			0.0641	20
1,1-Dichloroethene	25.0	25.0	25.4	100	102	71.0-124			1.62	20
cis-1,2-Dichloroethene	25.0	23.9	23.7	95.7	94.7	73.0-120			1.11	20
trans-1,2-Dichloroethene	25.0	24.9	24.9	99.6	99.4	73.0-120			0.115	20
1,2-Dichloropropane	25.0	26.5	26.5	106	106	77.0-125			0.267	20
1,1-Dichloropropene	25.0	24.9	24.8	99.4	99.1	74.0-126			0.298	20
1,3-Dichloropropene	25.0	24.6	25.1	98.6	100	80.0-120			1.86	20
cis-1,3-Dichloropropene	25.0	24.0	24.2	96.2	96.7	80.0-123			0.513	20
trans-1,3-Dichloropropene	25.0	23.3	23.5	93.2	94.1	78.0-124			0.936	20
trans-1,4-Dichloro-2-butene	25.0	20.7	19.7	83.0	78.6	33.0-144			5.42	20
2,2-Dichloropropane	25.0	32.0	31.4	128	126	58.0-130			2.05	20
Diisopropyl ether	25.0	27.7	27.6	111	110	58.0-138			0.601	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3406794-1 04/25/19 09:03 • (LCSD) R3406794-2 04/25/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.4	24.7	97.5	98.9	79.0-123			1.46	20
Hexachloro-1,3-butadiene	25.0	31.2	30.4	125	122	54.0-138			2.57	20
2-Hexanone	125	147	146	117	117	67.0-149			0.700	20
n-Hexane	25.0	29.2	28.6	117	114	57.0-133			2.29	20
Iodomethane	125	134	128	107	102	33.0-147			4.64	26
Isopropylbenzene	25.0	25.6	26.1	103	104	76.0-127			1.66	20
p-Isopropyltoluene	25.0	24.2	23.8	96.8	95.1	76.0-125			1.85	20
2-Butanone (MEK)	125	165	156	132	125	44.0-160			5.34	20
Methylene Chloride	25.0	24.7	24.5	98.8	98.1	67.0-120			0.726	20
4-Methyl-2-pentanone (MIBK)	125	143	142	114	114	68.0-142			0.369	20
Methyl tert-butyl ether	25.0	23.7	23.4	94.7	93.6	68.0-125			1.16	20
Naphthalene	25.0	25.1	24.5	100	98.1	54.0-135			2.40	20
n-Propylbenzene	25.0	23.0	23.0	92.1	91.9	77.0-124			0.261	20
Styrene	25.0	26.6	27.4	106	110	73.0-130			3.12	20
1,1,1,2-Tetrachloroethane	25.0	24.1	24.0	96.2	96.2	75.0-125			0.0553	20
1,1,2,2-Tetrachloroethane	25.0	22.8	22.7	91.3	90.8	65.0-130			0.553	20
1,1,2-Trichlorotrifluoroethane	25.0	23.4	24.1	93.6	96.5	69.0-132			3.14	20
Tetrachloroethene	25.0	25.8	25.8	103	103	72.0-132			0.287	20
Toluene	25.0	25.9	26.1	103	104	79.0-120			0.981	20
1,2,3-Trichlorobenzene	25.0	25.7	24.4	103	97.5	50.0-138			5.36	20
1,2,4-Trichlorobenzene	25.0	26.6	25.2	107	101	57.0-137			5.53	20
1,1,1-Trichloroethane	25.0	23.7	23.8	94.9	95.3	73.0-124			0.433	20
1,1,2-Trichloroethane	25.0	22.8	22.6	91.3	90.4	80.0-120			0.971	20
Trichloroethene	25.0	25.1	25.2	100	101	78.0-124			0.572	20
Trichlorofluoromethane	25.0	15.2	16.5	60.9	65.9	59.0-147			7.93	20
1,2,3-Trichloropropane	25.0	21.1	20.9	84.4	83.5	73.0-130			1.11	20
1,2,4-Trimethylbenzene	25.0	22.8	22.6	91.2	90.5	76.0-121			0.774	20
1,2,3-Trimethylbenzene	25.0	22.4	21.8	89.8	87.2	77.0-120			2.96	20
1,3,5-Trimethylbenzene	25.0	23.4	22.6	93.5	90.5	76.0-122			3.16	20
Vinyl acetate	125	119	120	95.4	95.7	11.0-160			0.361	20
Vinyl chloride	25.0	17.8	17.9	71.3	71.7	67.0-131			0.499	20
Xylenes, Total	75.0	74.9	75.0	99.9	100	79.0-123			0.133	20
(S) Toluene-d8				101	100	80.0-120				
(S) 4-Bromofluorobenzene				105	107	77.0-126				
(S) 1,2-Dichloroethane-d4				92.7	99.9	70.0-130				

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1091958-01.02](#)

Method Blank (MB)

(MB) R3406890-2 05/01/19 01:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
(S) Toluene-d8	104		120	80.0-120
(S) 4-Bromofluorobenzene	98.3		100	77.0-126
(S) 1,2-Dichloroethane-d4	102		103	70.0-130

Laboratory Control Sample (LCS)

(LCS) R3406890-1 05/01/19 00:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	29.9	120	73.0-120	
(S) Toluene-d8			102	80.0-120	
(S) 4-Bromofluorobenzene			100	77.0-126	
(S) 1,2-Dichloroethane-d4			103	70.0-130	

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier	Description
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B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.



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* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

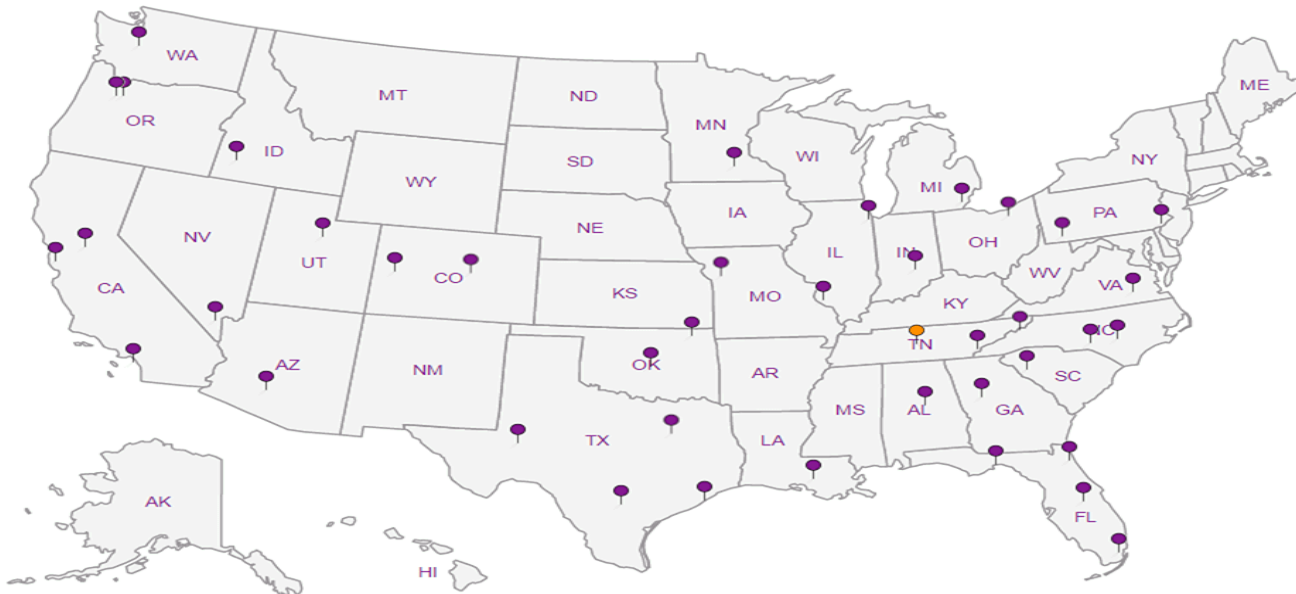
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com; kspriestead@pesenv.com; bhaldeman@pesenv.com

Project Description: **American Linen**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.05.601

City/State Collected:
Seattle, WA

Lab Project #
PESENVSWA-ALP

Collected by (print):
Ben Heckl / K. Eggs

Site/Facility ID #
Amussen Linen

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Quote #

Immediately Packed on ice N Y

Date Results Needed

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

Analysis / Container / Preservative

Pres Chk

Chain of Custody

Page 1 of 1

Page 1 of 1

Page 1 of 1

Page 1 of 1

Page 1 of 1

NWTPHGX 40ml Amb HCl

VOCs (V8260LLC) 40ml Amb-HCl

RSK-175 Low Level

Alkalinity

ICPMS - Fe/Mn/Cr

IC - Chloride / Nitrate

TOC

12055 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# **L1011958**

Table #

Accnum: **PESENVSWA**

Template: **T146397**

Prelogin: **P694557**

TSR: **110 - Brian Ford**

PB: **2/15/19mc**

Shipped Via: **FedEX Ground**

Remarks

Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative	Pres Chk	Chain of Custody	Page 1 of 1
WW-103-042219	Grab	GW	108	4-22-19		3				
MMH-012219	Grab	GW	75	4-22-19		3				
W-MW-02-042319		GW	75	4-23-19		12				
MMW04-042319		GW	75			12				
B3-8-042319		GW	35			12				
MMW105-042319		GW	135			12				
MMW-155-042319		GW	25			12				
MMW147-042319		GW	75			12				
MMW144-042319		GW	45			12				
TRIP BLANK-042319		GW				12				

Remarks: **TR 2 QA/QC for all**

Matrix: **AIR - Air F - Filter**
SS - Soil
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
 UPS FedEx Courier

pH _____ Temp _____
Flow _____ Other _____

Sample Receipt Checklist
COC Seal Present/Intact: NP Y
COC Signed/Accurate: NP Y
Bottles arrive intact: NP Y
Correct bottles used: NP Y
Sufficient volume sent: NP Y
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature) *[Signature]* Date: **23 April 2019** Time: **1500**

Received by: (Signature) *[Signature]* Date: **04-23-19** Time: **1700**

Temp: **09.20-0.98-4** °C
Bottles Received: **48**

Hold: NCF OK

Relinquished by: (Signature) *[Signature]* Date: **04-23-19** Time: **1700**

Received for lab by: (Signature) *[Signature]*

Date: **4/24/19** Time: **0845**

Condition: OK

Brian Ford

From: Kim Vilk <KVilk@pesenv.com>
Sent: Wednesday, April 24, 2019 11:51 AM
To: Brian Ford
Cc: Bill Haldeman; Karsten Springstead
Subject: American Linen - Groundwater Samples - COC - CORRECTION
Attachments: COC_20190424.pdf

Importance: High

Hi Brian,
I was reviewing the COC for the samples that were shipped to you yesterday (see attached) and I need to make some corrections. They are shown on the mark up attached, but will write them here too:

Sample MW-155-042319 should be analyzed for VOCs and gasoline only
Sample MW103-042219 should be analyzed for VOCs only
Sample MW111-042219 should be analyzed for VOCs only
Sample MW104-042319 should also be analyzed for gasoline (add that analysis)
Sample MW105-042319 should also be analyzed for gasoline (add that analysis)
Sample MW147-042319 should also be analyzed for gasoline (add that analysis)

Let me know if you have any questions.

Thanks!

Kim Vilk, L.G.
Senior Geologist

PES Environmental, Inc.
1215 Fourth Avenue, Suite 1350
Seattle, Washington 98161-1012
kvilk@pesenv.com

Office: (206) 529-3980, Ext. 110



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	799000		2710	20000	1	04/30/2019 17:24	WG1273427

Sample Narrative:

L1091958-01 WG1273427: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	86700		51.9	1000	1	04/24/2019 23:40	WG1271082
Nitrate	U		22.7	100	1	04/24/2019 23:40	WG1271082
Sulfate	U		77.4	5000	1	04/24/2019 23:40	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	26100		102	1000	1	04/24/2019 17:57	WG1271096

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	13400		300	2000	20	05/07/2019 00:48	WG1271171
Manganese	3430		5.00	100	20	05/07/2019 00:48	WG1271171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	429	J+	31.6	100	1	04/25/2019 15:43	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 15:43	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	10600		5.74	13.6	20	04/30/2019 14:04	WG1273649
Ethane	45.2		0.296	1.29	1	04/26/2019 14:48	WG1271298
Ethene	37.4		0.422	1.27	1	04/26/2019 14:48	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	2.25	J	J J0 J3 J4	1.05	25.0	1	04/25/2019 17:28	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 17:28	WG1271705	
Benzene	U		0.0896	0.500	1	04/25/2019 17:28	WG1271705	
Bromobenzene	U		0.133	0.500	1	04/25/2019 17:28	WG1271705	
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 17:28	WG1271705	
Bromochloromethane	U		0.145	0.500	1	04/25/2019 17:28	WG1271705	
Bromoform	U		0.186	0.500	1	04/25/2019 17:28	WG1271705	
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 17:28	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 17:28	WG1271705	
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 17:28	WG1271705	
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 17:28	WG1271705	
Carbon disulfide	0.160	J	J	0.101	0.500	1	04/25/2019 17:28	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 17:28	WG1271705	

JC 5/13/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/23/19 07:45

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 17:28	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 17:28	WG1271705
Chloroethane	U	UJ JO	0.141	2.50	1	04/25/2019 17:28	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 17:28	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 17:28	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 17:28	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 17:28	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 17:28	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 17:28	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 17:28	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 17:28	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 17:28	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 17:28	WG1271705
1,1-Dichloroethene	1.96		0.188	0.500	1	04/25/2019 17:28	WG1271705
cis-1,2-Dichloroethene	672		0.933	5.00	10	05/01/2019 02:42	WG1274056
trans-1,2-Dichloroethene	2.35		0.152	0.500	1	04/25/2019 17:28	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 17:28	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 17:28	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 17:28	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 17:28	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 17:28	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 17:28	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 17:28	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 17:28	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 17:28	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 17:28	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 17:28	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 17:28	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 17:28	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 17:28	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 17:28	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 17:28	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 17:28	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 17:28	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 17:28	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 17:28	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 17:28	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 17:28	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 17:28	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 17:28	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 17:28	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 17:28	WG1271705
Toluene	0.560		0.412	0.500	1	04/25/2019 17:28	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 17:28	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 17:28	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 17:28	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 17:28	WG1271705
Trichloroethene	40.1		0.153	0.500	1	04/25/2019 17:28	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 17:28	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 17:28	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 17:28	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 17:28	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 17:28	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 17:28	WG1271705
Vinyl chloride	81.0	J JO	0.118	0.500	1	04/25/2019 17:28	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 17:28	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 17:28	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 02:42	WG1274056
(S) 4-Bromofluorobenzene	106			77.0-126		04/25/2019 17:28	WG1271705
(S) 4-Bromofluorobenzene	99.6			77.0-126		05/01/2019 02:42	WG1274056
(S) 1,2-Dichloroethane-d4	93.5			70.0-130		04/25/2019 17:28	WG1271705
(S) 1,2-Dichloroethane-d4	100			70.0-130		05/01/2019 02:42	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	227000		2710	20000	1	04/30/2019 17:31	WG1273427

Sample Narrative:

L1091958-02 WG1273427: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	28100		51.9	1000	1	04/25/2019 00:09	WG1271082
Nitrate	2770		22.7	100	1	04/25/2019 00:09	WG1271082
Sulfate	44400		77.4	5000	1	04/25/2019 00:09	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2710	B	102	1000	1	04/24/2019 18:18	WG1271096

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	315		15.0	100	1	05/06/2019 00:10	WG1271171
Manganese	63.7		0.250	5.00	1	05/06/2019 00:10	WG1271171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 16:07	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	112			78.0-120		04/25/2019 16:07	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	04/26/2019 14:51	WG1271298
Ethane	U		0.296	1.29	1	04/26/2019 14:51	WG1271298
Ethene	U		0.422	1.27	1	04/26/2019 14:51	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	2.03	J	J J0 J3 J4	1.05	25.0	1	04/25/2019 17:48	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 17:48	WG1271705	
Benzene	U		0.0896	0.500	1	04/25/2019 17:48	WG1271705	
Bromobenzene	U		0.133	0.500	1	04/25/2019 17:48	WG1271705	
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 17:48	WG1271705	
Bromochloromethane	U		0.145	0.500	1	04/25/2019 17:48	WG1271705	
Bromoform	U		0.186	0.500	1	04/25/2019 17:48	WG1271705	
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 17:48	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 17:48	WG1271705	
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 17:48	WG1271705	
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 17:48	WG1271705	
Carbon disulfide	U		0.101	0.500	1	04/25/2019 17:48	WG1271705	
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 17:48	WG1271705	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/23/19 10:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 17:48	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 17:48	WG1271705
Chloroethane	U	UJ JO	0.141	2.50	1	04/25/2019 17:48	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 17:48	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 17:48	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 17:48	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 17:48	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 17:48	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 17:48	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 17:48	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 17:48	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 17:48	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 17:48	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 17:48	WG1271705
cis-1,2-Dichloroethene	7.57		0.0933	0.500	1	05/01/2019 01:36	WG1274056
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 17:48	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 17:48	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 17:48	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 17:48	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 17:48	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 17:48	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 17:48	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 17:48	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 17:48	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 17:48	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 17:48	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 17:48	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 17:48	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 17:48	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 17:48	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 17:48	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 17:48	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 17:48	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 17:48	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 17:48	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 17:48	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 17:48	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 17:48	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 17:48	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 17:48	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 17:48	WG1271705
Tetrachloroethene	48.8		0.199	0.500	1	04/25/2019 17:48	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 17:48	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 17:48	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 17:48	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 17:48	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 17:48	WG1271705
Trichloroethene	9.09		0.153	0.500	1	04/25/2019 17:48	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 17:48	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 17:48	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 17:48	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 17:48	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 17:48	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/23/19 10:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 17:48	WG1271705
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/25/2019 17:48	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 17:48	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 17:48	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 01:36	WG1274056
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 17:48	WG1271705
(S) 4-Bromofluorobenzene	101			77.0-126		05/01/2019 01:36	WG1274056
(S) 1,2-Dichloroethane-d4	108			70.0-130		04/25/2019 17:48	WG1271705
(S) 1,2-Dichloroethane-d4	102			70.0-130		05/01/2019 01:36	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/23/19 11:45

L1091958

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 16:31	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 16:31	WG1271515

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	1.86	J	J J0 J3 J4	1.05	25.0	1	04/25/2019 18:09	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 18:09	WG1271705	
Benzene	U		0.0896	0.500	1	04/25/2019 18:09	WG1271705	
Bromobenzene	U		0.133	0.500	1	04/25/2019 18:09	WG1271705	
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 18:09	WG1271705	
Bromochloromethane	U		0.145	0.500	1	04/25/2019 18:09	WG1271705	
Bromoform	U		0.186	0.500	1	04/25/2019 18:09	WG1271705	
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 18:09	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 18:09	WG1271705	
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 18:09	WG1271705	
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 18:09	WG1271705	
Carbon disulfide	U		0.101	0.500	1	04/25/2019 18:09	WG1271705	
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 18:09	WG1271705	
Chlorobenzene	U		0.140	0.500	1	04/25/2019 18:09	WG1271705	
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 18:09	WG1271705	
Chloroethane	U	UJ	J0	0.141	2.50	1	04/25/2019 18:09	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 18:09	WG1271705	
Chloromethane	U		0.153	1.25	1	04/25/2019 18:09	WG1271705	
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 18:09	WG1271705	
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 18:09	WG1271705	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 18:09	WG1271705	
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 18:09	WG1271705	
Dibromomethane	U		0.117	0.500	1	04/25/2019 18:09	WG1271705	
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 18:09	WG1271705	
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 18:09	WG1271705	
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 18:09	WG1271705	
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 18:09	WG1271705	
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 18:09	WG1271705	
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 18:09	WG1271705	
1,1-Dichloroethene	0.249	J	J	0.188	0.500	1	04/25/2019 18:09	WG1271705
cis-1,2-Dichloroethene	71.9		0.0933	0.500	1	04/25/2019 18:09	WG1271705	
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 18:09	WG1271705	
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 18:09	WG1271705	
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 18:09	WG1271705	
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 18:09	WG1271705	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 18:09	WG1271705	
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 18:09	WG1271705	
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 18:09	WG1271705	
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 18:09	WG1271705	
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 18:09	WG1271705	
Ethylbenzene	U		0.158	0.500	1	04/25/2019 18:09	WG1271705	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 18:09	WG1271705	
2-Hexanone	U		0.757	5.00	1	04/25/2019 18:09	WG1271705	
n-Hexane	U		0.305	5.00	1	04/25/2019 18:09	WG1271705	
Iodomethane	U		0.377	10.0	1	04/25/2019 18:09	WG1271705	
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 18:09	WG1271705	
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 18:09	WG1271705	
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 18:09	WG1271705	

JC 5/13/19



Collected date/time: 04/23/19 11:45

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 18:09	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 18:09	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 18:09	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 18:09	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 18:09	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 18:09	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 18:09	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 18:09	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 18:09	WG1271705
Tetrachloroethene	14.6		0.199	0.500	1	04/25/2019 18:09	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 18:09	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 18:09	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 18:09	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 18:09	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 18:09	WG1271705
Trichloroethene	4.75		0.153	0.500	1	04/25/2019 18:09	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 18:09	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 18:09	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 18:09	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 18:09	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 18:09	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 18:09	WG1271705
Vinyl chloride	6.54	J JO	0.118	0.500	1	04/25/2019 18:09	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 18:09	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 18:09	WG1271705
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 18:09	WG1271705
(S) 1,2-Dichloroethane-d4	93.4			70.0-130		04/25/2019 18:09	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
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JC 5/13/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	733000		2710	20000	1	04/30/2019 17:37	WG1273427

Sample Narrative:

L1091958-04 WG1273427: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	144000		260	5000	5	04/25/2019 00:37	WG1271082
Nitrate	U		22.7	100	1	04/25/2019 00:23	WG1271082
Sulfate	U		77.4	5000	1	04/25/2019 00:23	WG1271082

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	11400		102	1000	1	04/24/2019 19:53	WG1271096

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1220		15.0	100	1	05/06/2019 00:14	WG1271171
Manganese	1480		2.50	50.0	10	05/07/2019 00:53	WG1271171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 16:55	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 16:55	WG1271515

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	13000		5.74	13.6	20	05/02/2019 08:44	WG1274563
Ethane	771		0.296	1.29	1	04/26/2019 14:56	WG1271298
Ethene	699		0.422	1.27	1	04/26/2019 14:56	WG1271298

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	2.38	J	J J0 J3 J4	1.05	25.0	1	04/25/2019 18:29	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 18:29	WG1271705	
Benzene	U		0.0896	0.500	1	04/25/2019 18:29	WG1271705	
Bromobenzene	U		0.133	0.500	1	04/25/2019 18:29	WG1271705	
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 18:29	WG1271705	
Bromochloromethane	U		0.145	0.500	1	04/25/2019 18:29	WG1271705	
Bromoform	U		0.186	0.500	1	04/25/2019 18:29	WG1271705	
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 18:29	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 18:29	WG1271705	
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 18:29	WG1271705	
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 18:29	WG1271705	
Carbon disulfide	0.210	J	J	0.101	0.500	1	04/25/2019 18:29	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 18:29	WG1271705	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/23/19 14:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/25/2019 18:29	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 18:29	WG1271705
Chloroethane	U	UJ JO	0.141	2.50	1	04/25/2019 18:29	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 18:29	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 18:29	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 18:29	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 18:29	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 18:29	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 18:29	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 18:29	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 18:29	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 18:29	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 18:29	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 18:29	WG1271705
cis-1,2-Dichloroethene	4.09		0.0933	0.500	1	04/25/2019 18:29	WG1271705
trans-1,2-Dichloroethene	0.472	J U	0.152	0.500	1	04/25/2019 18:29	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 18:29	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 18:29	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 18:29	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 18:29	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 18:29	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 18:29	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 18:29	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 18:29	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 18:29	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 18:29	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 18:29	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 18:29	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 18:29	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 18:29	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 18:29	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 18:29	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 18:29	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 18:29	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 18:29	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 18:29	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 18:29	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 18:29	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 18:29	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 18:29	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 18:29	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 18:29	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 18:29	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 18:29	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 18:29	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 18:29	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 18:29	WG1271705
Trichloroethene	0.158	J U	0.153	0.500	1	04/25/2019 18:29	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 18:29	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 18:29	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 18:29	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 18:29	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 18:29	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/23/19 14:05

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 18:29	WG1271705
Vinyl chloride	7.30	J JO	0.118	0.500	1	04/25/2019 18:29	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 18:29	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 18:29	WG1271705
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 18:29	WG1271705
(S) 1,2-Dichloroethane-d4	95.9			70.0-130		04/25/2019 18:29	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/23/19 00:00

L1091958

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/25/2019 12:56	WG1271515
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/25/2019 12:56	WG1271515

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J3 J4	1.05	25.0	1	04/25/2019 16:08	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 16:08	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 16:08	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 16:08	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 16:08	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 16:08	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 16:08	WG1271705
Bromomethane	U	UJ JO	0.157	2.50	1	04/25/2019 16:08	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 16:08	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 16:08	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 16:08	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 16:08	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 16:08	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 16:08	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 16:08	WG1271705
Chloroethane	U	UJ JO	0.141	2.50	1	04/25/2019 16:08	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 16:08	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 16:08	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 16:08	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 16:08	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 16:08	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 16:08	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 16:08	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 16:08	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 16:08	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 16:08	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 16:08	WG1271705
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/25/2019 16:08	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 16:08	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 16:08	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 16:08	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 16:08	WG1271705 JC 5/13/19
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 16:08	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 16:08	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 16:08	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 16:08	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 16:08	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 16:08	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 16:08	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 16:08	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 16:08	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 16:08	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 16:08	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 16:08	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 16:08	WG1271705



Collected date/time: 04/23/19 00:00

L1091958

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 16:08	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 16:08	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 16:08	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 16:08	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 16:08	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 16:08	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 16:08	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 16:08	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 16:08	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 16:08	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 16:08	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 16:08	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 16:08	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 16:08	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 16:08	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 16:08	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 16:08	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 16:08	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 16:08	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 16:08	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 16:08	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 16:08	WG1271705
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/25/2019 16:08	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 16:08	WG1271705
(S) Toluene-d8	100			80.0-120		04/25/2019 16:08	WG1271705
(S) 4-Bromofluorobenzene	104			77.0-126		04/25/2019 16:08	WG1271705
(S) 1,2-Dichloroethane-d4	92.3			70.0-130		04/25/2019 16:08	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



ANALYTICAL REPORT

May 03, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

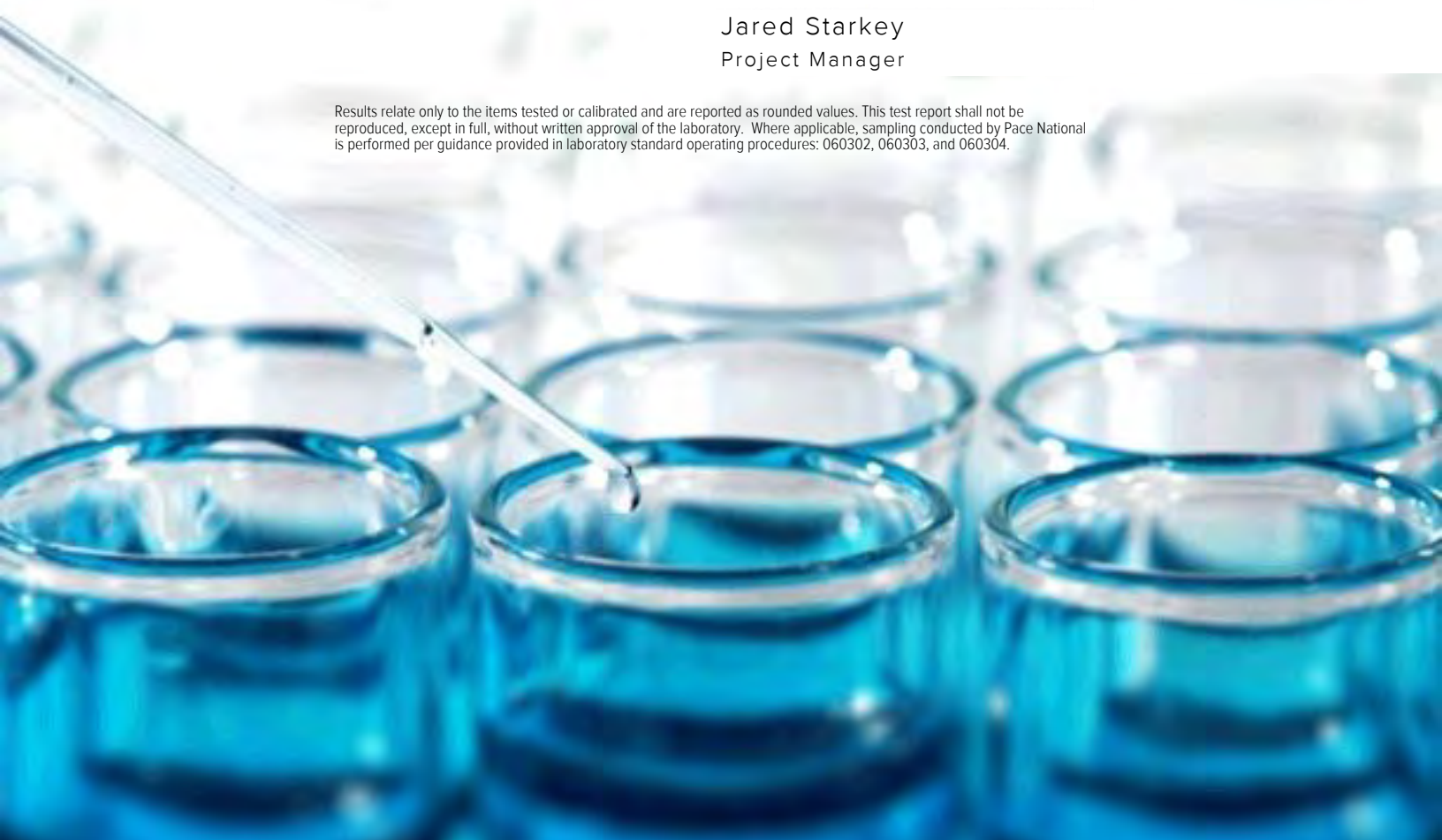
PES Environmental, Inc.- WA

Sample Delivery Group: L1092400
Samples Received: 04/25/2019
Project Number: 1413.001.05.601
Description: American Linen
Site: AMERICAN LINEN
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Jared Starkey
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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				Collected by	Collected date/time	Received date/time
MW-909-042419 L1092400-01 GW				Ben Hecht	04/24/19 08:00	04/25/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273429	1	04/30/19 14:55	04/30/19 14:55	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271706	1	04/26/19 02:48	04/26/19 02:48	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1272243	1	04/29/19 19:31	04/29/19 19:31	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271843	1	04/26/19 07:59	04/29/19 15:46	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271843	5	04/26/19 07:59	04/29/19 17:16	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1272107	1	04/26/19 02:05	04/26/19 02:05	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1272501	1	05/02/19 14:17	05/02/19 14:17	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 18:49	04/25/19 18:49	BMB	Mt. Juliet, TN

1
Cp

2
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Cn

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Sr

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Qc

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Gl

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Al

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Sc

				Collected by	Collected date/time	Received date/time
MW-146-042419 L1092400-02 GW				Ben Hecht	04/24/19 09:55	04/25/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273429	1	04/30/19 15:03	04/30/19 15:03	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271706	1	04/26/19 02:59	04/26/19 02:59	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1272243	1	04/29/19 19:49	04/29/19 19:49	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271843	5	04/26/19 07:59	04/29/19 17:21	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1272107	1	04/26/19 02:29	04/26/19 02:29	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1272501	1	05/02/19 14:20	05/02/19 14:20	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 19:09	04/25/19 19:09	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1274056	10	05/01/19 03:04	05/01/19 03:04	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW-154-042419 L1092400-03 GW				Ben Hecht	04/24/19 11:40	04/25/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1272107	1	04/26/19 02:53	04/26/19 02:53	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 19:29	04/25/19 19:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1274056	1	05/01/19 01:58	05/01/19 01:58	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW-153-042419 L1092400-04 GW				Ben Hecht	04/24/19 12:55	04/25/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1273429	1	04/30/19 15:10	04/30/19 15:10	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1271706	1	04/26/19 03:10	04/26/19 03:10	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1272243	1	04/29/19 20:49	04/29/19 20:49	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271843	5	04/26/19 07:59	04/29/19 17:27	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1272107	1	04/26/19 03:17	04/26/19 03:17	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1272501	1	05/02/19 15:36	05/02/19 15:36	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 19:49	04/25/19 19:49	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1274056	1	05/01/19 02:20	05/01/19 02:20	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
TRIP BLANK-042419 L1092400-05 GW				Ben Hecht	04/24/19 00:00	04/25/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1272107	1	04/26/19 01:41	04/26/19 01:41	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1271705	1	04/25/19 16:28	04/25/19 16:28	BMB	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Jared Starkey
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	170000		2710	20000	1	04/30/2019 14:55	WG1273429

Sample Narrative:

L1092400-01 WG1273429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	9160		51.9	1000	1	04/26/2019 02:48	WG1271706
Nitrate	U		22.7	100	1	04/26/2019 02:48	WG1271706
Sulfate	8910		77.4	5000	1	04/26/2019 02:48	WG1271706

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4620	<u>B</u>	102	1000	1	04/29/2019 19:31	WG1272243

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1590		15.0	100	1	04/29/2019 15:46	WG1271843
Manganese	305		1.25	25.0	5	04/29/2019 17:16	WG1271843

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 02:05	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 02:05	WG1272107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	434		0.287	0.678	1	05/02/2019 14:17	WG1272501
Ethane	U		0.296	1.29	1	05/02/2019 14:17	WG1272501
Ethene	U		0.422	1.27	1	05/02/2019 14:17	WG1272501

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.21	<u>J J0 J3 J4</u>	1.05	25.0	1	04/25/2019 18:49	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 18:49	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 18:49	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 18:49	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 18:49	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 18:49	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 18:49	WG1271705
Bromomethane	U	<u>J0</u>	0.157	2.50	1	04/25/2019 18:49	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 18:49	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 18:49	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 18:49	WG1271705
Carbon disulfide	0.303	<u>J</u>	0.101	0.500	1	04/25/2019 18:49	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 18:49	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/24/19 08:00

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 18:49	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 18:49	WG1271705
Chloroethane	U	<u>JO</u>	0.141	2.50	1	04/25/2019 18:49	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 18:49	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 18:49	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 18:49	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 18:49	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 18:49	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 18:49	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 18:49	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 18:49	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 18:49	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 18:49	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 18:49	WG1271705
cis-1,2-Dichloroethene	0.975		0.0933	0.500	1	04/25/2019 18:49	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 18:49	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 18:49	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 18:49	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 18:49	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 18:49	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 18:49	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 18:49	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 18:49	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 18:49	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 18:49	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 18:49	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 18:49	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 18:49	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 18:49	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 18:49	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 18:49	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 18:49	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 18:49	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 18:49	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 18:49	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 18:49	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 18:49	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 18:49	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 18:49	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 18:49	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 18:49	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 18:49	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 18:49	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 18:49	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 18:49	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 18:49	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 18:49	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 18:49	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 18:49	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 18:49	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 18:49	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 18:49	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/24/19 08:00

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 18:49	WG1271705
Vinyl chloride	1.66	<u>JO</u>	0.118	0.500	1	04/25/2019 18:49	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 18:49	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 18:49	WG1271705
(S) 4-Bromofluorobenzene	106			77.0-126		04/25/2019 18:49	WG1271705
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		04/25/2019 18:49	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	310000		2710	20000	1	04/30/2019 15:03	WG1273429

Sample Narrative:

L1092400-02 WG1273429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14800		51.9	1000	1	04/26/2019 02:59	WG1271706
Nitrate	U		22.7	100	1	04/26/2019 02:59	WG1271706
Sulfate	23300		77.4	5000	1	04/26/2019 02:59	WG1271706

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4950	<u>B</u>	102	1000	1	04/29/2019 19:49	WG1272243

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2870		75.0	500	5	04/29/2019 17:21	WG1271843
Manganese	770		1.25	25.0	5	04/29/2019 17:21	WG1271843

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	88.0	<u>J</u>	31.6	100	1	04/26/2019 02:29	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 02:29	WG1272107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5090		0.287	0.678	1	05/02/2019 14:20	WG1272501
Ethane	4.00		0.296	1.29	1	05/02/2019 14:20	WG1272501
Ethene	347		0.422	1.27	1	05/02/2019 14:20	WG1272501

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.58	<u>J J0 J3 J4</u>	1.05	25.0	1	04/25/2019 19:09	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 19:09	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 19:09	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 19:09	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 19:09	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 19:09	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 19:09	WG1271705
Bromomethane	U	<u>J0</u>	0.157	2.50	1	04/25/2019 19:09	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 19:09	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 19:09	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 19:09	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 19:09	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 19:09	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/24/19 09:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 19:09	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 19:09	WG1271705
Chloroethane	0.719	JJO	0.141	2.50	1	04/25/2019 19:09	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 19:09	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 19:09	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 19:09	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 19:09	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 19:09	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 19:09	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 19:09	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 19:09	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 19:09	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 19:09	WG1271705
1,1-Dichloroethene	1.04		0.188	0.500	1	04/25/2019 19:09	WG1271705
cis-1,2-Dichloroethene	257		0.933	5.00	10	05/01/2019 03:04	WG1274056
trans-1,2-Dichloroethene	1.94		0.152	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 19:09	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 19:09	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 19:09	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 19:09	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 19:09	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 19:09	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 19:09	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 19:09	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 19:09	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 19:09	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 19:09	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 19:09	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 19:09	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 19:09	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 19:09	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 19:09	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 19:09	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 19:09	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 19:09	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 19:09	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 19:09	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 19:09	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 19:09	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 19:09	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 19:09	WG1271705
Tetrachloroethene	1.50		0.199	0.500	1	04/25/2019 19:09	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 19:09	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 19:09	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 19:09	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 19:09	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 19:09	WG1271705
Trichloroethene	12.4		0.153	0.500	1	04/25/2019 19:09	WG1271705
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/25/2019 19:09	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 19:09	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 19:09	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 19:09	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 19:09	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/24/19 09:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 19:09	WG1271705
Vinyl chloride	383		1.18	5.00	10	05/01/2019 03:04	WG1274056
Xylenes, Total	U		0.316	1.50	1	04/25/2019 19:09	WG1271705
(S) Toluene-d8	97.1			80.0-120		04/25/2019 19:09	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 03:04	WG1274056
(S) 4-Bromofluorobenzene	99.8			77.0-126		04/25/2019 19:09	WG1271705
(S) 4-Bromofluorobenzene	99.5			77.0-126		05/01/2019 03:04	WG1274056
(S) 1,2-Dichloroethane-d4	107			70.0-130		04/25/2019 19:09	WG1271705
(S) 1,2-Dichloroethane-d4	102			70.0-130		05/01/2019 03:04	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/24/19 11:40

L1092400

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 02:53	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 02:53	WG1272107

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.68	<u>J J0 J3 J4</u>	1.05	25.0	1	04/25/2019 19:29	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 19:29	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 19:29	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 19:29	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 19:29	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 19:29	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 19:29	WG1271705
Bromomethane	U	<u>J0</u>	0.157	2.50	1	04/25/2019 19:29	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 19:29	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 19:29	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 19:29	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 19:29	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 19:29	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 19:29	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 19:29	WG1271705
Chloroethane	0.369	<u>J J0</u>	0.141	2.50	1	04/25/2019 19:29	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 19:29	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 19:29	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 19:29	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 19:29	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 19:29	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 19:29	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 19:29	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 19:29	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 19:29	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 19:29	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 19:29	WG1271705
cis-1,2-Dichloroethene	1.76		0.0933	0.500	1	05/01/2019 01:58	WG1274056
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 19:29	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 19:29	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 19:29	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 19:29	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 19:29	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 19:29	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 19:29	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 19:29	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 19:29	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 19:29	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 19:29	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 19:29	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 19:29	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 19:29	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 19:29	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 19:29	WG1271705

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/24/19 11:40

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 19:29	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 19:29	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 19:29	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 19:29	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 19:29	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 19:29	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 19:29	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 19:29	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 19:29	WG1271705
Tetrachloroethene	1.02		0.199	0.500	1	04/25/2019 19:29	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 19:29	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 19:29	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 19:29	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 19:29	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 19:29	WG1271705
Trichloroethene	0.214	<u>J</u>	0.153	0.500	1	04/25/2019 19:29	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 19:29	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 19:29	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 19:29	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 19:29	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 19:29	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 19:29	WG1271705
Vinyl chloride	0.797		0.118	0.500	1	05/01/2019 01:58	WG1274056
Xylenes, Total	U		0.316	1.50	1	04/25/2019 19:29	WG1271705
(S) Toluene-d8	94.9			80.0-120		04/25/2019 19:29	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 01:58	WG1274056
(S) 4-Bromofluorobenzene	98.6			77.0-126		04/25/2019 19:29	WG1271705
(S) 4-Bromofluorobenzene	99.7			77.0-126		05/01/2019 01:58	WG1274056
(S) 1,2-Dichloroethane-d4	106			70.0-130		04/25/2019 19:29	WG1271705
(S) 1,2-Dichloroethane-d4	100			70.0-130		05/01/2019 01:58	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	174000		2710	20000	1	04/30/2019 15:10	WG1273429

Sample Narrative:

L1092400-04 WG1273429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	9400		51.9	1000	1	04/26/2019 03:10	WG1271706
Nitrate	U		22.7	100	1	04/26/2019 03:10	WG1271706
Sulfate	9230		77.4	5000	1	04/26/2019 03:10	WG1271706

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3860	<u>B</u>	102	1000	1	04/29/2019 20:49	WG1272243

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3600		75.0	500	5	04/29/2019 17:27	WG1271843
Manganese	385		1.25	25.0	5	04/29/2019 17:27	WG1271843

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 03:17	WG1272107
(S) <i>a,a</i> -Trifluorotoluene(FID)	111			78.0-120		04/26/2019 03:17	WG1272107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	412		0.287	0.678	1	05/02/2019 15:36	WG1272501
Ethane	U		0.296	1.29	1	05/02/2019 15:36	WG1272501
Ethene	1.79		0.422	1.27	1	05/02/2019 15:36	WG1272501

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.82	<u>J J0 J3 J4</u>	1.05	25.0	1	04/25/2019 19:49	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 19:49	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 19:49	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 19:49	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 19:49	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 19:49	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 19:49	WG1271705
Bromomethane	U	<u>J0</u>	0.157	2.50	1	04/25/2019 19:49	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 19:49	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 19:49	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 19:49	WG1271705
Carbon disulfide	0.394	<u>J</u>	0.101	0.500	1	04/25/2019 19:49	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 19:49	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/24/19 12:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 19:49	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 19:49	WG1271705
Chloroethane	U	JO	0.141	2.50	1	04/25/2019 19:49	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 19:49	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 19:49	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 19:49	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 19:49	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 19:49	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 19:49	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 19:49	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 19:49	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 19:49	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 19:49	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 19:49	WG1271705
cis-1,2-Dichloroethene	1.07		0.0933	0.500	1	05/01/2019 02:20	WG1274056
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 19:49	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 19:49	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 19:49	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 19:49	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 19:49	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 19:49	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 19:49	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 19:49	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 19:49	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 19:49	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 19:49	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 19:49	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 19:49	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 19:49	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 19:49	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 19:49	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 19:49	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 19:49	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 19:49	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 19:49	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 19:49	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 19:49	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 19:49	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 19:49	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 19:49	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 19:49	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 19:49	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 19:49	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 19:49	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 19:49	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 19:49	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 19:49	WG1271705
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/25/2019 19:49	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 19:49	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 19:49	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 19:49	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 19:49	WG1271705

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

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Gl

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Al

9
Sc



Collected date/time: 04/24/19 12:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 19:49	WG1271705
Vinyl chloride	2.69		0.118	0.500	1	05/01/2019 02:20	WG1274056
Xylenes, Total	U		0.316	1.50	1	04/25/2019 19:49	WG1271705
(S) Toluene-d8	103			80.0-120		04/25/2019 19:49	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 02:20	WG1274056
(S) 4-Bromofluorobenzene	103			77.0-126		04/25/2019 19:49	WG1271705
(S) 4-Bromofluorobenzene	97.4			77.0-126		05/01/2019 02:20	WG1274056
(S) 1,2-Dichloroethane-d4	97.4			70.0-130		04/25/2019 19:49	WG1271705
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/01/2019 02:20	WG1274056

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/24/19 00:00

L1092400

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 01:41	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 01:41	WG1272107

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.76	J JO J3 J4	1.05	25.0	1	04/25/2019 16:28	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 16:28	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 16:28	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 16:28	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 16:28	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 16:28	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 16:28	WG1271705
Bromomethane	U	JO	0.157	2.50	1	04/25/2019 16:28	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 16:28	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 16:28	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 16:28	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 16:28	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 16:28	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 16:28	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 16:28	WG1271705
Chloroethane	U	JO	0.141	2.50	1	04/25/2019 16:28	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 16:28	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 16:28	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 16:28	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 16:28	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 16:28	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 16:28	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 16:28	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 16:28	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 16:28	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 16:28	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 16:28	WG1271705
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/25/2019 16:28	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 16:28	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 16:28	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 16:28	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 16:28	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 16:28	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 16:28	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 16:28	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 16:28	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 16:28	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 16:28	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 16:28	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 16:28	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 16:28	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 16:28	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 16:28	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 16:28	WG1271705



Collected date/time: 04/24/19 00:00

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 16:28	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 16:28	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 16:28	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 16:28	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 16:28	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 16:28	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 16:28	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 16:28	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 16:28	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 16:28	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 16:28	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 16:28	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 16:28	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 16:28	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 16:28	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 16:28	WG1271705
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/25/2019 16:28	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 16:28	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 16:28	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 16:28	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 16:28	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 16:28	WG1271705
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/25/2019 16:28	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 16:28	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 16:28	WG1271705
(S) 4-Bromofluorobenzene	105			77.0-126		04/25/2019 16:28	WG1271705
(S) 1,2-Dichloroethane-d4	92.8			70.0-130		04/25/2019 16:28	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3406816-1 04/30/19 12:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	3160	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1092253-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1092253-04 04/30/19 13:12 • (DUP) R3406816-5 04/30/19 13:18

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	50900	52200	1	2.61	%	20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1092421-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1092421-01 04/30/19 15:52 • (DUP) R3406816-10 04/30/19 15:59

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	61300	57900	1	5.61	%	20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3406816-9 04/30/19 14:01

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	99300	99.3	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3405679-1 04/25/19 23:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1092353-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1092353-01 04/26/19 00:27 • (DUP) R3405679-3 04/26/19 00:38

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	16600	16100	1	3.08			15
Nitrate	U	0.000	1	0.000			15
Sulfate	20000	19200	1	4.16			15

L1092400-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1092400-04 04/26/19 03:10 • (DUP) R3405679-6 04/26/19 03:21

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	9400	9560	1	1.76			15
Nitrate	U	0.000	1	0.000			15
Sulfate	9230	9330	1	1.03			15

Laboratory Control Sample (LCS)

(LCS) R3405679-2 04/25/19 23:53

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40100	100	80.0-120	
Nitrate	8000	7890	98.7	80.0-120	
Sulfate	40000	40900	102	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1092353-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1092353-01 04/26/19 00:27 • (MS) R3405679-4 04/26/19 00:49 • (MSD) R3405679-5 04/26/19 00:59

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	16600	65100	65100	97.0	96.9	1	80.0-120	1		0.0978	15
Nitrate	5000	U	4610	4610	92.1	92.2	1	80.0-120	1		0.126	15
Sulfate	50000	20000	67300	67100	94.7	94.3	1	80.0-120	1		0.292	15

L1092400-04 Original Sample (OS) • Matrix Spike (MS)

(OS) L1092400-04 04/26/19 03:10 • (MS) R3405679-7 04/26/19 03:32

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Chloride	50000	9400	59000	99.1	1	80.0-120	
Nitrate	5000	U	4710	94.2	1	80.0-120	
Sulfate	50000	9230	58100	97.8	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3406579-1	04/29/19 14:21	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	568	<u>1</u>	102	1000
TOC (Total Organic Carbon)					

L1092307-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1092307-01	04/29/19 16:13 • (DUP) R3406579-3	04/29/19 16:31	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	48600	48400	1	0.516	%	%	20
TOC (Total Organic Carbon)								

L1092431-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1092431-08	04/30/19 01:31 • (DUP) R3406579-8	04/30/19 01:49	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	8550	8900	1	3.99	%	%	20
TOC (Total Organic Carbon)								

Laboratory Control Sample (LCS)

(LCS) R3406579-2	04/29/19 14:58	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	75000	78700	105	85.0-115	%
TOC (Total Organic Carbon)						

L1092400-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1092400-02	04/29/19 19:49 • (MS) R3406579-4	04/29/19 20:11 • (MSD) R3406579-5	04/29/19 20:29	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	50000	4950	56200	55400	102	101	80.0-120	1.36	20	%	%	%	%	%
TOC (Total Organic Carbon)															

L1092412-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1092412-06	04/30/19 00:16 • (MS) R3406579-6	04/30/19 00:34 • (MSD) R3406579-7	04/30/19 00:52	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	50000	ND	50800	51000	101	101	80.0-120	0.314	20	%	%	%	%	%
TOC (Total Organic Carbon)															

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1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Metals (ICPMS) by Method 6020B

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3406378-1 04/29/19 13:02				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3406378-2 04/29/19 13:07 • (LCSD) R3406378-3 04/29/19 13:12		(OS) L1092217-01 04/29/19 13:18 • (MS) R3406378-5 04/29/19 13:28 • (MSD) R3406378-6 04/29/19 13:33							
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	500	490	480	98.0	96.1	80.0-120			1.92	20
Manganese	50.0	48.4	47.0	96.7	94.0	80.0-120			2.85	20

L1092217-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	500	2630	2940	3550	61.9	185	1	75.0-125	V	V	19.0	20
Manganese	50.0	2630	2730	2770	195	272	1	75.0-125	V	V	1.38	20

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1092400-01.02.03.04.05](#)

Method Blank (MB)

(MB) R3406246-2 04/25/19 22:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) <i>a,a</i> -Trifluorotoluene(FID)	111			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3406246-1 04/25/19 21:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	6260	114	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			94.6	78.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1092400-01.02.04](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	72.0	77.7	106	115	85.0-115			7.60	20
Ethane	129	117	120	90.5	93.2	85.0-115			2.96	20
Ethene	127	116	119	91.7	93.5	85.0-115			1.95	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

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Method Blank (MB)

(MB) R3406794-3 04/25/19 10:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1092400-01.02.03.04.05](#)

Method Blank (MB)

(MB) R3406794-3 04/25/19 10:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.239	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	101			80.0-120
(S) 4-Bromofluorobenzene	105			77.0-126
(S) 1,2-Dichloroethane-d4	94.7			70.0-130

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3406794-1 04/25/19 09:03 • (LCSD) R3406794-2 04/25/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	205	144	164	115	19.0-160	J4	J3	34.8	27
Acrylonitrile	125	160	156	128	125	55.0-149			2.36	20
Benzene	25.0	26.0	26.1	104	104	70.0-123			0.383	20
Bromobenzene	25.0	23.4	23.6	93.5	94.5	73.0-121			1.10	20
Bromodichloromethane	25.0	22.3	22.3	89.3	89.2	75.0-120			0.142	20
Bromochloromethane	25.0	23.5	23.3	94.2	93.0	76.0-122			1.20	20
Bromoform	25.0	26.4	27.0	106	108	68.0-132			2.26	20
Bromomethane	25.0	17.7	17.6	70.8	70.5	10.0-160			0.433	25
n-Butylbenzene	25.0	23.2	22.8	92.7	91.2	73.0-125			1.67	20
sec-Butylbenzene	25.0	23.9	23.3	95.6	93.1	75.0-125			2.69	20
tert-Butylbenzene	25.0	24.5	24.0	98.0	96.1	76.0-124			1.94	20
Carbon disulfide	25.0	28.4	31.0	113	124	61.0-128			8.82	20
Carbon tetrachloride	25.0	23.9	23.9	95.5	95.5	68.0-126			0.0359	20
Chlorobenzene	25.0	24.0	24.2	96.1	96.6	80.0-121			0.523	20
Chlorodibromomethane	25.0	23.5	24.0	94.2	96.0	77.0-125			1.90	20
Chloroethane	25.0	15.0	17.2	60.1	69.0	47.0-150			13.7	20
Chloroform	25.0	22.0	21.9	87.8	87.8	73.0-120			0.0352	20
Chloromethane	25.0	26.3	26.2	105	105	41.0-142			0.338	20
2-Chlorotoluene	25.0	23.1	22.8	92.6	91.0	76.0-123			1.66	20
4-Chlorotoluene	25.0	23.4	23.2	93.5	93.0	75.0-122			0.522	20
1,2-Dibromo-3-Chloropropane	25.0	28.4	27.7	114	111	58.0-134			2.76	20
1,2-Dibromoethane	25.0	23.3	23.7	93.0	94.8	80.0-122			1.90	20
Dibromomethane	25.0	22.7	22.5	90.7	90.0	80.0-120			0.716	20
1,2-Dichlorobenzene	25.0	23.9	23.4	95.5	93.5	79.0-121			2.08	20
1,3-Dichlorobenzene	25.0	23.5	23.2	94.0	93.0	79.0-120			1.05	20
1,4-Dichlorobenzene	25.0	22.7	22.5	91.0	89.9	79.0-120			1.15	20
Dichlorodifluoromethane	25.0	26.3	26.2	105	105	51.0-149			0.238	20
1,1-Dichloroethane	25.0	24.8	24.6	99.4	98.3	70.0-126			1.12	20
1,2-Dichloroethane	25.0	20.8	20.8	83.1	83.1	70.0-128			0.0641	20
1,1-Dichloroethene	25.0	25.0	25.4	100	102	71.0-124			1.62	20
cis-1,2-Dichloroethene	25.0	23.9	23.7	95.7	94.7	73.0-120			1.11	20
trans-1,2-Dichloroethene	25.0	24.9	24.9	99.6	99.4	73.0-120			0.115	20
1,2-Dichloropropane	25.0	26.5	26.5	106	106	77.0-125			0.267	20
1,1-Dichloropropene	25.0	24.9	24.8	99.4	99.1	74.0-126			0.298	20
1,3-Dichloropropane	25.0	24.6	25.1	98.6	100	80.0-120			1.86	20
cis-1,3-Dichloropropene	25.0	24.0	24.2	96.2	96.7	80.0-123			0.513	20
trans-1,3-Dichloropropene	25.0	23.3	23.5	93.2	94.1	78.0-124			0.936	20
trans-1,4-Dichloro-2-butene	25.0	20.7	19.7	83.0	78.6	33.0-144			5.42	20
2,2-Dichloropropane	25.0	32.0	31.4	128	126	58.0-130			2.05	20
Diisopropyl ether	25.0	27.7	27.6	111	110	58.0-138			0.601	20

Public Review Draft

1 Cp
2 Tc
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ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.05.601

SDG:

L1092400

DATE/TIME:

05/03/19 10:33

PAGE:

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3406794-1 04/25/19 09:03 • (LCSD) R3406794-2 04/25/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.4	24.7	97.5	98.9	79.0-123			1.46	20
Hexachloro-1,3-butadiene	25.0	31.2	30.4	125	122	54.0-138			2.57	20
2-Hexanone	125	147	146	117	117	67.0-149			0.700	20
n-Hexane	25.0	29.2	28.6	117	114	57.0-133			2.29	20
Iodomethane	125	134	128	107	102	33.0-147			4.64	26
Isopropylbenzene	25.0	25.6	26.1	103	104	76.0-127			1.66	20
p-Isopropyltoluene	25.0	24.2	23.8	96.8	95.1	76.0-125			1.85	20
2-Butanone (MEK)	125	165	156	132	125	44.0-160			5.34	20
Methylene Chloride	25.0	24.7	24.5	98.8	98.1	67.0-120			0.726	20
4-Methyl-2-pentanone (MIBK)	125	143	142	114	114	68.0-142			0.369	20
Methyl tert-butyl ether	25.0	23.7	23.4	94.7	93.6	68.0-125			1.16	20
Naphthalene	25.0	25.1	24.5	100	98.1	54.0-135			2.40	20
n-Propylbenzene	25.0	23.0	23.0	92.1	91.9	77.0-124			0.261	20
Styrene	25.0	26.6	27.4	106	110	73.0-130			3.12	20
1,1,1,2-Tetrachloroethane	25.0	24.1	24.0	96.2	96.2	75.0-125			0.0553	20
1,1,2,2-Tetrachloroethane	25.0	22.8	22.7	91.3	90.8	65.0-130			0.553	20
1,1,2-Trichlorotrifluoroethane	25.0	23.4	24.1	93.6	96.5	69.0-132			3.14	20
Tetrachloroethene	25.0	25.8	25.8	103	103	72.0-132			0.287	20
Toluene	25.0	25.9	26.1	103	104	79.0-120			0.981	20
1,2,3-Trichlorobenzene	25.0	25.7	24.4	103	97.5	50.0-138			5.36	20
1,2,4-Trichlorobenzene	25.0	26.6	25.2	107	101	57.0-137			5.53	20
1,1,1-Trichloroethane	25.0	23.7	23.8	94.9	95.3	73.0-124			0.433	20
1,1,2-Trichloroethane	25.0	22.8	22.6	91.3	90.4	80.0-120			0.971	20
Trichloroethene	25.0	25.1	25.2	100	101	78.0-124			0.572	20
Trichlorofluoromethane	25.0	15.2	16.5	60.9	65.9	59.0-147			7.93	20
1,2,3-Trichloropropane	25.0	21.1	20.9	84.4	83.5	73.0-130			1.11	20
1,2,4-Trimethylbenzene	25.0	22.8	22.6	91.2	90.5	76.0-121			0.774	20
1,2,3-Trimethylbenzene	25.0	22.4	21.8	89.8	87.2	77.0-120			2.96	20
1,3,5-Trimethylbenzene	25.0	23.4	22.6	93.5	90.5	76.0-122			3.16	20
Vinyl acetate	125	119	120	95.4	95.7	11.0-160			0.361	20
Vinyl chloride	25.0	17.8	17.9	71.3	71.7	67.0-131			0.499	20
Xylenes, Total	75.0	74.9	75.0	99.9	100	79.0-123			0.133	20
(S) Toluene-d8				101	100	80.0-120				
(S) 4-Bromofluorobenzene				105	107	77.0-126				
(S) 1,2-Dichloroethane-d4				92.7	99.9	70.0-130				

Public Review Draft

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1092400-02.03.04](#)

Method Blank (MB)

(MB) R3406890-2 05/01/19 01:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	104			80.0-120
(S) 4-Bromofluorobenzene	98.3			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3406890-1 05/01/19 00:32

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	29.9	120	73.0-120	
Vinyl chloride	25.0	32.6	131	67.0-131	
(S) Toluene-d8			102	80.0-120	
(S) 4-Bromofluorobenzene			100	77.0-126	
(S) 1,2-Dichloroethane-d4			103	70.0-130	

Public Review Draft

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
-----------	-------------

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.
V	The sample concentration is too high to evaluate accurate spike recoveries.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

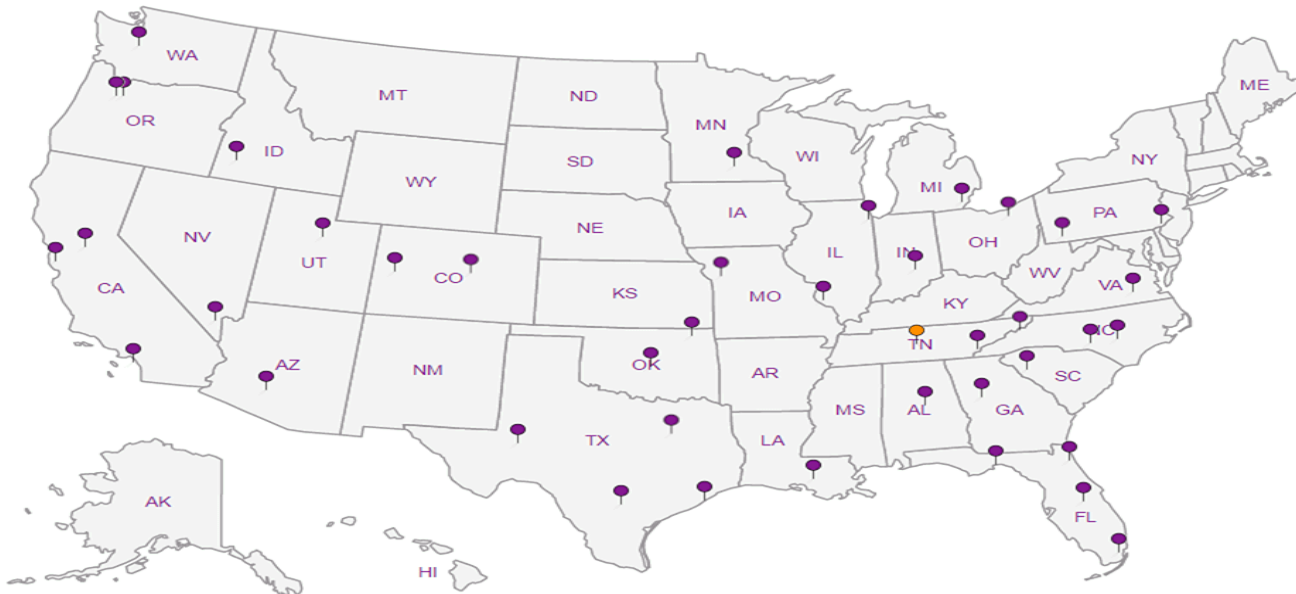
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Pres
Chk

Analysis / Container / Preservative

Chain of Custody Page 4

Report for
Brian O'Neal/Bill Haldeman

Email To: bonaen@pesenv.com
bhaldeman@pesenv.com

Project
Ammonium Levels

Description:
Ammonium Levels

City/State
Collected: **Seattle, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413-001-05-601

Lab Project #
PESENVWA-ALP

Collected by (print):
Ben Hecht

Sitg./Facility ID #
Ammonium Levels

P.O. #

Collected by (signature):
Ben Hecht

Rush? (Lab MUST Be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Quote #

Immediately Packed on Ice N Y

Date Results Needed
4/24/19

No. of Cntrs

Sample ID	Comp/Grab	M-rix *	Depth	Date	Time	No. of Cntrs
MW-909-042419	Grab	GW	130	0800	4/24/19	1
MW146-042419		GW	45	0935	4/24/19	1
MW-154-042419		GW	30	1140	4/24/19	1
MW-153-042419		GW	125	1255	4/24/19	1
TRIP 13/ABW-042419		GW	-	-	4/24/19	1

Sample ID	*NO3,S04,Cl* 125ml HDPE-NoPres	Alkalinity 125ml HDPE-NoPres	EEM (RSK175LI) 40ml Amb-HCl	TOC 250ml Amb-HCl	Total Fe Mn 6020 250ml HDPE-HNO3	VOC 8260	GRO (NWIPX-G)
MW-909-042419	X	X	X	X	X	X	X
MW146-042419	X	X	X	X	X	X	X
MW-154-042419	X	X	X	X	X	X	X
MW-153-042419	X	X	X	X	X	X	X
TRIP 13/ABW-042419	X	X	X	X	X	X	X

Remarks: **NOC GRO -05**

Actnum: **PESENVSW**
Template: **T143845**
PrelgIn: **P701221**
TSR: **110 - Brian Ford**
PB: **4/24/19**
Shipped Via: **FedEx Ground**

12055 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

C229

Sample Receipt Checklist:
COC Seal present/Intact:
COC Signed/Authenticated:
Bottles arrive Intact:
Correct bottles used:
Sufficient volume sent:
If Applicable:
VOA zero HeadSpace:
Reservoirs correct, checked:

Tracking # **Fedex 4870 1080 2011**

Received by (Signature): *[Signature]*

Received by (Signature): *[Signature]*

Date: **4-24-19** Time: **16:05**

Date: **4/25/19** Time: **8:45**

Relinquished by (Signature): *[Signature]*

Relinquished by (Signature): *[Signature]*

Date: **4-24-19** Time: **16:05**

Date: **4/25/19** Time: **8:45**

Condition: **OK**

ES Environmental, Inc. - WA

2115 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: boneal@pesenv.com;
bhaldeman@pesenv.com;

Report by: Brian O'Neal/Bill Halldeman

Project: *American Lym*

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #: *1413-001-05-601*

City/State Collected: *Seattle, WA*

Lab Project #: *PESENVSWA-AIP*

Quote #

Signature: *Ben Heath*

Signature: *Ben Heath*

Signature: *Ben Heath*

Signature: *Ben Heath*

Signature: *Ben Heath*

Signature: *Ben Heath*

Signature: *Ben Heath*

Signature: *Ben Heath*

Signature: *Ben Heath*

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Signature: *Ben Heath*

Signature: *Ben Heath*



12065 Lebaron Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Table # *L1092403*

Acetum: *PESENVSWA*

Template: *T143845*

Protocol: *P701221*

TSR: *110 - Brian Ford*

PI: *B 4-19*

Shipped Via: *FedEX Ground*

Remarks

Sample # (lab only)

Analysis / Container / Preservative

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	*NO3,SO4,Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM (RSK175LL) 40mlAmb-HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	VOC 8260	GRO (NWPT-G)
MMW-909-042419		GW	130	0820	4/24/19	12	X	X	X	X	X	X	X
MMW-146-042419		GW	45	0955		12	X	X	X	X	X	X	X
MMW-154-042419		GW	30	1140		6	X	X	X	X	X	X	X
MMW-153-042419		GW	125	1255		12	X	X	X	X	X	X	X
TDSIP 13/AMC-042419		GW				1	X	X	X	X	X	X	X

Remarks:

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Biossay
WW - Wastewater
PW - Drinking Water
OT - Other

Samples returned via:
UPS Fedex Courier

Relinquished by: (Signature) *[Signature]*

Relinquished by: (Signature) *[Signature]*

Relinquished by: (Signature)

Received by: (Signature) *[Signature]*

Received by: (Signature) *[Signature]*

Received by: (Signature)

Temp: *17.5* °C
Bottles received: *12*

Temp: *17.5* °C
Bottles received: *12*

Temp: *17.5* °C
Bottles received: *12*

Chain of Custody Checklist:
COC Seal Present/Intact: *Y*
COC Signed/Accounted: *Y*
Bottles arrive intact: *Y*
Correct bottles used: *Y*
Sufficient volume sent: *Y*
IT Applicable: *Y*
VOC Zero Headspace: *Y*
Preservation Correct/Checked: *Y*

If preservation required by LogIn: Date/Time

Hold: *N/A*

Condition: *OK*



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	170000		2710	20000	1	04/30/2019 14:55	WG1273429

Sample Narrative:

L1092400-01 WG1273429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	9160		51.9	1000	1	04/26/2019 02:48	WG1271706
Nitrate	U		22.7	100	1	04/26/2019 02:48	WG1271706
Sulfate	8910		77.4	5000	1	04/26/2019 02:48	WG1271706

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4620	B	102	1000	1	04/29/2019 19:31	WG1272243

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1590	J	15.0	100	1	04/29/2019 15:46	WG1271843
Manganese	305		1.25	25.0	5	04/29/2019 17:16	WG1271843

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 02:05	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 02:05	WG1272107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	434		0.287	0.678	1	05/02/2019 14:17	WG1272501
Ethane	U		0.296	1.29	1	05/02/2019 14:17	WG1272501
Ethene	U		0.422	1.27	1	05/02/2019 14:17	WG1272501

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch	
Acetone	2.21	U	J J0 J3 J4	1.05	25.0	1	04/25/2019 18:49	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 18:49	WG1271705	
Benzene	U		0.0896	0.500	1	04/25/2019 18:49	WG1271705	
Bromobenzene	U		0.133	0.500	1	04/25/2019 18:49	WG1271705	
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 18:49	WG1271705	
Bromochloromethane	U		0.145	0.500	1	04/25/2019 18:49	WG1271705	
Bromoform	U		0.186	0.500	1	04/25/2019 18:49	WG1271705	
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 18:49	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 18:49	WG1271705	
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 18:49	WG1271705	
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 18:49	WG1271705	
Carbon disulfide	0.303	J	J	0.101	0.500	1	04/25/2019 18:49	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 18:49	WG1271705	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/9/19



Collected date/time: 04/24/19 08:00

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 18:49	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 18:49	WG1271705
Chloroethane	U	UJ JO	0.141	2.50	1	04/25/2019 18:49	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 18:49	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 18:49	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 18:49	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 18:49	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 18:49	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 18:49	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 18:49	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 18:49	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 18:49	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 18:49	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 18:49	WG1271705
cis-1,2-Dichloroethene	0.975		0.0933	0.500	1	04/25/2019 18:49	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 18:49	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 18:49	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 18:49	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 18:49	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 18:49	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 18:49	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 18:49	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 18:49	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 18:49	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 18:49	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 18:49	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 18:49	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 18:49	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 18:49	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 18:49	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 18:49	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 18:49	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 18:49	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 18:49	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 18:49	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 18:49	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 18:49	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 18:49	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 18:49	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 18:49	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 18:49	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 18:49	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 18:49	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 18:49	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 18:49	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 18:49	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 18:49	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 18:49	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 18:49	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 18:49	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 18:49	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 18:49	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 18:49	WG1271705

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/9/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 18:49	WG1271705
Vinyl chloride	1.66	J JO	0.118	0.500	1	04/25/2019 18:49	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 18:49	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 18:49	WG1271705
(S) 4-Bromofluorobenzene	106			77.0-126		04/25/2019 18:49	WG1271705
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		04/25/2019 18:49	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/19



Collected date/time: 04/24/19 09:55

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	310000		2710	20000	1	04/30/2019 15:03	WG1273429

Sample Narrative:

L1092400-02 WG1273429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14800		51.9	1000	1	04/26/2019 02:59	WG1271706
Nitrate	U		22.7	100	1	04/26/2019 02:59	WG1271706
Sulfate	23300		77.4	5000	1	04/26/2019 02:59	WG1271706

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4950	⚠	102	1000	1	04/29/2019 19:49	WG1272243

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2870		75.0	500	5	04/29/2019 17:21	WG1271843
Manganese	770		1.25	25.0	5	04/29/2019 17:21	WG1271843

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	88.0	J U	31.6	100	1	04/26/2019 02:29	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 02:29	WG1272107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5090		0.287	0.678	1	05/02/2019 14:20	WG1272501
Ethane	4.00		0.296	1.29	1	05/02/2019 14:20	WG1272501
Ethene	347		0.422	1.27	1	05/02/2019 14:20	WG1272501

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch	
Acetone	1.58	U	J J0 J3 J4	1.05	25.0	1	04/25/2019 19:09	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 19:09	WG1271705	
Benzene	U		0.0896	0.500	1	04/25/2019 19:09	WG1271705	
Bromobenzene	U		0.133	0.500	1	04/25/2019 19:09	WG1271705	
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 19:09	WG1271705	
Bromochloromethane	U		0.145	0.500	1	04/25/2019 19:09	WG1271705	
Bromoform	U		0.186	0.500	1	04/25/2019 19:09	WG1271705	
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 19:09	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 19:09	WG1271705	
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 19:09	WG1271705	
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 19:09	WG1271705	
Carbon disulfide	U		0.101	0.500	1	04/25/2019 19:09	WG1271705	
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 19:09	WG1271705	

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/9/19



Collected date/time: 04/24/19 09:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 19:09	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 19:09	WG1271705
Chloroethane	0.719	J JJ0	0.141	2.50	1	04/25/2019 19:09	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 19:09	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 19:09	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 19:09	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 19:09	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 19:09	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 19:09	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 19:09	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 19:09	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 19:09	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 19:09	WG1271705
1,1-Dichloroethene	1.04		0.188	0.500	1	04/25/2019 19:09	WG1271705
cis-1,2-Dichloroethene	257		0.933	5.00	10	05/01/2019 03:04	WG1274056
trans-1,2-Dichloroethene	1.94		0.152	0.500	1	04/25/2019 19:09	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 19:09	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 19:09	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 19:09	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 19:09	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 19:09	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 19:09	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 19:09	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 19:09	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 19:09	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 19:09	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 19:09	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 19:09	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 19:09	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 19:09	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 19:09	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 19:09	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 19:09	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 19:09	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 19:09	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 19:09	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 19:09	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 19:09	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 19:09	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 19:09	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 19:09	WG1271705
Tetrachloroethene	1.50		0.199	0.500	1	04/25/2019 19:09	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 19:09	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 19:09	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 19:09	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 19:09	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 19:09	WG1271705
Trichloroethene	12.4		0.153	0.500	1	04/25/2019 19:09	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 19:09	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 19:09	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 19:09	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 19:09	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 19:09	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/19



Collected date/time: 04/24/19 09:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 19:09	WG1271705
Vinyl chloride	383		1.18	5.00	10	05/01/2019 03:04	WG1274056
Xylenes, Total	U		0.316	1.50	1	04/25/2019 19:09	WG1271705
(S) Toluene-d8	97.1			80.0-120		04/25/2019 19:09	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 03:04	WG1274056
(S) 4-Bromofluorobenzene	99.8			77.0-126		04/25/2019 19:09	WG1271705
(S) 4-Bromofluorobenzene	99.5			77.0-126		05/01/2019 03:04	WG1274056
(S) 1,2-Dichloroethane-d4	107			70.0-130		04/25/2019 19:09	WG1271705
(S) 1,2-Dichloroethane-d4	102			70.0-130		05/01/2019 03:04	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/19



Collected date/time: 04/24/19 11:40

L1092400

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 02:53	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 02:53	WG1272107

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Acetone	2.68	U	J JO J3 J4	1.05	25.0	1	04/25/2019 19:29	WG1271705
Acrylonitrile	U			0.873	5.00	1	04/25/2019 19:29	WG1271705
Benzene	U			0.0896	0.500	1	04/25/2019 19:29	WG1271705
Bromobenzene	U			0.133	0.500	1	04/25/2019 19:29	WG1271705
Bromodichloromethane	U			0.0800	0.500	1	04/25/2019 19:29	WG1271705
Bromochloromethane	U			0.145	0.500	1	04/25/2019 19:29	WG1271705
Bromoform	U			0.186	0.500	1	04/25/2019 19:29	WG1271705
Bromomethane	U	UJ	JO	0.157	2.50	1	04/25/2019 19:29	WG1271705
n-Butylbenzene	U			0.143	0.500	1	04/25/2019 19:29	WG1271705
sec-Butylbenzene	U			0.134	0.500	1	04/25/2019 19:29	WG1271705
tert-Butylbenzene	U			0.183	0.500	1	04/25/2019 19:29	WG1271705
Carbon disulfide	U			0.101	0.500	1	04/25/2019 19:29	WG1271705
Carbon tetrachloride	U			0.159	0.500	1	04/25/2019 19:29	WG1271705
Chlorobenzene	U			0.140	0.500	1	04/25/2019 19:29	WG1271705
Chlorodibromomethane	U			0.128	0.500	1	04/25/2019 19:29	WG1271705
Chloroethane	0.369	J	J JO	0.141	2.50	1	04/25/2019 19:29	WG1271705
Chloroform	U			0.0860	0.500	1	04/25/2019 19:29	WG1271705
Chloromethane	U			0.153	1.25	1	04/25/2019 19:29	WG1271705
2-Chlorotoluene	U			0.111	0.500	1	04/25/2019 19:29	WG1271705
4-Chlorotoluene	U			0.0972	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dibromo-3-Chloropropane	U			0.325	2.50	1	04/25/2019 19:29	WG1271705
1,2-Dibromoethane	U			0.193	0.500	1	04/25/2019 19:29	WG1271705
Dibromomethane	U			0.117	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dichlorobenzene	U			0.101	0.500	1	04/25/2019 19:29	WG1271705
1,3-Dichlorobenzene	U			0.130	0.500	1	04/25/2019 19:29	WG1271705
1,4-Dichlorobenzene	U			0.121	0.500	1	04/25/2019 19:29	WG1271705
Dichlorodifluoromethane	U			0.127	2.50	1	04/25/2019 19:29	WG1271705
1,1-Dichloroethane	U			0.114	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dichloroethane	U			0.108	0.500	1	04/25/2019 19:29	WG1271705
1,1-Dichloroethene	U			0.188	0.500	1	04/25/2019 19:29	WG1271705
cis-1,2-Dichloroethene	1.76			0.0933	0.500	1	05/01/2019 01:58	WG1274056
trans-1,2-Dichloroethene	U			0.152	0.500	1	04/25/2019 19:29	WG1271705
1,2-Dichloropropane	U			0.190	0.500	1	04/25/2019 19:29	WG1271705
1,1-Dichloropropene	U			0.128	0.500	1	04/25/2019 19:29	WG1271705
1,3-Dichloropropane	U			0.147	1.00	1	04/25/2019 19:29	WG1271705
cis-1,3-Dichloropropene	U			0.0976	0.500	1	04/25/2019 19:29	WG1271705
trans-1,3-Dichloropropene	U			0.222	0.500	1	04/25/2019 19:29	WG1271705
trans-1,4-Dichloro-2-butene	U			0.257	5.00	1	04/25/2019 19:29	WG1271705
2,2-Dichloropropane	U			0.0929	0.500	1	04/25/2019 19:29	WG1271705
Di-isopropyl ether	U			0.0924	0.500	1	04/25/2019 19:29	WG1271705
Ethylbenzene	U			0.158	0.500	1	04/25/2019 19:29	WG1271705
Hexachloro-1,3-butadiene	U			0.157	1.00	1	04/25/2019 19:29	WG1271705
2-Hexanone	U			0.757	5.00	1	04/25/2019 19:29	WG1271705
n-Hexane	U			0.305	5.00	1	04/25/2019 19:29	WG1271705
Iodomethane	U			0.377	10.0	1	04/25/2019 19:29	WG1271705
Isopropylbenzene	U			0.126	0.500	1	04/25/2019 19:29	WG1271705
p-Isopropyltoluene	U			0.138	0.500	1	04/25/2019 19:29	WG1271705
2-Butanone (MEK)	U			1.28	5.00	1	04/25/2019 19:29	WG1271705

JC 5/9/19



Collected date/time: 04/24/19 11:40

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 19:29	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 19:29	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 19:29	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 19:29	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 19:29	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 19:29	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 19:29	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 19:29	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 19:29	WG1271705
Tetrachloroethene	1.02		0.199	0.500	1	04/25/2019 19:29	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 19:29	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 19:29	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 19:29	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 19:29	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 19:29	WG1271705
Trichloroethene	0.214	J UJ	0.153	0.500	1	04/25/2019 19:29	WG1271705
Trichlorofluoromethane	U	J JO	0.130	2.50	1	04/25/2019 19:29	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 19:29	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 19:29	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 19:29	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 19:29	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 19:29	WG1271705
Vinyl chloride	0.797		0.118	0.500	1	05/01/2019 01:58	WG1274056
Xylenes, Total	U		0.316	1.50	1	04/25/2019 19:29	WG1271705
(S) Toluene-d8	94.9			80.0-120		04/25/2019 19:29	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 01:58	WG1274056
(S) 4-Bromofluorobenzene	98.6			77.0-126		04/25/2019 19:29	WG1271705
(S) 4-Bromofluorobenzene	99.7			77.0-126		05/01/2019 01:58	WG1274056
(S) 1,2-Dichloroethane-d4	106			70.0-130		04/25/2019 19:29	WG1271705
(S) 1,2-Dichloroethane-d4	100			70.0-130		05/01/2019 01:58	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/19



Collected date/time: 04/24/19 12:55

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	174000		2710	20000	1	04/30/2019 15:10	WG1273429

Sample Narrative:

L1092400-04 WG1273429: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	9400		51.9	1000	1	04/26/2019 03:10	WG1271706
Nitrate	U		22.7	100	1	04/26/2019 03:10	WG1271706
Sulfate	9230		77.4	5000	1	04/26/2019 03:10	WG1271706

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3860	B	102	1000	1	04/29/2019 20:49	WG1272243

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3600	J	75.0	500	5	04/29/2019 17:27	WG1271843
Manganese	385		1.25	25.0	5	04/29/2019 17:27	WG1271843

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 03:17	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 03:17	WG1272107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	412		0.287	0.678	1	05/02/2019 15:36	WG1272501
Ethane	U		0.296	1.29	1	05/02/2019 15:36	WG1272501
Ethene	1.79		0.422	1.27	1	05/02/2019 15:36	WG1272501

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	3.82	U	J J0 J3 J4	1.05	25.0	1	04/25/2019 19:49	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 19:49	WG1271705	
Benzene	U		0.0896	0.500	1	04/25/2019 19:49	WG1271705	
Bromobenzene	U		0.133	0.500	1	04/25/2019 19:49	WG1271705	
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 19:49	WG1271705	
Bromochloromethane	U		0.145	0.500	1	04/25/2019 19:49	WG1271705	
Bromoform	U		0.186	0.500	1	04/25/2019 19:49	WG1271705	
Bromomethane	U	UJ	J0	0.157	2.50	1	04/25/2019 19:49	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 19:49	WG1271705	
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 19:49	WG1271705	
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 19:49	WG1271705	
Carbon disulfide	0.394	J	J	0.101	0.500	1	04/25/2019 19:49	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 19:49	WG1271705	

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/24/19 12:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	04/25/2019 19:49	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 19:49	WG1271705
Chloroethane	U	UJ <u>JO</u>	0.141	2.50	1	04/25/2019 19:49	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 19:49	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 19:49	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 19:49	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 19:49	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 19:49	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 19:49	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 19:49	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 19:49	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 19:49	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 19:49	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 19:49	WG1271705
cis-1,2-Dichloroethene	1.07		0.0933	0.500	1	05/01/2019 02:20	WG1274056
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 19:49	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 19:49	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 19:49	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 19:49	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 19:49	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 19:49	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 19:49	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 19:49	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 19:49	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 19:49	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 19:49	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 19:49	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 19:49	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 19:49	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 19:49	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 19:49	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 19:49	WG1271705
Methylene Chloride	U		1.07	2.50	1	04/25/2019 19:49	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 19:49	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 19:49	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 19:49	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 19:49	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 19:49	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 19:49	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 19:49	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 19:49	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 19:49	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 19:49	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 19:49	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 19:49	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 19:49	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 19:49	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 19:49	WG1271705
Trichlorofluoromethane	U	UJ <u>JO</u>	0.130	2.50	1	04/25/2019 19:49	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 19:49	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 19:49	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 19:49	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 19:49	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/19



Collected date/time: 04/24/19 12:55

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/25/2019 19:49	WG1271705
Vinyl chloride	2.69	J	0.118	0.500	1	05/01/2019 02:20	WG1274056
Xylenes, Total	U		0.316	1.50	1	04/25/2019 19:49	WG1271705
(S) Toluene-d8	103			80.0-120		04/25/2019 19:49	WG1271705
(S) Toluene-d8	103			80.0-120		05/01/2019 02:20	WG1274056
(S) 4-Bromofluorobenzene	103			77.0-126		04/25/2019 19:49	WG1271705
(S) 4-Bromofluorobenzene	97.4			77.0-126		05/01/2019 02:20	WG1274056
(S) 1,2-Dichloroethane-d4	97.4			70.0-130		04/25/2019 19:49	WG1271705
(S) 1,2-Dichloroethane-d4	103			70.0-130		05/01/2019 02:20	WG1274056

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/19



Collected date/time: 04/24/19 00:00

L1092400

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	04/26/2019 01:41	WG1272107
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		04/26/2019 01:41	WG1272107

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.76	<u>J</u> <u>JO</u> <u>J3</u> <u>J4</u>	1.05	25.0	1	04/25/2019 16:28	WG1271705
Acrylonitrile	U		0.873	5.00	1	04/25/2019 16:28	WG1271705
Benzene	U		0.0896	0.500	1	04/25/2019 16:28	WG1271705
Bromobenzene	U		0.133	0.500	1	04/25/2019 16:28	WG1271705
Bromodichloromethane	U		0.0800	0.500	1	04/25/2019 16:28	WG1271705
Bromochloromethane	U		0.145	0.500	1	04/25/2019 16:28	WG1271705
Bromoform	U		0.186	0.500	1	04/25/2019 16:28	WG1271705
Bromomethane	U	<u>UJ</u> <u>JO</u>	0.157	2.50	1	04/25/2019 16:28	WG1271705
n-Butylbenzene	U		0.143	0.500	1	04/25/2019 16:28	WG1271705
sec-Butylbenzene	U		0.134	0.500	1	04/25/2019 16:28	WG1271705
tert-Butylbenzene	U		0.183	0.500	1	04/25/2019 16:28	WG1271705
Carbon disulfide	U		0.101	0.500	1	04/25/2019 16:28	WG1271705
Carbon tetrachloride	U		0.159	0.500	1	04/25/2019 16:28	WG1271705
Chlorobenzene	U		0.140	0.500	1	04/25/2019 16:28	WG1271705
Chlorodibromomethane	U		0.128	0.500	1	04/25/2019 16:28	WG1271705
Chloroethane	U	<u>UJ</u> <u>JO</u>	0.141	2.50	1	04/25/2019 16:28	WG1271705
Chloroform	U		0.0860	0.500	1	04/25/2019 16:28	WG1271705
Chloromethane	U		0.153	1.25	1	04/25/2019 16:28	WG1271705
2-Chlorotoluene	U		0.111	0.500	1	04/25/2019 16:28	WG1271705
4-Chlorotoluene	U		0.0972	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/25/2019 16:28	WG1271705
1,2-Dibromoethane	U		0.193	0.500	1	04/25/2019 16:28	WG1271705
Dibromomethane	U		0.117	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dichlorobenzene	U		0.101	0.500	1	04/25/2019 16:28	WG1271705
1,3-Dichlorobenzene	U		0.130	0.500	1	04/25/2019 16:28	WG1271705
1,4-Dichlorobenzene	U		0.121	0.500	1	04/25/2019 16:28	WG1271705
Dichlorodifluoromethane	U		0.127	2.50	1	04/25/2019 16:28	WG1271705
1,1-Dichloroethane	U		0.114	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dichloroethane	U		0.108	0.500	1	04/25/2019 16:28	WG1271705
1,1-Dichloroethene	U		0.188	0.500	1	04/25/2019 16:28	WG1271705
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/25/2019 16:28	WG1271705
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/25/2019 16:28	WG1271705
1,2-Dichloropropane	U		0.190	0.500	1	04/25/2019 16:28	WG1271705
1,1-Dichloropropene	U		0.128	0.500	1	04/25/2019 16:28	WG1271705
1,3-Dichloropropane	U		0.147	1.00	1	04/25/2019 16:28	WG1271705
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/25/2019 16:28	WG1271705
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/25/2019 16:28	WG1271705
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/25/2019 16:28	WG1271705
2,2-Dichloropropane	U		0.0929	0.500	1	04/25/2019 16:28	WG1271705
Di-isopropyl ether	U		0.0924	0.500	1	04/25/2019 16:28	WG1271705
Ethylbenzene	U		0.158	0.500	1	04/25/2019 16:28	WG1271705
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/25/2019 16:28	WG1271705
2-Hexanone	U		0.757	5.00	1	04/25/2019 16:28	WG1271705
n-Hexane	U		0.305	5.00	1	04/25/2019 16:28	WG1271705
Iodomethane	U		0.377	10.0	1	04/25/2019 16:28	WG1271705
Isopropylbenzene	U		0.126	0.500	1	04/25/2019 16:28	WG1271705
p-Isopropyltoluene	U		0.138	0.500	1	04/25/2019 16:28	WG1271705
2-Butanone (MEK)	U		1.28	5.00	1	04/25/2019 16:28	WG1271705

JC 5/9/19



Collected date/time: 04/24/19 00:00

L1092400

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/25/2019 16:28	WG1271705
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/25/2019 16:28	WG1271705
Methyl tert-butyl ether	U		0.102	0.500	1	04/25/2019 16:28	WG1271705
Naphthalene	U		0.174	2.50	1	04/25/2019 16:28	WG1271705
n-Propylbenzene	U		0.162	0.500	1	04/25/2019 16:28	WG1271705
Styrene	U		0.117	0.500	1	04/25/2019 16:28	WG1271705
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/25/2019 16:28	WG1271705
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/25/2019 16:28	WG1271705
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/25/2019 16:28	WG1271705
Tetrachloroethene	U		0.199	0.500	1	04/25/2019 16:28	WG1271705
Toluene	U		0.412	0.500	1	04/25/2019 16:28	WG1271705
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/25/2019 16:28	WG1271705
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/25/2019 16:28	WG1271705
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/25/2019 16:28	WG1271705
1,1,2-Trichloroethane	U		0.186	0.500	1	04/25/2019 16:28	WG1271705
Trichloroethene	U		0.153	0.500	1	04/25/2019 16:28	WG1271705
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/25/2019 16:28	WG1271705
1,2,3-Trichloropropane	U		0.247	2.50	1	04/25/2019 16:28	WG1271705
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/25/2019 16:28	WG1271705
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/25/2019 16:28	WG1271705
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/25/2019 16:28	WG1271705
Vinyl acetate	U		0.645	5.00	1	04/25/2019 16:28	WG1271705
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/25/2019 16:28	WG1271705
Xylenes, Total	U		0.316	1.50	1	04/25/2019 16:28	WG1271705
(S) Toluene-d8	101			80.0-120		04/25/2019 16:28	WG1271705
(S) 4-Bromofluorobenzene	105			77.0-126		04/25/2019 16:28	WG1271705
(S) 1,2-Dichloroethane-d4	92.8			70.0-130		04/25/2019 16:28	WG1271705

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/9/19



ANALYTICAL REPORT

May 08, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

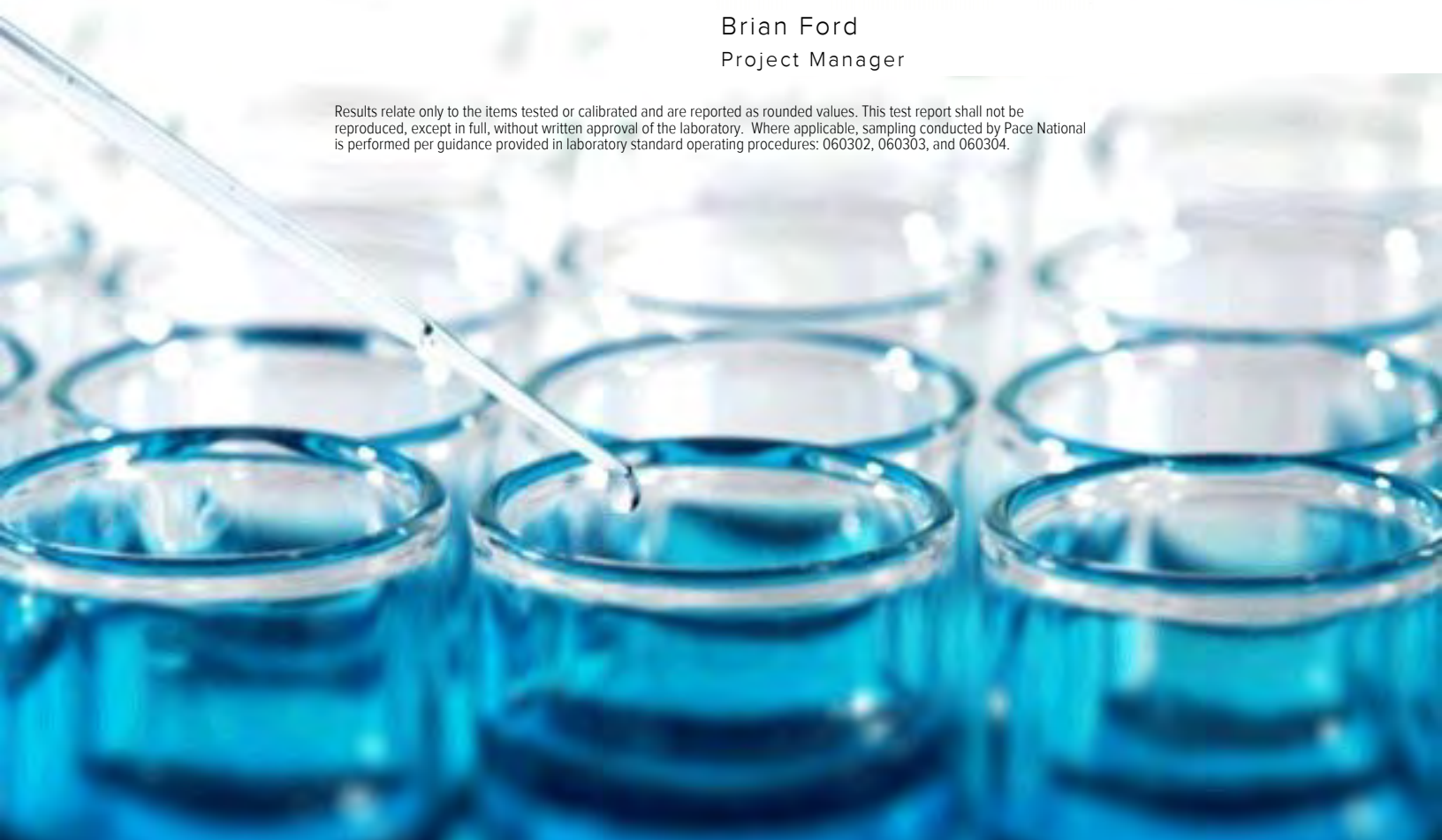
PES Environmental, Inc.- WA

Sample Delivery Group: L1093242
 Samples Received: 04/27/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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				Collected by	Collected date/time	Received date/time
MW106-042619 L1093242-01 GW				K. Zygus	04/26/19 09:30	04/27/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1275809	1	05/04/19 20:24	05/04/19 20:24	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1272741	1	04/27/19 13:06	04/27/19 13:06	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1273394	1	04/29/19 19:55	04/29/19 19:55	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271844	1	04/30/19 09:36	05/07/19 23:12	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1274492	1	05/01/19 15:18	05/01/19 15:18	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1275531	1	05/03/19 15:01	05/03/19 15:01	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 16:01	04/27/19 16:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275623	1	05/03/19 13:59	05/03/19 13:59	JHH	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

				Collected by	Collected date/time	Received date/time
MW145-042619 L1093242-02 GW				K. Zygus	04/26/19 11:40	04/27/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1275809	1	05/04/19 20:31	05/04/19 20:31	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1272741	1	04/27/19 13:21	04/27/19 13:21	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1273394	1	04/29/19 20:10	04/29/19 20:10	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271844	1	04/30/19 09:36	05/07/19 23:17	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1274492	1	05/01/19 15:38	05/01/19 15:38	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1275531	1	05/03/19 15:15	05/03/19 15:15	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 16:21	04/27/19 16:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275623	1	05/03/19 14:19	05/03/19 14:19	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW110-042619 L1093242-03 GW				K. Zygus	04/26/19 13:30	04/27/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 16:41	04/27/19 16:41	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275623	50	05/03/19 16:20	05/03/19 16:20	DWR	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
TRIP BLANK-042419 L1093242-04 GW				K. Zygus	04/26/19 00:00	04/27/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1274492	1	05/01/19 13:35	05/01/19 13:35	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 11:51	04/27/19 11:51	BMB	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW-910-042619 L1093242-05 GW				K. Zygus	04/26/19 08:15	04/27/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1274492	1	05/01/19 15:59	05/01/19 15:59	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 17:01	04/27/19 17:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275623	1	05/03/19 14:59	05/03/19 14:59	DWR	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW-178-042619 L1093242-06 GW				K. Zygus	04/26/19 09:10	04/27/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1275809	1	05/04/19 20:39	05/04/19 20:39	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1272741	1	04/27/19 14:05	04/27/19 14:05	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1272741	5	04/27/19 14:58	04/27/19 14:58	ST	Mt. Juliet, TN



MW-178-042619 L1093242-06 GW

Collected by: K. Zygas
 Collected date/time: 04/26/19 09:10
 Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9060A	WG1273394	1	04/29/19 20:23	04/29/19 20:23	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1271844	1	04/30/19 09:36	05/07/19 23:21	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1274492	1	05/01/19 16:20	05/01/19 16:20	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1275531	1	05/03/19 15:20	05/03/19 15:20	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 17:21	04/27/19 17:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275623	1	05/03/19 15:19	05/03/19 15:19	DWR	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn

MW-159-042519 L1093242-07 GW

Collected by: K. Zygas
 Collected date/time: 04/26/19 11:05
 Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1274492	1	05/01/19 16:40	05/01/19 16:40	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 17:41	04/27/19 17:41	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275623	1	05/03/19 15:39	05/03/19 15:39	DWR	Mt. Juliet, TN

- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al

MW-9-042619 L1093242-08 GW

Collected by: K. Zygas
 Collected date/time: 04/26/19 13:00
 Received date/time: 04/27/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1274492	1	05/01/19 17:01	05/01/19 17:01	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1272804	1	04/27/19 18:01	04/27/19 18:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275623	1	05/03/19 16:00	05/03/19 16:00	DWR	Mt. Juliet, TN

- 9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Sample Handling and Receiving

The following analysis were performed from an unpreserved, insufficiently or inadequately preserved sample.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1093242-06	MW-178-042619	9060A

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	267000		2710	20000	1	05/04/2019 20:24	WG1275809

Sample Narrative:

L1093242-01 WG1275809: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	23600		51.9	1000	1	04/27/2019 13:06	WG1272741
Nitrate	U		22.7	100	1	04/27/2019 13:06	WG1272741
Sulfate	15900		77.4	5000	1	04/27/2019 13:06	WG1272741

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3320		102	1000	1	04/29/2019 19:55	WG1273394

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3420		15.0	100	1	05/07/2019 23:12	WG1271844
Manganese	695		0.250	5.00	1	05/07/2019 23:12	WG1271844

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 15:18	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	92.9			78.0-120		05/01/2019 15:18	WG1274492

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	42.1		0.287	0.678	1	05/03/2019 15:01	WG1275531
Ethane	U		0.296	1.29	1	05/03/2019 15:01	WG1275531
Ethene	U		0.422	1.27	1	05/03/2019 15:01	WG1275531

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.65	J	1.05	25.0	1	04/27/2019 16:01	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 16:01	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 16:01	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 16:01	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 16:01	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 16:01	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 16:01	WG1272804
Bromomethane	U	JO	0.157	2.50	1	04/27/2019 16:01	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 16:01	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 16:01	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 16:01	WG1272804
Carbon disulfide	0.142	J	0.101	0.500	1	04/27/2019 16:01	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 16:01	WG1272804

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/26/19 09:30

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/27/2019 16:01	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 16:01	WG1272804
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 13:59	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 16:01	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 16:01	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 16:01	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 16:01	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 16:01	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 16:01	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 16:01	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 16:01	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 16:01	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 16:01	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 16:01	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 13:59	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 16:01	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 16:01	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/27/2019 16:01	WG1272804
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 16:01	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 16:01	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 16:01	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 16:01	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 16:01	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 16:01	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 16:01	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 16:01	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 16:01	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 16:01	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 16:01	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 16:01	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 16:01	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 16:01	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 16:01	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 16:01	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 16:01	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 16:01	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 16:01	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 16:01	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 16:01	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 16:01	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 16:01	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 16:01	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 16:01	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 16:01	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 16:01	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 16:01	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 16:01	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 16:01	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 13:59	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 16:01	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 16:01	WG1272804
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/27/2019 16:01	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 16:01	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 16:01	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 16:01	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 16:01	WG1272804

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/26/19 09:30

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/27/2019 16:01	WG1272804
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/27/2019 16:01	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 16:01	WG1272804
(S) Toluene-d8	97.8			80.0-120		04/27/2019 16:01	WG1272804
(S) Toluene-d8	96.7			80.0-120		05/03/2019 13:59	WG1275623
(S) 4-Bromofluorobenzene	105			77.0-126		04/27/2019 16:01	WG1272804
(S) 4-Bromofluorobenzene	104			77.0-126		05/03/2019 13:59	WG1275623
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		04/27/2019 16:01	WG1272804
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		05/03/2019 13:59	WG1275623

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	287000		2710	20000	1	05/04/2019 20:31	WG1275809

Sample Narrative:

L1093242-02 WG1275809: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	44700		51.9	1000	1	04/27/2019 13:21	WG1272741
Nitrate	U		22.7	100	1	04/27/2019 13:21	WG1272741
Sulfate	73900		77.4	5000	1	04/27/2019 13:21	WG1272741

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5290		102	1000	1	04/29/2019 20:10	WG1273394

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5730		15.0	100	1	05/07/2019 23:17	WG1271844
Manganese	318		0.250	5.00	1	05/07/2019 23:17	WG1271844

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 15:38	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.9			78.0-120		05/01/2019 15:38	WG1274492

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	455		0.287	0.678	1	05/03/2019 15:15	WG1275531
Ethane	1.73		0.296	1.29	1	05/03/2019 15:15	WG1275531
Ethene	5.24		0.422	1.27	1	05/03/2019 15:15	WG1275531

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.01	J	1.05	25.0	1	04/27/2019 16:21	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 16:21	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 16:21	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 16:21	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 16:21	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 16:21	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 16:21	WG1272804
Bromomethane	U	JO	0.157	2.50	1	04/27/2019 16:21	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 16:21	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 16:21	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 16:21	WG1272804
Carbon disulfide	0.365	J	0.101	0.500	1	04/27/2019 16:21	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 16:21	WG1272804

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/26/19 11:40

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/27/2019 16:21	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 16:21	WG1272804
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 14:19	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 16:21	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 16:21	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 16:21	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 16:21	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 16:21	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 16:21	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 16:21	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 16:21	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 16:21	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 16:21	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 16:21	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 14:19	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 16:21	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 16:21	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/27/2019 16:21	WG1272804
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 16:21	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 16:21	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 16:21	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 16:21	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 16:21	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 16:21	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 16:21	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 16:21	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 16:21	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 16:21	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 16:21	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 16:21	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 16:21	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 16:21	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 16:21	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 16:21	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 16:21	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 16:21	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 16:21	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 16:21	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 16:21	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 16:21	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 16:21	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 16:21	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 16:21	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 16:21	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 16:21	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 16:21	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 16:21	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 16:21	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 14:19	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 16:21	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 16:21	WG1272804
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/27/2019 16:21	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 16:21	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 16:21	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 16:21	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 16:21	WG1272804

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/26/19 11:40

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/27/2019 16:21	WG1272804
Vinyl chloride	0.392	JJO	0.118	0.500	1	04/27/2019 16:21	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 16:21	WG1272804
(S) Toluene-d8	99.1			80.0-120		04/27/2019 16:21	WG1272804
(S) Toluene-d8	99.5			80.0-120		05/03/2019 14:19	WG1275623
(S) 4-Bromofluorobenzene	104			77.0-126		04/27/2019 16:21	WG1272804
(S) 4-Bromofluorobenzene	106			77.0-126		05/03/2019 14:19	WG1275623
(S) 1,2-Dichloroethane-d4	96.0			70.0-130		04/27/2019 16:21	WG1272804
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		05/03/2019 14:19	WG1275623

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/27/2019 16:41	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 16:41	WG1272804
Benzene	0.291	J	0.0896	0.500	1	04/27/2019 16:41	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 16:41	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 16:41	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 16:41	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 16:41	WG1272804
Bromomethane	U	JO	0.157	2.50	1	04/27/2019 16:41	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 16:41	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 16:41	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 16:41	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 16:41	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 16:41	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 16:41	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 16:41	WG1272804
Chloroethane	U	JO	7.05	125	50	05/03/2019 16:20	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 16:41	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 16:41	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 16:41	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 16:41	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 16:41	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 16:41	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 16:41	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 16:41	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 16:41	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 16:41	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 16:41	WG1272804
1,1-Dichloroethane	U		5.70	25.0	50	05/03/2019 16:20	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 16:41	WG1272804
1,1-Dichloroethene	7.03		0.188	0.500	1	04/27/2019 16:41	WG1272804
cis-1,2-Dichloroethene	710		4.66	25.0	50	05/03/2019 16:20	WG1275623
trans-1,2-Dichloroethene	5.59		0.152	0.500	1	04/27/2019 16:41	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 16:41	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 16:41	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 16:41	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 16:41	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 16:41	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 16:41	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 16:41	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 16:41	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 16:41	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 16:41	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 16:41	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 16:41	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 16:41	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 16:41	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 16:41	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 16:41	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 16:41	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 16:41	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 16:41	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 16:41	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 16:41	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 16:41	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 16:41	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 16:41	WG1272804

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/26/19 13:30

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 16:41	WG1272804
Tetrachloroethene	1500		9.95	25.0	50	05/03/2019 16:20	WG1275623
Toluene	U		0.412	0.500	1	04/27/2019 16:41	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 16:41	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 16:41	WG1272804
1,1,1-Trichloroethane	U		4.70	25.0	50	05/03/2019 16:20	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 16:41	WG1272804
Trichloroethene	613		7.65	25.0	50	05/03/2019 16:20	WG1275623
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/27/2019 16:41	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 16:41	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 16:41	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 16:41	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 16:41	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 16:41	WG1272804
Vinyl chloride	0.900	<u>JO</u>	0.118	0.500	1	04/27/2019 16:41	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 16:41	WG1272804
(S) Toluene-d8	99.1			80.0-120		04/27/2019 16:41	WG1272804
(S) Toluene-d8	98.7			80.0-120		05/03/2019 16:20	WG1275623
(S) 4-Bromofluorobenzene	104			77.0-126		04/27/2019 16:41	WG1272804
(S) 4-Bromofluorobenzene	101			77.0-126		05/03/2019 16:20	WG1275623
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		04/27/2019 16:41	WG1272804
(S) 1,2-Dichloroethane-d4	98.9			70.0-130		05/03/2019 16:20	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1093242-03 WG1272804, WG1275623: Not all compounds reportable at lower dilution.

L1093242-03 WG1272804, WG1275623: Cannot be re-analyzed at lower dilution due to high levels of target analytes.



Collected date/time: 04/26/19 00:00

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 13:35	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	92.8			78.0-120		05/01/2019 13:35	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.43	J	1.05	25.0	1	04/27/2019 11:51	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 11:51	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 11:51	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 11:51	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 11:51	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 11:51	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 11:51	WG1272804
Bromomethane	U	JO	0.157	2.50	1	04/27/2019 11:51	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 11:51	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 11:51	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 11:51	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 11:51	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 11:51	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 11:51	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 11:51	WG1272804
Chloroethane	U	JO	0.141	2.50	1	04/27/2019 11:51	WG1272804
Chloroform	U		0.0860	0.500	1	04/27/2019 11:51	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 11:51	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 11:51	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 11:51	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 11:51	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 11:51	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 11:51	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 11:51	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 11:51	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 11:51	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 11:51	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/27/2019 11:51	WG1272804
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 11:51	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 11:51	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 11:51	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 11:51	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 11:51	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 11:51	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 11:51	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 11:51	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 11:51	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 11:51	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 11:51	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 11:51	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 11:51	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 11:51	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 11:51	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 11:51	WG1272804



Collected date/time: 04/26/19 00:00

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 11:51	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 11:51	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 11:51	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 11:51	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 11:51	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 11:51	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 11:51	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 11:51	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 11:51	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 11:51	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 11:51	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 11:51	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 11:51	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/27/2019 11:51	WG1272804
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 11:51	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 11:51	WG1272804
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/27/2019 11:51	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 11:51	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 11:51	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 11:51	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 11:51	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 11:51	WG1272804
Vinyl chloride	U	<u>JO</u>	0.118	0.500	1	04/27/2019 11:51	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 11:51	WG1272804
(S) Toluene-d8	106			80.0-120		04/27/2019 11:51	WG1272804
(S) 4-Bromofluorobenzene	106			77.0-126		04/27/2019 11:51	WG1272804
(S) 1,2-Dichloroethane-d4	104			70.0-130		04/27/2019 11:51	WG1272804

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/26/19 08:15

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 15:59	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.2			78.0-120		05/01/2019 15:59	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.65	J	1.05	25.0	1	04/27/2019 17:01	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 17:01	WG1272804
Benzene	0.193	J	0.0896	0.500	1	04/27/2019 17:01	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 17:01	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 17:01	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 17:01	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 17:01	WG1272804
Bromomethane	U	JO	0.157	2.50	1	04/27/2019 17:01	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 17:01	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 17:01	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 17:01	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 17:01	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 17:01	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 17:01	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 17:01	WG1272804
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 14:59	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 17:01	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 17:01	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 17:01	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 17:01	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 17:01	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 17:01	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 17:01	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 17:01	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 17:01	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 17:01	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 17:01	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 14:59	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 17:01	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 17:01	WG1272804
cis-1,2-Dichloroethene	1.12		0.0933	0.500	1	05/03/2019 14:59	WG1275623
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 17:01	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 17:01	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 17:01	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 17:01	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 17:01	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 17:01	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 17:01	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 17:01	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 17:01	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 17:01	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 17:01	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 17:01	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 17:01	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 17:01	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 17:01	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 17:01	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 17:01	WG1272804



Collected date/time: 04/26/19 08:15

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 17:01	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 17:01	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 17:01	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 17:01	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 17:01	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 17:01	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 17:01	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 17:01	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 17:01	WG1272804
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 14:59	WG1275623
Toluene	U		0.412	0.500	1	04/27/2019 17:01	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 17:01	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 17:01	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 14:59	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 17:01	WG1272804
Trichloroethene	U		0.153	0.500	1	05/03/2019 14:59	WG1275623
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/27/2019 17:01	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 17:01	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 17:01	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 17:01	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 17:01	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 17:01	WG1272804
Vinyl chloride	1.04	<u>JO</u>	0.118	0.500	1	04/27/2019 17:01	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 17:01	WG1272804
(S) Toluene-d8	99.1			80.0-120		04/27/2019 17:01	WG1272804
(S) Toluene-d8	98.3			80.0-120		05/03/2019 14:59	WG1275623
(S) 4-Bromofluorobenzene	107			77.0-126		04/27/2019 17:01	WG1272804
(S) 4-Bromofluorobenzene	105			77.0-126		05/03/2019 14:59	WG1275623
(S) 1,2-Dichloroethane-d4	94.7			70.0-130		04/27/2019 17:01	WG1272804
(S) 1,2-Dichloroethane-d4	93.6			70.0-130		05/03/2019 14:59	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	161000		2710	20000	1	05/04/2019 20:39	WG1275809

Sample Narrative:

L1093242-06 WG1275809: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	17100		51.9	1000	1	04/27/2019 14:05	WG1272741
Nitrate	U		22.7	100	1	04/27/2019 14:05	WG1272741
Sulfate	175000		387	25000	5	04/27/2019 14:58	WG1272741

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5190		102	1000	1	04/29/2019 20:23	WG1273394

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2910		15.0	100	1	05/07/2019 23:21	WG1271844
Manganese	420		0.250	5.00	1	05/07/2019 23:21	WG1271844

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 16:20	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.7			78.0-120		05/01/2019 16:20	WG1274492

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1600		0.287	0.678	1	05/03/2019 15:20	WG1275531
Ethane	U		0.296	1.29	1	05/03/2019 15:20	WG1275531
Ethene	3.65		0.422	1.27	1	05/03/2019 15:20	WG1275531

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.70	J	1.05	25.0	1	04/27/2019 17:21	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 17:21	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 17:21	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 17:21	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 17:21	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 17:21	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 17:21	WG1272804
Bromomethane	U	JO	0.157	2.50	1	04/27/2019 17:21	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 17:21	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 17:21	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 17:21	WG1272804
Carbon disulfide	0.198	J	0.101	0.500	1	04/27/2019 17:21	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 17:21	WG1272804

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/26/19 09:10

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/27/2019 17:21	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 17:21	WG1272804
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 15:19	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 17:21	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 17:21	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 17:21	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 17:21	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 17:21	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 17:21	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 17:21	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 17:21	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 17:21	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 17:21	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 17:21	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 15:19	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 17:21	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 17:21	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/03/2019 15:19	WG1275623
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 17:21	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 17:21	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 17:21	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 17:21	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 17:21	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 17:21	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 17:21	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 17:21	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 17:21	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 17:21	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 17:21	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 17:21	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 17:21	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 17:21	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 17:21	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 17:21	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 17:21	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 17:21	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 17:21	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 17:21	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 17:21	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 17:21	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 17:21	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 17:21	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 17:21	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 17:21	WG1272804
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 15:19	WG1275623
Toluene	U		0.412	0.500	1	04/27/2019 17:21	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 17:21	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 17:21	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 15:19	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 17:21	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 17:21	WG1272804
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/27/2019 17:21	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 17:21	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 17:21	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 17:21	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 17:21	WG1272804

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/26/19 09:10

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/27/2019 17:21	WG1272804
Vinyl chloride	0.277	JJO	0.118	0.500	1	04/27/2019 17:21	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 17:21	WG1272804
(S) Toluene-d8	97.2			80.0-120		04/27/2019 17:21	WG1272804
(S) Toluene-d8	98.2			80.0-120		05/03/2019 15:19	WG1275623
(S) 4-Bromofluorobenzene	103			77.0-126		04/27/2019 17:21	WG1272804
(S) 4-Bromofluorobenzene	99.8			77.0-126		05/03/2019 15:19	WG1275623
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		04/27/2019 17:21	WG1272804
(S) 1,2-Dichloroethane-d4	99.3			70.0-130		05/03/2019 15:19	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/26/19 11:05

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 16:40	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.8			78.0-120		05/01/2019 16:40	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/27/2019 17:41	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 17:41	WG1272804
Benzene	0.179	J	0.0896	0.500	1	04/27/2019 17:41	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 17:41	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 17:41	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 17:41	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 17:41	WG1272804
Bromomethane	U	JO	0.157	2.50	1	04/27/2019 17:41	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 17:41	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 17:41	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 17:41	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 17:41	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 17:41	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 17:41	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 17:41	WG1272804
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 15:39	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 17:41	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 17:41	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 17:41	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 17:41	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 17:41	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 17:41	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 17:41	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 17:41	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 17:41	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 17:41	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 17:41	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 15:39	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 17:41	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 17:41	WG1272804
cis-1,2-Dichloroethene	1.23		0.0933	0.500	1	05/03/2019 15:39	WG1275623
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 17:41	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 17:41	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 17:41	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 17:41	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 17:41	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 17:41	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 17:41	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 17:41	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 17:41	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 17:41	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 17:41	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 17:41	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 17:41	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 17:41	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 17:41	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 17:41	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 17:41	WG1272804



Collected date/time: 04/26/19 11:05

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 17:41	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 17:41	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 17:41	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 17:41	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 17:41	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 17:41	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 17:41	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 17:41	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 17:41	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 17:41	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 17:41	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 17:41	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 17:41	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 15:39	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 17:41	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 17:41	WG1272804
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	04/27/2019 17:41	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 17:41	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 17:41	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 17:41	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 17:41	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 17:41	WG1272804
Vinyl chloride	1.03	<u>JO</u>	0.118	0.500	1	04/27/2019 17:41	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 17:41	WG1272804
(S) Toluene-d8	99.9			80.0-120		04/27/2019 17:41	WG1272804
(S) Toluene-d8	102			80.0-120		05/03/2019 15:39	WG1275623
(S) 4-Bromofluorobenzene	106			77.0-126		04/27/2019 17:41	WG1272804
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 15:39	WG1275623
(S) 1,2-Dichloroethane-d4	96.5			70.0-130		04/27/2019 17:41	WG1272804
(S) 1,2-Dichloroethane-d4	102			70.0-130		05/03/2019 15:39	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/26/19 13:00

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	121		31.6	100	1	05/01/2019 17:01	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	94.3			78.0-120		05/01/2019 17:01	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/27/2019 18:01	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 18:01	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 18:01	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 18:01	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 18:01	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 18:01	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 18:01	WG1272804
Bromomethane	U	<u>JO</u>	0.157	2.50	1	04/27/2019 18:01	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 18:01	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 18:01	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 18:01	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 18:01	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 18:01	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 18:01	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 18:01	WG1272804
Chloroethane	U	<u>JO</u>	0.141	2.50	1	05/03/2019 16:00	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 18:01	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 18:01	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 18:01	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 18:01	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 18:01	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 18:01	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 18:01	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 18:01	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 18:01	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 18:01	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 18:01	WG1272804
1,1-Dichloroethane	1.57		0.114	0.500	1	05/03/2019 16:00	WG1275623
1,2-Dichloroethane	0.229	<u>J</u>	0.108	0.500	1	04/27/2019 18:01	WG1272804
1,1-Dichloroethene	0.893		0.188	0.500	1	04/27/2019 18:01	WG1272804
cis-1,2-Dichloroethene	75.1		0.0933	0.500	1	04/27/2019 18:01	WG1272804
trans-1,2-Dichloroethene	0.261	<u>J</u>	0.152	0.500	1	04/27/2019 18:01	WG1272804
1,2-Dichloropropane	0.878		0.190	0.500	1	04/27/2019 18:01	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 18:01	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 18:01	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 18:01	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 18:01	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 18:01	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 18:01	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 18:01	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 18:01	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 18:01	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 18:01	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 18:01	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 18:01	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 18:01	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 18:01	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 18:01	WG1272804



Collected date/time: 04/26/19 13:00

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 18:01	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 18:01	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 18:01	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 18:01	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 18:01	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 18:01	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 18:01	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 18:01	WG1272804
1,1,2-Trichlorotrifluoroethane	0.465	U	0.164	0.500	1	04/27/2019 18:01	WG1272804
Tetrachloroethene	157		0.199	0.500	1	04/27/2019 18:01	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 18:01	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 18:01	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 18:01	WG1272804
1,1,1-Trichloroethane	0.298	U	0.0940	0.500	1	05/03/2019 16:00	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 18:01	WG1272804
Trichloroethene	45.2		0.153	0.500	1	04/27/2019 18:01	WG1272804
Trichlorofluoromethane	U	JO	0.130	2.50	1	04/27/2019 18:01	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 18:01	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 18:01	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 18:01	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 18:01	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 18:01	WG1272804
Vinyl chloride	0.861	JO	0.118	0.500	1	04/27/2019 18:01	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 18:01	WG1272804
(S) Toluene-d8	98.3			80.0-120		04/27/2019 18:01	WG1272804
(S) Toluene-d8	98.2			80.0-120		05/03/2019 16:00	WG1275623
(S) 4-Bromofluorobenzene	103			77.0-126		04/27/2019 18:01	WG1272804
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 16:00	WG1275623
(S) 1,2-Dichloroethane-d4	93.7			70.0-130		04/27/2019 18:01	WG1272804
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		05/03/2019 16:00	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3408496-1 05/04/19 20:03

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	3110	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1093241-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1093241-01 05/04/19 20:10 • (DUP) R3408496-2 05/04/19 20:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	167000	167000	1	0.0717		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1093601-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1093601-01 05/04/19 22:54 • (DUP) R3408496-4 05/04/19 23:01

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	274000	267000	1	2.59		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3408496-3 05/04/19 21:17

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	102000	102	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3406167-1 04/27/19 09:15

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1093227-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1093227-01 04/27/19 11:05 • (DUP) R3406167-3 04/27/19 11:19

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	19900	19900	1	0.288		15
Nitrate	996	1000	1	0.351		15
Sulfate	16500	16500	1	0.152		15

L1091939-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1091939-06 04/27/19 16:12 • (DUP) R3406167-6 04/27/19 16:27

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	5350	5330	1	0.491		15
Nitrate	80.2	80.4	1	0.249	J	15
Sulfate	14200	14200	1	0.0457		15

Laboratory Control Sample (LCS)

(LCS) R3406167-2 04/27/19 09:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	40200	100	80.0-120	
Nitrate	8000	8250	103	80.0-120	
Sulfate	40000	40900	102	80.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1093227-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	19900	69200	69400	98.7	99.1	1	80.0-120	1		0.273	15
Nitrate	5000	996	5960	5990	99.3	99.8	1	80.0-120	1		0.387	15
Sulfate	50000	16500	66400	66500	99.7	100	1	80.0-120	1		0.258	15

L1091939-06 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	5350	55300	99.9	1	80.0-120	
Nitrate	5000	80.2	5020	98.7	1	80.0-120	
Sulfate	50000	14200	64300	100	1	80.0-120	

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6 Qc
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Method Blank (MB)

(MB) R3406585-1	04/29/19 11:52	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	284	1	102	1000
TOC (Total Organic Carbon)					

L1092770-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1092770-01	04/29/19 13:19 • (DUP) R3406585-3	04/29/19 13:32	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	8240	8150	1	1.15	%	%	20
TOC (Total Organic Carbon)								

L1093209-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1093209-03	04/29/19 18:04 • (DUP) R3406585-6	04/29/19 18:17	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	4670	4640	1	0.623	%	%	20
TOC (Total Organic Carbon)								

Laboratory Control Sample (LCS)

(LCS) R3406585-2	04/29/19 12:30	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	75000	77000	103	85.0-115	%
TOC (Total Organic Carbon)						

L1092865-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1092865-02	04/29/19 16:29 • (MS) R3406585-4	04/29/19 16:45 • (MSD) R3406585-5	04/29/19 17:00	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	50000	2150	50400	50000	96.5	95.7	1	80.0-120	1	80.0-120	0.836	20	%	%
TOC (Total Organic Carbon)															

L1093242-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1093242-06	04/29/19 20:23 • (MS) R3406585-7	04/29/19 20:39 • (MSD) R3406585-8	04/29/19 20:55	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	50000	5190	51100	51100	91.8	91.9	1	80.0-120	1	80.0-120	0.137	20	%	%
TOC (Total Organic Carbon)															

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 6020B

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Iron	87.3	J	15.0	100
Manganese	184	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec. %	LCSD Rec. %	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits
	Spike Amount	ug/l	ug/l	ug/l							
Iron	500	449	441	441	89.8	88.1	80.0-120			1.93	20
Manganese	50.0	45.5	44.5	44.5	91.0	89.1	80.0-120			2.10	20

L1092880-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD %	RPD Limits
	Spike Amount	ug/l	ug/l	ug/l	ug/l	ug/l						
Iron	500	12400	13900	13700	286	251	1	75.0-125	V	V	1.26	20
Manganese	50.0	393	440	449	93.4	111	1	75.0-125	V	V	2.01	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1093242-01.02.04.05.06.07.08](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	93.6		78.0-120	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	%	ug/l	%	ug/l	%	%	%	%	%			%	%	%	%	%	%
Gasoline Range Organics-NWTPH	5500		5370		5440		97.6		98.9		70.0-124		1.33		20			
^(S) <i>a,a</i> -Trifluorotoluene(FID)							104		105		78.0-120							

L1092880-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount		Original Result		MS Result		MSD Result		MS Rec.		MSD Rec.		Dilution		Rec. Limits		MS Qualifier		MSD Qualifier		RPD	
	ug/l	%	ug/l	%	ug/l	%	ug/l	%	%	%	%	%			%	%	%	%	%	%	%	%
Gasoline Range Organics-NWTPH	5500		U		6290		5510		114		100		1		10.0-155						13.2	
^(S) <i>a,a</i> -Trifluorotoluene(FID)									109		107				78.0-120							21

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1093242-01.02.06](#)

Method Blank (MB)

(MB) R3408007-1 05/03/19 14:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1092924-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1092924-01 05/03/19 14:23 • (DUP) R3408007-2 05/03/19 15:18

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3408007-3 05/03/19 15:40 • (LCSD) R3408007-4 05/03/19 15:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	74.4	70.2	110	104	85.0-115			5.87	20
Ethane	129	110	110	85.6	85.2	85.0-115			0.467	20
Ethene	127	110	109	86.3	85.9	85.0-115			0.532	20

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Method Blank (MB)

(MB) R3407791-2_04/27/19_09:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
2-Hexanone	U		0.757	5.00

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1093242-01.02.03.04.05.06.07.08](#)

Method Blank (MB)

(MB) R3407791-2_04/27/19_09:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
n-Hexane	U		0.305	5.00
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.368	J	0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
Naphthalene	U		0.174	2.50
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	5.00
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Toluene	U		0.412	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	99.8			80.0-120
(S) 4-Bromofluorobenzene	105			77.0-126
(S) 1,2-Dichloroethane-d4	90.5			70.0-130

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc - WA

PROJECT:

1413.001.05.601

SDG:

L1093242

DATE/TIME:

05/08/19 15:09

PAGE:

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Laboratory Control Sample (LCS)

(LCS) R3407791-1 04/27/19 09:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Bromochloromethane	25.0	23.5	93.9	76.0-122	
Acetone	125	137	110	19.0-160	
Acrylonitrile	125	151	121	55.0-149	
Bromobenzene	25.0	22.6	90.5	73.0-121	
Bromodichloromethane	25.0	21.8	87.2	75.0-120	
Bromoform	25.0	26.8	107	68.0-132	
Bromomethane	25.0	18.3	73.3	10.0-160	
trans-1,4-Dichloro-2-butene	25.0	21.1	84.3	33.0-144	
n-Butylbenzene	25.0	21.1	84.4	73.0-125	
sec-Butylbenzene	25.0	22.7	90.8	75.0-125	
tert-Butylbenzene	25.0	23.5	94.0	76.0-124	
Carbon disulfide	25.0	27.0	108	61.0-128	
2-Hexanone	125	141	113	67.0-149	
Carbon tetrachloride	25.0	23.2	92.6	68.0-126	
Chlorobenzene	25.0	23.4	93.5	80.0-121	
n-Hexane	25.0	24.5	98.2	57.0-133	
Chlorodibromomethane	25.0	23.5	94.1	77.0-125	
Iodomethane	125	131	105	33.0-147	
Chloroethane	25.0	17.3	69.4	47.0-150	
Chloroform	25.0	21.7	86.8	73.0-120	
Chloromethane	25.0	25.5	102	41.0-142	
2-Chlorotoluene	25.0	22.3	89.1	76.0-123	
Benzene	25.0	25.4	102	70.0-123	
4-Chlorotoluene	25.0	22.5	89.8	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	27.0	108	58.0-134	
1,2-Dibromoethane	25.0	23.1	92.4	80.0-122	
Dibromomethane	25.0	22.2	88.7	80.0-120	
1,2-Dichlorobenzene	25.0	23.1	92.3	79.0-121	
1,3-Dichlorobenzene	25.0	22.7	90.6	79.0-120	
1,4-Dichlorobenzene	25.0	21.8	87.1	79.0-120	
Dichlorodifluoromethane	25.0	29.6	118	51.0-149	
1,1-Dichloroethane	25.0	23.7	94.8	70.0-126	
1,2-Dichloroethane	25.0	20.3	81.1	70.0-128	
1,1-Dichloroethene	25.0	24.2	96.8	71.0-124	
cis-1,2-Dichloroethene	25.0	23.7	94.8	73.0-120	
trans-1,2-Dichloroethene	25.0	24.3	97.1	73.0-120	
1,2-Dichloropropane	25.0	25.4	102	77.0-125	
1,1-Dichloropropene	25.0	24.2	96.8	74.0-126	
1,3-Dichloropropene	25.0	24.0	96.1	80.0-120	
cis-1,3-Dichloropropene	25.0	23.0	92.2	80.0-123	

Public Review Draft

1 Cp
2 Tc
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9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3407791-1 04/27/19 09:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Vinyl acetate	125	68.1	54.5	11.0-160	
trans-1,3-Dichloropropene	25.0	22.0	88.2	78.0-124	
2,2-Dichloropropane	25.0	27.2	109	58.0-130	
Di-isopropyl ether	25.0	26.5	106	58.0-138	
Hexachloro-1,3-butadiene	25.0	28.0	112	54.0-138	
Isopropylbenzene	25.0	25.0	100	76.0-127	
p-Isopropyltoluene	25.0	23.0	92.1	76.0-125	
2-Butanone (MEK)	125	155	124	44.0-160	
Methylene Chloride	25.0	24.1	96.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	138	110	68.0-142	
Methyl tert-butyl ether	25.0	23.6	94.2	68.0-125	
Ethylbenzene	25.0	24.0	96.0	79.0-123	
n-Propylbenzene	25.0	22.0	88.0	77.0-124	
Styrene	25.0	26.5	106	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	23.9	95.8	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	20.8	83.2	65.0-130	
Tetrachloroethene	25.0	24.9	99.8	72.0-132	
1,1,2-Trichlorotrifluoroethane	25.0	22.4	89.7	69.0-132	
1,2,3-Trichlorobenzene	25.0	24.8	99.0	50.0-138	
1,2,4-Trichlorobenzene	25.0	24.9	99.6	57.0-137	
1,1,1-Trichloroethane	25.0	23.5	94.0	73.0-124	
1,1,2-Trichloroethane	25.0	22.3	89.2	80.0-120	
Trichloroethene	25.0	26.2	105	78.0-124	
Trichlorofluoromethane	25.0	16.4	65.5	59.0-147	
1,2,3-Trichloropropane	25.0	20.3	81.3	73.0-130	
1,2,3-Trimethylbenzene	25.0	21.6	86.3	77.0-120	
1,2,4-Trimethylbenzene	25.0	22.2	88.7	76.0-121	
1,3,5-Trimethylbenzene	25.0	22.2	89.0	76.0-122	
Naphthalene	25.0	24.9	99.8	54.0-135	
Vinyl chloride	25.0	18.5	73.8	67.0-131	
Toluene	25.0	25.3	101	79.0-120	
Xylenes, Total	75.0	72.5	96.7	79.0-123	
(S) Toluene-d8			100	80.0-120	
(S) 4-Bromofluorobenzene			109	77.0-126	
(S) 1,2-Dichloroethane-d4			91.0	70.0-130	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
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05/08/19 15:09

PAGE:

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1093242-01.02.03.05.06.07.08](#)

Method Blank (MB)

(MB) R3407938-3 05/03/19 10:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloroethane	U		0.141	2.50
1,1-Dichloroethane	U		0.114	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	96.9			80.0-120
(S) 4-Bromofluorobenzene	109			77.0-126
(S) 1,2-Dichloroethane-d4	95.5			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3407938-1 05/03/19 09:11 • (LCSD) R3407938-2 05/03/19 09:31

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Chloroethane	25.0	15.9	14.4	63.6	57.6	47.0-150			9.85	20
1,1-Dichloroethane	25.0	25.7	24.0	103	96.0	70.0-126			6.87	20
cis-1,2-Dichloroethene	25.0	24.0	23.2	96.1	93.0	73.0-120			3.33	20
Tetrachloroethene	25.0	23.8	23.6	95.2	94.3	72.0-132			0.966	20
1,1,1-Trichloroethane	25.0	24.0	23.4	96.1	93.6	73.0-124			2.65	20
Trichloroethene	25.0	26.0	24.9	104	99.8	78.0-124			4.20	20
(S) Toluene-d8				98.5	96.4	80.0-120				
(S) 4-Bromofluorobenzene				107	110	77.0-126				
(S) 1,2-Dichloroethane-d4				96.5	94.6	70.0-130				

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc.- WA

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Qualifier	Description
-----------	-------------

J	The identification of the analyte is acceptable; the reported value is an estimate.
JO	JO: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

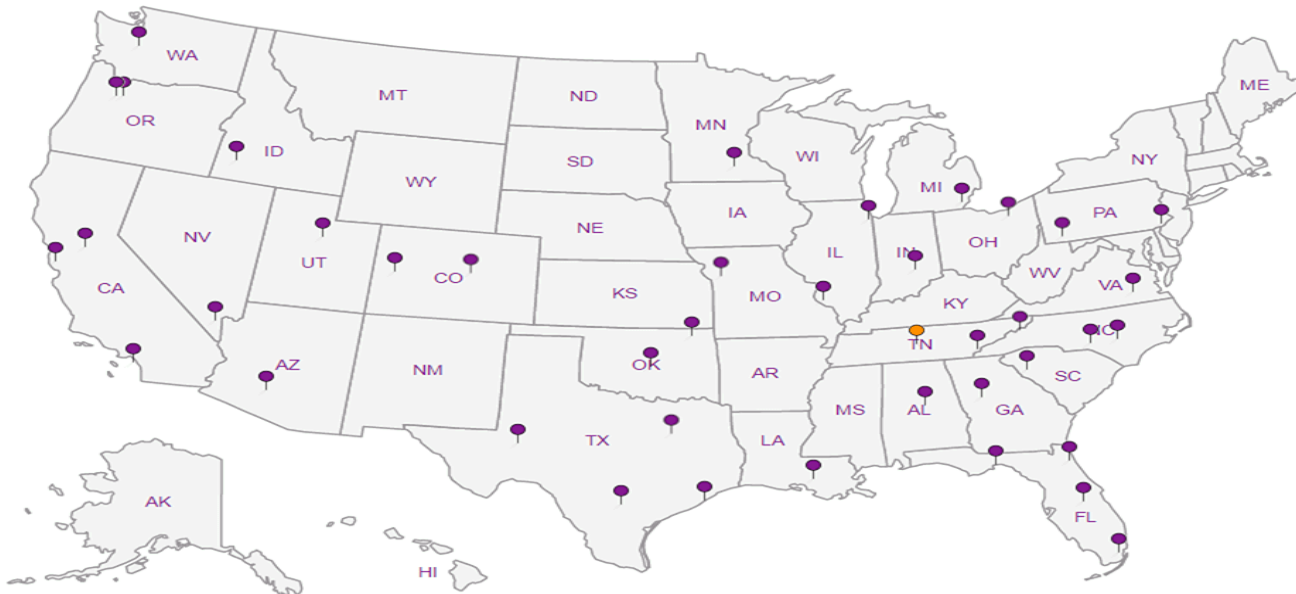
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. -WA
1215 4th Avenue STE 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 4th Ave STE 1350
Seattle, WA 98161

Pres
 CHK

Analysis / Container / Preservative

Chain of Custody

Page 1 of 2



National Center for Testing & Innovation

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



L# 1093242

E153

Tab

Accrums:

Template:

Prelogin:

TSR:

PB:

Shipped Via:

Remarks

Sample # (lab only)

Report to: **Brian O'Neal/Bill Haldeman**
 Project: **American Linen**
 Description:
 Phone: **206-529-3980**
 Fax: **206-529-3985**
 Client Project #: **1413.001.05.601**
 Site/Facility ID #: **American Linen**
 City/State: **Seattle, WA**
 Lab Project #: **PESENVSWA-ALP**
 P.O. #

Email To: **KViked@PESENV.COM**, **BHALDEMAN@PESENV.COM**, **BONEAL@PESENV.COM**
ESPRM@STAND@PESENV.COM

Collected by (print): **K. Egeas**
 Collected by (signature): *[Signature]*
 Immediately Packed on Ice: **N** **Y**
 Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Sample ID: **MW106-042619**
MW145-042619
MW110-042619
Trip Blank-042619

Comp/Grab: **Grab**
 Matrix: **GW**
 Depth: **135**
 Date: **4/26/19**
 Time: **0930**
 No. of Cntrs: **12**

Comp/Grab: **Grab**
 Matrix: **GW**
 Depth: **75**
 Date: **4/26/19**
 Time: **1140**
 No. of Cntrs: **12**

Comp/Grab: **Grab**
 Matrix: **GW**
 Depth: **40**
 Date: **4/26/19**
 Time: **1330**
 No. of Cntrs: **3**

Comp/Grab: **Grab**
 Matrix: **GW**
 Depth: **1**
 Date: **4/26/19**
 Time: **1330**
 No. of Cntrs: **1**

Remarks: **Ties 2 lab QA/QC**

Sample ID	Comp/Grab	Matrix	Depth	Date	Time	No. of Cntrs	*NO3,SO4,Cl* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM (RSK175LL) 40mlAmb-HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	VOC (8260)	GRO (NWTPH-Gx)
MW106-042619	Grab	GW	135	4/26/19	0930	12	X	X	X	X	X	X	X
MW145-042619	Grab	GW	75	4/26/19	1140	12	X	X	X	X	X	X	X
MW110-042619	Grab	GW	40	4/26/19	1330	3	X	X	X	X	X	X	X
Trip Blank-042619	Grab	GW	1	4/26/19	1330	1	X	X	X	X	X	X	X

Tracking # **4086647107395**

Received by: (Signature) *[Signature]*
 Date: **04-26-19**
 Time: **1500**

Relinquished by: (Signature) *[Signature]*
 Date: **04-26-19**
 Time: **1500**

Received for lab by: (Signature) *[Signature]*
 Date: **4/27/19**
 Time: **0845**

Hold: **Y**
 Conditions: **NCF / OK**

* Matrix: **SS - Soil** **AIR - Air** **F - Filter**
GW - Groundwater **B - Bioassay**
WW - Waste/Water
DW - Drinking Water
OT - Other

Flow: **pH** **Temp**
 Other: **Temp: 17.8°C**
3.8+/-0.39
 BOTTLES RECEIVED: **275**

Sample Receipt Checklist
 VOC Seal Present/Intact: **Y**
 VOC Signed/Accurate: **Y**
 BOTTLES arrive intact: **Y**
 Correct bottles used: **Y**
 Sufficient volume sent: **Y**
 If Applicable
 VOA Zero Headspace: **Y**
 Preservation Correct/Checked: **Y**
RAD SCREEN: <0.5 mR/hr

PES Environmental, Inc. -WA
 1215 4th Avenue STE 1350
 Seattle, WA 98161

Billing Information:
 Attn: Accounts Payable
 1215 4th Ave STE 1350
 Seattle, WA 98161

Email To: KVIC@PESENV.COM KSTRUCST@PESENV.COM
 BONEAL@PESENV.COM BHALDENAN@PESENV.COM

City/State: Seattle, WA
Collected: PESENV-WA-ALP

Client Project #: 1413.001.05.601
Lab Project #: PESENVSWA-ALP

Site/Facility ID #: American Linen
P.O. #:

Quote #:

Collected by (signature): K. Zygas
Immediately: **Next Day:** **Five Day:**
Two Day: **10 Day (Rad Only):**
Three Day: **Date Results Needed:** Standard CAT

Packed on Ice: **N:** **Y:**
Sample ID

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MMW-910-042619	Grab	GW	25	4-26-19	0815	6
MMW-148-042619	Grab	GW	75		0910	12
MMW-159-042619	Grab	GW	25		1105	6
MMW-9-042619	Grab	GW	15		1300	6
Temp Blank 042619	Grab	GW				
Grab		GW				
Grab		GW				
Grab		GW				
Grab		GW				
Grab		GW				
Grab		GW				

Remarks: *Res 2 Lab QA/QC*

*** Matrix:**
 SS - Soil **AIR - Air** **F - Filter**
 GW - Groundwater **B - Bioassay**
 WW - Wastewater
 DW - Drinking Water
 OT - Other

Relinquished by: (Signature) *[Signature]* **Date:** 04-26-19 **Time:** 1500

Relinquished by: (Signature) *[Signature]* **Date:** **Time:**

Relinquished by: (Signature) **Date:** **Time:**

Pres Chk

Analysis / Container / Preservative

NO3,SO4,Cl 125mlHDPE-NoPres	
Alkalinity 125mlHDPE-NoPres	
EEM (RSK175LL) 40mlAmb-HCl	
TOC 250mlAmb-HCl	
Total Fe Mn 6020 250mlHDPE-HNO3	
VOC (8260)	
GRO (NWTPh-Gx)	



12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



L# 1093242
 E152

Accnum:
Template:
Prelogin:
TSR:
PB:
Shipped Via:
Remarks:

Sample Receipt Checklist
 COC Seal Present/Intact: Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 IF Applicable
 VOA zero Headspace: Y N
 Preservation Correct/Checked: Y N
PAD SCREEN: Y N

Temp: 3.8 ± 1.5 °C
Date: 4/27/19 **Time:** 0845

Received for lab by: (Signature) *[Signature]*



Collected date/time: 04/26/19 09:30

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	267000		2710	20000	1	05/04/2019 20:24	WG1275809

Sample Narrative:

L1093242-01 WG1275809: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23600		51.9	1000	1	04/27/2019 13:06	WG1272741
Nitrate	U		22.7	100	1	04/27/2019 13:06	WG1272741
Sulfate	15900		77.4	5000	1	04/27/2019 13:06	WG1272741

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3320		102	1000	1	04/29/2019 19:55	WG1273394

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3420		15.0	100	1	05/07/2019 23:12	WG1271844
Manganese	695		0.250	5.00	1	05/07/2019 23:12	WG1271844

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 15:18	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	92.9			78.0-120		05/01/2019 15:18	WG1274492

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	42.1		0.287	0.678	1	05/03/2019 15:01	WG1275531
Ethane	U		0.296	1.29	1	05/03/2019 15:01	WG1275531
Ethene	U		0.422	1.27	1	05/03/2019 15:01	WG1275531

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.65	U J	1.05	25.0	1	04/27/2019 16:01	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 16:01	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 16:01	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 16:01	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 16:01	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 16:01	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 16:01	WG1272804
Bromomethane	U	UJ JO	0.157	2.50	1	04/27/2019 16:01	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 16:01	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 16:01	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 16:01	WG1272804
Carbon disulfide	0.142	J J	0.101	0.500	1	04/27/2019 16:01	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 16:01	WG1272804

JC 5/13/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/26/19 09:30

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/27/2019 16:01	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 16:01	WG1272804
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 13:59	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 16:01	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 16:01	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 16:01	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 16:01	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 16:01	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 16:01	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 16:01	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 16:01	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 16:01	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 16:01	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 16:01	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 13:59	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 16:01	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 16:01	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/27/2019 16:01	WG1272804
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 16:01	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 16:01	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 16:01	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 16:01	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 16:01	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 16:01	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 16:01	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 16:01	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 16:01	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 16:01	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 16:01	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 16:01	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 16:01	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 16:01	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 16:01	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 16:01	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 16:01	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 16:01	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 16:01	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 16:01	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 16:01	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 16:01	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 16:01	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 16:01	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 16:01	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 16:01	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 16:01	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 16:01	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 16:01	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 16:01	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 13:59	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 16:01	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 16:01	WG1272804
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 16:01	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 16:01	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 16:01	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 16:01	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 16:01	WG1272804

- 1 Cp
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- 3 Ss
- 4 Cn
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- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/26/19 09:30

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/27/2019 16:01	WG1272804
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/27/2019 16:01	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 16:01	WG1272804
(S) Toluene-d8	97.8			80.0-120		04/27/2019 16:01	WG1272804
(S) Toluene-d8	96.7			80.0-120		05/03/2019 13:59	WG1275623
(S) 4-Bromofluorobenzene	105			77.0-126		04/27/2019 16:01	WG1272804
(S) 4-Bromofluorobenzene	104			77.0-126		05/03/2019 13:59	WG1275623
(S) 1,2-Dichloroethane-d4	96.8			70.0-130		04/27/2019 16:01	WG1272804
(S) 1,2-Dichloroethane-d4	94.6			70.0-130		05/03/2019 13:59	WG1275623

- 1 Cp
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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	287000		2710	20000	1	05/04/2019 20:31	WG1275809

Sample Narrative:

L1093242-02 WG1275809: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	44700		51.9	1000	1	04/27/2019 13:21	WG1272741
Nitrate	U		22.7	100	1	04/27/2019 13:21	WG1272741
Sulfate	73900		77.4	5000	1	04/27/2019 13:21	WG1272741

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5290		102	1000	1	04/29/2019 20:10	WG1273394

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5730		15.0	100	1	05/07/2019 23:17	WG1271844
Manganese	318		0.250	5.00	1	05/07/2019 23:17	WG1271844

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 15:38	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.9			78.0-120		05/01/2019 15:38	WG1274492

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	455		0.287	0.678	1	05/03/2019 15:15	WG1275531
Ethane	1.73		0.296	1.29	1	05/03/2019 15:15	WG1275531
Ethene	5.24		0.422	1.27	1	05/03/2019 15:15	WG1275531

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.01	U J	1.05	25.0	1	04/27/2019 16:21	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 16:21	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 16:21	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 16:21	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 16:21	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 16:21	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 16:21	WG1272804
Bromomethane	U	UJ JO	0.157	2.50	1	04/27/2019 16:21	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 16:21	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 16:21	WG1272804 JC 5/13/19
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 16:21	WG1272804
Carbon disulfide	0.365	J J	0.101	0.500	1	04/27/2019 16:21	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 16:21	WG1272804

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 04/26/19 11:40

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/27/2019 16:21	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 16:21	WG1272804
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 14:19	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 16:21	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 16:21	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 16:21	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 16:21	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 16:21	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 16:21	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 16:21	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 16:21	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 16:21	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 16:21	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 16:21	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 14:19	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 16:21	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 16:21	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/27/2019 16:21	WG1272804
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 16:21	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 16:21	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 16:21	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 16:21	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 16:21	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 16:21	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 16:21	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 16:21	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 16:21	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 16:21	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 16:21	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 16:21	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 16:21	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 16:21	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 16:21	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 16:21	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 16:21	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 16:21	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 16:21	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 16:21	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 16:21	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 16:21	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 16:21	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 16:21	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 16:21	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 16:21	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 16:21	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 16:21	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 16:21	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 16:21	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 14:19	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 16:21	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 16:21	WG1272804
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 16:21	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 16:21	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 16:21	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 16:21	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 16:21	WG1272804

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/26/19 11:40

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/27/2019 16:21	WG1272804
Vinyl chloride	0.392	J JJQ	0.118	0.500	1	04/27/2019 16:21	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 16:21	WG1272804
(S) Toluene-d8	99.1			80.0-120		04/27/2019 16:21	WG1272804
(S) Toluene-d8	99.5			80.0-120		05/03/2019 14:19	WG1275623
(S) 4-Bromofluorobenzene	104			77.0-126		04/27/2019 16:21	WG1272804
(S) 4-Bromofluorobenzene	106			77.0-126		05/03/2019 14:19	WG1275623
(S) 1,2-Dichloroethane-d4	96.0			70.0-130		04/27/2019 16:21	WG1272804
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		05/03/2019 14:19	WG1275623

- 1 Cp
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- 9 Sc

JC 5/13/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	04/27/2019 16:41	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 16:41	WG1272804
Benzene	0.291	J J	0.0896	0.500	1	04/27/2019 16:41	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 16:41	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 16:41	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 16:41	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 16:41	WG1272804
Bromomethane	U	UJ JO	0.157	2.50	1	04/27/2019 16:41	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 16:41	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 16:41	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 16:41	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 16:41	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 16:41	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 16:41	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 16:41	WG1272804
Chloroethane	U	UJ JO	7.05	125	50	05/03/2019 16:20	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 16:41	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 16:41	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 16:41	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 16:41	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 16:41	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 16:41	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 16:41	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 16:41	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 16:41	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 16:41	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 16:41	WG1272804
1,1-Dichloroethane	U		5.70	25.0	50	05/03/2019 16:20	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 16:41	WG1272804
1,1-Dichloroethene	7.03		0.188	0.500	1	04/27/2019 16:41	WG1272804
cis-1,2-Dichloroethene	710		4.66	25.0	50	05/03/2019 16:20	WG1275623
trans-1,2-Dichloroethene	5.59		0.152	0.500	1	04/27/2019 16:41	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 16:41	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 16:41	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 16:41	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 16:41	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 16:41	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 16:41	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 16:41	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 16:41	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 16:41	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 16:41	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 16:41	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 16:41	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 16:41	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 16:41	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 16:41	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 16:41	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 16:41	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 16:41	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 16:41	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 16:41	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 16:41	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 16:41	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 16:41	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 16:41	WG1272804

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/26/19 13:30

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 16:41	WG1272804
Tetrachloroethene	1500		9.95	25.0	50	05/03/2019 16:20	WG1275623
Toluene	U		0.412	0.500	1	04/27/2019 16:41	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 16:41	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 16:41	WG1272804
1,1,1-Trichloroethane	U		4.70	25.0	50	05/03/2019 16:20	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 16:41	WG1272804
Trichloroethene	613		7.65	25.0	50	05/03/2019 16:20	WG1275623
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 16:41	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 16:41	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 16:41	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 16:41	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 16:41	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 16:41	WG1272804
Vinyl chloride	0.900	J JO	0.118	0.500	1	04/27/2019 16:41	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 16:41	WG1272804
(S) Toluene-d8	99.1			80.0-120		04/27/2019 16:41	WG1272804
(S) Toluene-d8	98.7			80.0-120		05/03/2019 16:20	WG1275623
(S) 4-Bromofluorobenzene	104			77.0-126		04/27/2019 16:41	WG1272804
(S) 4-Bromofluorobenzene	101			77.0-126		05/03/2019 16:20	WG1275623
(S) 1,2-Dichloroethane-d4	92.1			70.0-130		04/27/2019 16:41	WG1272804
(S) 1,2-Dichloroethane-d4	98.9			70.0-130		05/03/2019 16:20	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1093242-03 WG1272804, WG1275623: Not all compounds reportable at lower dilution.
 L1093242-03 WG1272804, WG1275623: Cannot be re-analyzed at lower dilution due to high levels of target analytes.

JC 5/13/19



Collected date/time: 04/26/19 00:00

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 13:35	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	92.8			78.0-120		05/01/2019 13:35	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.43	J	1.05	25.0	1	04/27/2019 11:51	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 11:51	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 11:51	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 11:51	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 11:51	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 11:51	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 11:51	WG1272804
Bromomethane	U	UJ JO	0.157	2.50	1	04/27/2019 11:51	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 11:51	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 11:51	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 11:51	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 11:51	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 11:51	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 11:51	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 11:51	WG1272804
Chloroethane	U	UJ JO	0.141	2.50	1	04/27/2019 11:51	WG1272804
Chloroform	U		0.0860	0.500	1	04/27/2019 11:51	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 11:51	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 11:51	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 11:51	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 11:51	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 11:51	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 11:51	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 11:51	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 11:51	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 11:51	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 11:51	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	04/27/2019 11:51	WG1272804
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 11:51	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 11:51	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 11:51	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 11:51	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 11:51	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 11:51	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 11:51	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 11:51	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 11:51	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 11:51	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 11:51	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 11:51	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 11:51	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 11:51	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 11:51	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 11:51	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 11:51	WG1272804

JC 5/13/19



Collected date/time: 04/26/19 00:00

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 11:51	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 11:51	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 11:51	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 11:51	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 11:51	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 11:51	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 11:51	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 11:51	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 11:51	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 11:51	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 11:51	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 11:51	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 11:51	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	04/27/2019 11:51	WG1272804
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 11:51	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 11:51	WG1272804
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 11:51	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 11:51	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 11:51	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 11:51	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 11:51	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 11:51	WG1272804
Vinyl chloride	U	UJ JO	0.118	0.500	1	04/27/2019 11:51	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 11:51	WG1272804
(S) Toluene-d8	106			80.0-120		04/27/2019 11:51	WG1272804
(S) 4-Bromofluorobenzene	106			77.0-126		04/27/2019 11:51	WG1272804
(S) 1,2-Dichloroethane-d4	104			70.0-130		04/27/2019 11:51	WG1272804

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/26/19 08:15

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 15:59	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.2			78.0-120		05/01/2019 15:59	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.65	U J	1.05	25.0	1	04/27/2019 17:01	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 17:01	WG1272804
Benzene	0.193	J J	0.0896	0.500	1	04/27/2019 17:01	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 17:01	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 17:01	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 17:01	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 17:01	WG1272804
Bromomethane	U	UJ JO	0.157	2.50	1	04/27/2019 17:01	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 17:01	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 17:01	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 17:01	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 17:01	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 17:01	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 17:01	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 17:01	WG1272804
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 14:59	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 17:01	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 17:01	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 17:01	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 17:01	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 17:01	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 17:01	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 17:01	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 17:01	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 17:01	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 17:01	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 17:01	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 14:59	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 17:01	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 17:01	WG1272804
cis-1,2-Dichloroethene	1.12		0.0933	0.500	1	05/03/2019 14:59	WG1275623
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 17:01	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 17:01	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 17:01	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 17:01	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 17:01	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 17:01	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 17:01	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 17:01	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 17:01	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 17:01	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 17:01	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 17:01	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 17:01	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 17:01	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 17:01	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 17:01	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 17:01	WG1272804

JC 5/13/19



Collected date/time: 04/26/19 08:15

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 17:01	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 17:01	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 17:01	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 17:01	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 17:01	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 17:01	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 17:01	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 17:01	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 17:01	WG1272804
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 14:59	WG1275623
Toluene	U		0.412	0.500	1	04/27/2019 17:01	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 17:01	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 17:01	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 14:59	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 17:01	WG1272804
Trichloroethene	U		0.153	0.500	1	05/03/2019 14:59	WG1275623
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 17:01	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 17:01	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 17:01	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 17:01	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 17:01	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 17:01	WG1272804
Vinyl chloride	1.04	J JO	0.118	0.500	1	04/27/2019 17:01	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 17:01	WG1272804
(S) Toluene-d8	99.1			80.0-120		04/27/2019 17:01	WG1272804
(S) Toluene-d8	98.3			80.0-120		05/03/2019 14:59	WG1275623
(S) 4-Bromofluorobenzene	107			77.0-126		04/27/2019 17:01	WG1272804
(S) 4-Bromofluorobenzene	105			77.0-126		05/03/2019 14:59	WG1275623
(S) 1,2-Dichloroethane-d4	94.7			70.0-130		04/27/2019 17:01	WG1272804
(S) 1,2-Dichloroethane-d4	93.6			70.0-130		05/03/2019 14:59	WG1275623

JC 5/13/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/26/19 09:10

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	161000		2710	20000	1	05/04/2019 20:39	WG1275809

Sample Narrative:

L1093242-06 WG1275809: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	17100		51.9	1000	1	04/27/2019 14:05	WG1272741
Nitrate	U		22.7	100	1	04/27/2019 14:05	WG1272741
Sulfate	175000		387	25000	5	04/27/2019 14:58	WG1272741

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5190		102	1000	1	04/29/2019 20:23	WG1273394

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2910		15.0	100	1	05/07/2019 23:21	WG1271844
Manganese	420		0.250	5.00	1	05/07/2019 23:21	WG1271844

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 16:20	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.7			78.0-120		05/01/2019 16:20	WG1274492

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1600		0.287	0.678	1	05/03/2019 15:20	WG1275531
Ethane	U		0.296	1.29	1	05/03/2019 15:20	WG1275531
Ethene	3.65		0.422	1.27	1	05/03/2019 15:20	WG1275531

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.70	U J	1.05	25.0	1	04/27/2019 17:21	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 17:21	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 17:21	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 17:21	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 17:21	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 17:21	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 17:21	WG1272804
Bromomethane	U	UJ JO	0.157	2.50	1	04/27/2019 17:21	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 17:21	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 17:21	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 17:21	WG1272804
Carbon disulfide	0.198	J J	0.101	0.500	1	04/27/2019 17:21	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 17:21	WG1272804

JC 5/13/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/26/19 09:10

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	04/27/2019 17:21	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 17:21	WG1272804
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 15:19	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 17:21	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 17:21	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 17:21	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 17:21	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 17:21	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 17:21	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 17:21	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 17:21	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 17:21	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 17:21	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 17:21	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 15:19	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 17:21	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 17:21	WG1272804
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/03/2019 15:19	WG1275623
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 17:21	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 17:21	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 17:21	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 17:21	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 17:21	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 17:21	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 17:21	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 17:21	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 17:21	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 17:21	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 17:21	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 17:21	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 17:21	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 17:21	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 17:21	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 17:21	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 17:21	WG1272804
Methylene Chloride	U		1.07	2.50	1	04/27/2019 17:21	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 17:21	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 17:21	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 17:21	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 17:21	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 17:21	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 17:21	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 17:21	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 17:21	WG1272804
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 15:19	WG1275623
Toluene	U		0.412	0.500	1	04/27/2019 17:21	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 17:21	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 17:21	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 15:19	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 17:21	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 17:21	WG1272804
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 17:21	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 17:21	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 17:21	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 17:21	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 17:21	WG1272804

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 5/13/19



Collected date/time: 04/26/19 09:10

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	04/27/2019 17:21	WG1272804
Vinyl chloride	0.277	J JJ0	0.118	0.500	1	04/27/2019 17:21	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 17:21	WG1272804
(S) Toluene-d8	97.2			80.0-120		04/27/2019 17:21	WG1272804
(S) Toluene-d8	98.2			80.0-120		05/03/2019 15:19	WG1275623
(S) 4-Bromofluorobenzene	103			77.0-126		04/27/2019 17:21	WG1272804
(S) 4-Bromofluorobenzene	99.8			77.0-126		05/03/2019 15:19	WG1275623
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		04/27/2019 17:21	WG1272804
(S) 1,2-Dichloroethane-d4	99.3			70.0-130		05/03/2019 15:19	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/26/19 11:05

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/01/2019 16:40	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	93.8			78.0-120		05/01/2019 16:40	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/27/2019 17:41	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 17:41	WG1272804
Benzene	0.179	J	0.0896	0.500	1	04/27/2019 17:41	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 17:41	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 17:41	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 17:41	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 17:41	WG1272804
Bromomethane	U	UJ	0.157	2.50	1	04/27/2019 17:41	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 17:41	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 17:41	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 17:41	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 17:41	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 17:41	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 17:41	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 17:41	WG1272804
Chloroethane	U	UJ	0.141	2.50	1	05/03/2019 15:39	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 17:41	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 17:41	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 17:41	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 17:41	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 17:41	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 17:41	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 17:41	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 17:41	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 17:41	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 17:41	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 17:41	WG1272804
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 15:39	WG1275623
1,2-Dichloroethane	U		0.108	0.500	1	04/27/2019 17:41	WG1272804
1,1-Dichloroethene	U		0.188	0.500	1	04/27/2019 17:41	WG1272804
cis-1,2-Dichloroethene	1.23		0.0933	0.500	1	05/03/2019 15:39	WG1275623
trans-1,2-Dichloroethene	U		0.152	0.500	1	04/27/2019 17:41	WG1272804
1,2-Dichloropropane	U		0.190	0.500	1	04/27/2019 17:41	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 17:41	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 17:41	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 17:41	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 17:41	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 17:41	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 17:41	WG1272804
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 17:41	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 17:41	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 17:41	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 17:41	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 17:41	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 17:41	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 17:41	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 17:41	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 17:41	WG1272804

JC 5/13/19



Collected date/time: 04/26/19 11:05

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 17:41	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 17:41	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 17:41	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 17:41	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 17:41	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 17:41	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 17:41	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 17:41	WG1272804
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	04/27/2019 17:41	WG1272804
Tetrachloroethene	U		0.199	0.500	1	04/27/2019 17:41	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 17:41	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 17:41	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 17:41	WG1272804
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 15:39	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 17:41	WG1272804
Trichloroethene	U		0.153	0.500	1	04/27/2019 17:41	WG1272804
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 17:41	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 17:41	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 17:41	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 17:41	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 17:41	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 17:41	WG1272804
Vinyl chloride	1.03	J JO	0.118	0.500	1	04/27/2019 17:41	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 17:41	WG1272804
(S) Toluene-d8	99.9			80.0-120		04/27/2019 17:41	WG1272804
(S) Toluene-d8	102			80.0-120		05/03/2019 15:39	WG1275623
(S) 4-Bromofluorobenzene	106			77.0-126		04/27/2019 17:41	WG1272804
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 15:39	WG1275623
(S) 1,2-Dichloroethane-d4	96.5			70.0-130		04/27/2019 17:41	WG1272804
(S) 1,2-Dichloroethane-d4	102			70.0-130		05/03/2019 15:39	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



Collected date/time: 04/26/19 13:00

L1093242

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	121	J+	31.6	100	1	05/01/2019 17:01	WG1274492
(S) a,a,a-Trifluorotoluene(FID)	94.3			78.0-120		05/01/2019 17:01	WG1274492

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	04/27/2019 18:01	WG1272804
Acrylonitrile	U		0.873	5.00	1	04/27/2019 18:01	WG1272804
Benzene	U		0.0896	0.500	1	04/27/2019 18:01	WG1272804
Bromobenzene	U		0.133	0.500	1	04/27/2019 18:01	WG1272804
Bromodichloromethane	U		0.0800	0.500	1	04/27/2019 18:01	WG1272804
Bromochloromethane	U		0.145	0.500	1	04/27/2019 18:01	WG1272804
Bromoform	U		0.186	0.500	1	04/27/2019 18:01	WG1272804
Bromomethane	U	UJ JO	0.157	2.50	1	04/27/2019 18:01	WG1272804
n-Butylbenzene	U		0.143	0.500	1	04/27/2019 18:01	WG1272804
sec-Butylbenzene	U		0.134	0.500	1	04/27/2019 18:01	WG1272804
tert-Butylbenzene	U		0.183	0.500	1	04/27/2019 18:01	WG1272804
Carbon disulfide	U		0.101	0.500	1	04/27/2019 18:01	WG1272804
Carbon tetrachloride	U		0.159	0.500	1	04/27/2019 18:01	WG1272804
Chlorobenzene	U		0.140	0.500	1	04/27/2019 18:01	WG1272804
Chlorodibromomethane	U		0.128	0.500	1	04/27/2019 18:01	WG1272804
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 16:00	WG1275623
Chloroform	U		0.0860	0.500	1	04/27/2019 18:01	WG1272804
Chloromethane	U		0.153	1.25	1	04/27/2019 18:01	WG1272804
2-Chlorotoluene	U		0.111	0.500	1	04/27/2019 18:01	WG1272804
4-Chlorotoluene	U		0.0972	0.500	1	04/27/2019 18:01	WG1272804
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	04/27/2019 18:01	WG1272804
1,2-Dibromoethane	U		0.193	0.500	1	04/27/2019 18:01	WG1272804
Dibromomethane	U		0.117	0.500	1	04/27/2019 18:01	WG1272804
1,2-Dichlorobenzene	U		0.101	0.500	1	04/27/2019 18:01	WG1272804
1,3-Dichlorobenzene	U		0.130	0.500	1	04/27/2019 18:01	WG1272804
1,4-Dichlorobenzene	U		0.121	0.500	1	04/27/2019 18:01	WG1272804
Dichlorodifluoromethane	U		0.127	2.50	1	04/27/2019 18:01	WG1272804
1,1-Dichloroethane	1.57		0.114	0.500	1	05/03/2019 16:00	WG1275623
1,2-Dichloroethane	0.229	J J	0.108	0.500	1	04/27/2019 18:01	WG1272804
1,1-Dichloroethene	0.893		0.188	0.500	1	04/27/2019 18:01	WG1272804
cis-1,2-Dichloroethene	75.1		0.0933	0.500	1	04/27/2019 18:01	WG1272804
trans-1,2-Dichloroethene	0.261	J J	0.152	0.500	1	04/27/2019 18:01	WG1272804
1,2-Dichloropropane	0.878		0.190	0.500	1	04/27/2019 18:01	WG1272804
1,1-Dichloropropene	U		0.128	0.500	1	04/27/2019 18:01	WG1272804
1,3-Dichloropropane	U		0.147	1.00	1	04/27/2019 18:01	WG1272804
cis-1,3-Dichloropropene	U		0.0976	0.500	1	04/27/2019 18:01	WG1272804
trans-1,3-Dichloropropene	U		0.222	0.500	1	04/27/2019 18:01	WG1272804
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	04/27/2019 18:01	WG1272804
2,2-Dichloropropane	U		0.0929	0.500	1	04/27/2019 18:01	WG1272804 JC 5/13/19
Di-isopropyl ether	U		0.0924	0.500	1	04/27/2019 18:01	WG1272804
Ethylbenzene	U		0.158	0.500	1	04/27/2019 18:01	WG1272804
Hexachloro-1,3-butadiene	U		0.157	1.00	1	04/27/2019 18:01	WG1272804
2-Hexanone	U		0.757	5.00	1	04/27/2019 18:01	WG1272804
n-Hexane	U		0.305	5.00	1	04/27/2019 18:01	WG1272804
Iodomethane	U		0.377	10.0	1	04/27/2019 18:01	WG1272804
Isopropylbenzene	U		0.126	0.500	1	04/27/2019 18:01	WG1272804
p-Isopropyltoluene	U		0.138	0.500	1	04/27/2019 18:01	WG1272804
2-Butanone (MEK)	U		1.28	5.00	1	04/27/2019 18:01	WG1272804



Collected date/time: 04/26/19 13:00

L1093242

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	04/27/2019 18:01	WG1272804
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	04/27/2019 18:01	WG1272804
Methyl tert-butyl ether	U		0.102	0.500	1	04/27/2019 18:01	WG1272804
Naphthalene	U		0.174	2.50	1	04/27/2019 18:01	WG1272804
n-Propylbenzene	U		0.162	0.500	1	04/27/2019 18:01	WG1272804
Styrene	U		0.117	0.500	1	04/27/2019 18:01	WG1272804
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	04/27/2019 18:01	WG1272804
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	04/27/2019 18:01	WG1272804
1,1,2-Trichlorotrifluoroethane	0.465	J J	0.164	0.500	1	04/27/2019 18:01	WG1272804
Tetrachloroethene	157		0.199	0.500	1	04/27/2019 18:01	WG1272804
Toluene	U		0.412	0.500	1	04/27/2019 18:01	WG1272804
1,2,3-Trichlorobenzene	U		0.164	0.500	1	04/27/2019 18:01	WG1272804
1,2,4-Trichlorobenzene	U		0.355	0.500	1	04/27/2019 18:01	WG1272804
1,1,1-Trichloroethane	0.298	J J	0.0940	0.500	1	05/03/2019 16:00	WG1275623
1,1,2-Trichloroethane	U		0.186	0.500	1	04/27/2019 18:01	WG1272804
Trichloroethene	45.2		0.153	0.500	1	04/27/2019 18:01	WG1272804
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	04/27/2019 18:01	WG1272804
1,2,3-Trichloropropane	U		0.247	2.50	1	04/27/2019 18:01	WG1272804
1,2,4-Trimethylbenzene	U		0.123	0.500	1	04/27/2019 18:01	WG1272804
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	04/27/2019 18:01	WG1272804
1,3,5-Trimethylbenzene	U		0.124	0.500	1	04/27/2019 18:01	WG1272804
Vinyl acetate	U		0.645	5.00	1	04/27/2019 18:01	WG1272804
Vinyl chloride	0.861	UJ JO	0.118	0.500	1	04/27/2019 18:01	WG1272804
Xylenes, Total	U		0.316	1.50	1	04/27/2019 18:01	WG1272804
(S) Toluene-d8	98.3			80.0-120		04/27/2019 18:01	WG1272804
(S) Toluene-d8	98.2			80.0-120		05/03/2019 16:00	WG1275623
(S) 4-Bromofluorobenzene	103			77.0-126		04/27/2019 18:01	WG1272804
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 16:00	WG1275623
(S) 1,2-Dichloroethane-d4	93.7			70.0-130		04/27/2019 18:01	WG1272804
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		05/03/2019 16:00	WG1275623

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/13/19



ANALYTICAL REPORT

May 14, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
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- 9 Sc

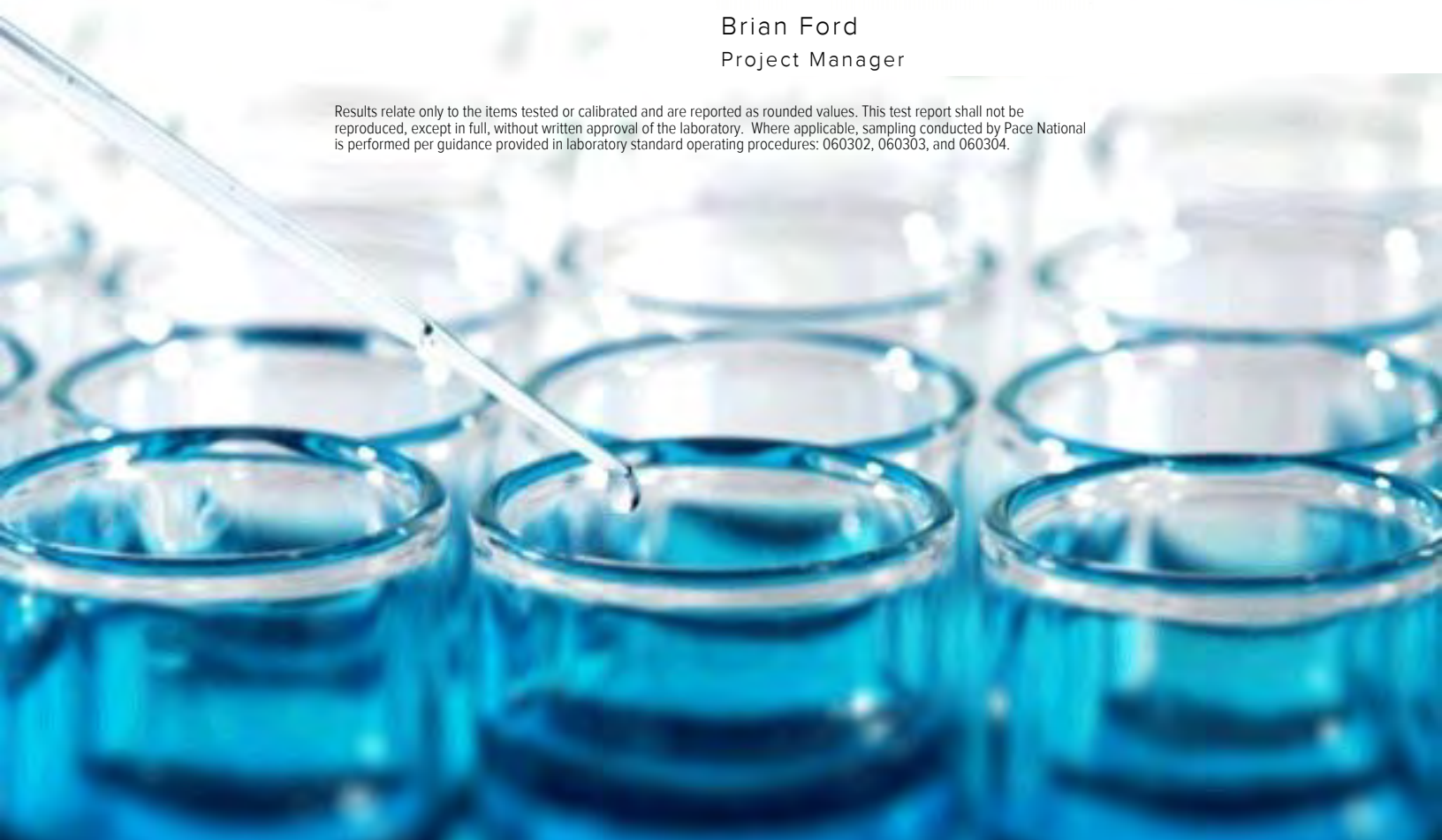
PES Environmental, Inc.- WA

Sample Delivery Group: L1094387
Samples Received: 05/02/2019
Project Number: 1413.001.05,601
Description: American Linen
Site: AMERICAN LINEN
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace National is performed per guidance provided in laboratory standard operating procedures: 060302, 060303, and 060304.





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MW109-042919 L1094387-01 GW
 Collected by Ben Hecht
 Collected date/time 04/29/19 08:45
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 18:20	05/03/19 18:20	DWR	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW108-042919 L1094387-02 GW
 Collected by Ben Hecht
 Collected date/time 04/29/19 09:50
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 18:41	05/03/19 18:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1276343	20	05/05/19 18:24	05/05/19 18:24	JAH	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

MW126-042919 L1094387-03 GW
 Collected by Ben Hecht
 Collected date/time 04/29/19 10:45
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 19:01	05/03/19 19:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1276343	1	05/05/19 18:04	05/05/19 18:04	JAH	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

MW119-042919 L1094387-04 GW
 Collected by Ben Hecht
 Collected date/time 04/29/19 12:20
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 19:21	05/03/19 19:21	DWR	Mt. Juliet, TN

MW121-042919 L1094387-05 GW
 Collected by Ben Hecht
 Collected date/time 04/29/19 13:35
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1275218	1	05/02/19 18:28	05/02/19 18:28	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 19:41	05/03/19 19:41	DWR	Mt. Juliet, TN

MW161-050119 L1094387-06 GW
 Collected by Ben Hecht
 Collected date/time 05/01/19 09:25
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1276578	1	05/07/19 19:50	05/07/19 19:50	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1274986	1	05/02/19 11:27	05/02/19 11:27	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1275023	1	05/02/19 21:22	05/02/19 21:22	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1275858	1	05/07/19 10:24	05/12/19 22:10	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1275218	1	05/02/19 18:52	05/02/19 18:52	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1277421	1	05/09/19 11:39	05/09/19 11:39	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 20:01	05/03/19 20:01	DWR	Mt. Juliet, TN

MW107-050119 L1094387-07 GW
 Collected by Ben Hecht
 Collected date/time 05/01/19 11:10
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1276578	1	05/07/19 19:58	05/07/19 19:58	MCG	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1274986	1	05/02/19 12:24	05/02/19 12:24	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1275023	1	05/02/19 21:58	05/02/19 21:58	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1275858	1	05/07/19 10:24	05/12/19 22:15	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1275218	1	05/02/19 19:16	05/02/19 19:16	DWR	Mt. Juliet, TN



MW107-050119 L1094387-07 GW

Collected by Ben Hecht
 Collected date/time 05/01/19 11:10
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG1277421	1	05/09/19 11:43	05/09/19 11:43	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1278760	20	05/09/19 16:35	05/09/19 16:35	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 20:21	05/03/19 20:21	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1276343	20	05/05/19 18:44	05/05/19 18:44	JAH	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

FMW-129-050119 L1094387-08 GW

Collected by Ben Hecht
 Collected date/time 05/01/19 14:00
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 20:42	05/03/19 20:42	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1276343	5	05/05/19 19:04	05/05/19 19:04	JAH	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

TRIP BLANK-050119 L1094387-09 GW

Collected by Ben Hecht
 Collected date/time 05/01/19 00:00
 Received date/time 05/02/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1275218	1	05/02/19 17:41	05/02/19 17:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1275813	1	05/03/19 17:00	05/03/19 17:00	DWR	Mt. Juliet, TN

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.78	J J4	1.05	25.0	1	05/03/2019 18:20	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 18:20	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 18:20	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 18:20	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 18:20	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 18:20	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 18:20	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 18:20	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 18:20	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 18:20	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 18:20	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 18:20	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 18:20	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 18:20	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 18:20	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 18:20	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 18:20	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 18:20	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 18:20	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 18:20	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 18:20	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 18:20	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 18:20	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 18:20	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 18:20	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 18:20	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 18:20	WG1275813
cis-1,2-Dichloroethene	4.78		0.0933	0.500	1	05/03/2019 18:20	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 18:20	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 18:20	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 18:20	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 18:20	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 18:20	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 18:20	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 18:20	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 18:20	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 18:20	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 18:20	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 18:20	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 18:20	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 18:20	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 18:20	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 18:20	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 18:20	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 18:20	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 18:20	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 18:20	WG1275813
Naphthalene	U	JO	0.174	2.50	1	05/03/2019 18:20	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 18:20	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 18:20	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 18:20	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 18:20	WG1275813

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 04/29/19 08:45

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 18:20	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 18:20	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 18:20	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 18:20	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 18:20	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 18:20	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 18:20	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 18:20	WG1275813
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	05/03/2019 18:20	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 18:20	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 18:20	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 18:20	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 18:20	WG1275813
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 18:20	WG1275813
Vinyl chloride	3.06	<u>JO J4</u>	0.118	0.500	1	05/03/2019 18:20	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 18:20	WG1275813
(S) Toluene-d8	98.4			80.0-120		05/03/2019 18:20	WG1275813
(S) 4-Bromofluorobenzene	104			77.0-126		05/03/2019 18:20	WG1275813
(S) 1,2-Dichloroethane-d4	95.8			70.0-130		05/03/2019 18:20	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.41	J J4	1.05	25.0	1	05/03/2019 18:41	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 18:41	WG1275813
Benzene	3.20		0.0896	0.500	1	05/03/2019 18:41	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 18:41	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 18:41	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 18:41	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 18:41	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 18:41	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 18:41	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 18:41	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 18:41	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 18:41	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 18:41	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 18:41	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 18:41	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 18:41	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 18:41	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 18:41	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 18:41	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 18:41	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 18:41	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 18:41	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 18:41	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 18:41	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 18:41	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 18:41	WG1275813
1,1-Dichloroethene	3.57		0.188	0.500	1	05/03/2019 18:41	WG1275813
cis-1,2-Dichloroethene	970		1.87	10.0	20	05/05/2019 18:24	WG1276343
trans-1,2-Dichloroethene	3.22		0.152	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 18:41	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 18:41	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 18:41	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 18:41	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 18:41	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 18:41	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 18:41	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 18:41	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 18:41	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 18:41	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 18:41	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 18:41	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 18:41	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 18:41	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 18:41	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 18:41	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 18:41	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 18:41	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 18:41	WG1275813
Naphthalene	U	JO	0.174	2.50	1	05/03/2019 18:41	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 18:41	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 18:41	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 18:41	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 18:41	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/29/19 09:50

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 18:41	WG1275813
Tetrachloroethene	419		3.98	10.0	20	05/05/2019 18:24	WG1276343
Toluene	U		0.412	0.500	1	05/03/2019 18:41	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 18:41	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 18:41	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 18:41	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 18:41	WG1275813
Trichloroethene	171		0.153	0.500	1	05/03/2019 18:41	WG1275813
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	05/03/2019 18:41	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 18:41	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 18:41	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 18:41	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 18:41	WG1275813
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 18:41	WG1275813
Vinyl chloride	125	<u>JO J4</u>	0.118	0.500	1	05/03/2019 18:41	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 18:41	WG1275813
(S) Toluene-d8	99.2			80.0-120		05/03/2019 18:41	WG1275813
(S) Toluene-d8	96.9			80.0-120		05/05/2019 18:24	WG1276343
(S) 4-Bromofluorobenzene	106			77.0-126		05/03/2019 18:41	WG1275813
(S) 4-Bromofluorobenzene	101			77.0-126		05/05/2019 18:24	WG1276343
(S) 1,2-Dichloroethane-d4	95.3			70.0-130		05/03/2019 18:41	WG1275813
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		05/05/2019 18:24	WG1276343

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.18	J J4	1.05	25.0	1	05/03/2019 19:01	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 19:01	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 19:01	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 19:01	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 19:01	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 19:01	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 19:01	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 19:01	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 19:01	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 19:01	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 19:01	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 19:01	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 19:01	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 19:01	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 19:01	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 19:01	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 19:01	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 19:01	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 19:01	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 19:01	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 19:01	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 19:01	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 19:01	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 19:01	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 19:01	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 19:01	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 19:01	WG1275813
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/05/2019 18:04	WG1276343
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 19:01	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 19:01	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 19:01	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 19:01	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 19:01	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 19:01	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 19:01	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 19:01	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 19:01	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 19:01	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 19:01	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 19:01	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 19:01	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 19:01	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 19:01	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 19:01	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 19:01	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 19:01	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 19:01	WG1275813
Naphthalene	U	JO	0.174	2.50	1	05/03/2019 19:01	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 19:01	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 19:01	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 19:01	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 19:01	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/29/19 10:45

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 19:01	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/05/2019 18:04	WG1276343
Toluene	U		0.412	0.500	1	05/03/2019 19:01	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 19:01	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 19:01	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 19:01	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 19:01	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 19:01	WG1275813
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	05/03/2019 19:01	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 19:01	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 19:01	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 19:01	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 19:01	WG1275813
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 19:01	WG1275813
Vinyl chloride	U	<u>JO J4</u>	0.118	0.500	1	05/03/2019 19:01	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 19:01	WG1275813
(S) Toluene-d8	98.8			80.0-120		05/03/2019 19:01	WG1275813
(S) Toluene-d8	97.5			80.0-120		05/05/2019 18:04	WG1276343
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 19:01	WG1275813
(S) 4-Bromofluorobenzene	101			77.0-126		05/05/2019 18:04	WG1276343
(S) 1,2-Dichloroethane-d4	98.5			70.0-130		05/03/2019 19:01	WG1275813
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		05/05/2019 18:04	WG1276343

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.90	J J4	1.05	25.0	1	05/03/2019 19:21	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 19:21	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 19:21	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 19:21	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 19:21	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 19:21	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 19:21	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 19:21	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 19:21	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 19:21	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 19:21	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 19:21	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 19:21	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 19:21	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 19:21	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 19:21	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 19:21	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 19:21	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 19:21	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 19:21	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 19:21	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 19:21	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 19:21	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 19:21	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 19:21	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 19:21	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 19:21	WG1275813
cis-1,2-Dichloroethene	10.9		0.0933	0.500	1	05/03/2019 19:21	WG1275813
trans-1,2-Dichloroethene	0.161	J	0.152	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 19:21	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 19:21	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 19:21	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 19:21	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 19:21	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 19:21	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 19:21	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 19:21	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 19:21	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 19:21	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 19:21	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 19:21	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 19:21	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 19:21	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 19:21	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 19:21	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 19:21	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 19:21	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 19:21	WG1275813
Naphthalene	U	JO	0.174	2.50	1	05/03/2019 19:21	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 19:21	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 19:21	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 19:21	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 19:21	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/29/19 12:20

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 19:21	WG1275813
Tetrachloroethene	0.224	<u>J</u>	0.199	0.500	1	05/03/2019 19:21	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 19:21	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 19:21	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 19:21	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 19:21	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 19:21	WG1275813
Trichloroethene	1.12		0.153	0.500	1	05/03/2019 19:21	WG1275813
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	05/03/2019 19:21	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 19:21	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 19:21	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 19:21	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 19:21	WG1275813
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 19:21	WG1275813
Vinyl chloride	U	<u>JO J4</u>	0.118	0.500	1	05/03/2019 19:21	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 19:21	WG1275813
(S) Toluene-d8	98.2			80.0-120		05/03/2019 19:21	WG1275813
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 19:21	WG1275813
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		05/03/2019 19:21	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 04/29/19 13:35

L1094387

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2019 18:28	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	98.1			78.0-120		05/02/2019 18:28	WG1275218

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.49	J J4	1.05	25.0	1	05/03/2019 19:41	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 19:41	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 19:41	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 19:41	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 19:41	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 19:41	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 19:41	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 19:41	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 19:41	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 19:41	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 19:41	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 19:41	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 19:41	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 19:41	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 19:41	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 19:41	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 19:41	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 19:41	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 19:41	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 19:41	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 19:41	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 19:41	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 19:41	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 19:41	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 19:41	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 19:41	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 19:41	WG1275813
cis-1,2-Dichloroethene	5.39		0.0933	0.500	1	05/03/2019 19:41	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 19:41	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 19:41	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 19:41	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 19:41	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 19:41	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 19:41	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 19:41	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 19:41	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 19:41	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 19:41	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 19:41	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 19:41	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 19:41	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 19:41	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 19:41	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 19:41	WG1275813



Collected date/time: 04/29/19 13:35

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/03/2019 19:41	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 19:41	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 19:41	WG1275813
Naphthalene	U	<u>JO</u>	0.174	2.50	1	05/03/2019 19:41	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 19:41	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 19:41	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 19:41	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 19:41	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 19:41	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 19:41	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 19:41	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 19:41	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 19:41	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 19:41	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 19:41	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 19:41	WG1275813
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	05/03/2019 19:41	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 19:41	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 19:41	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 19:41	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 19:41	WG1275813
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 19:41	WG1275813
Vinyl chloride	15.2	<u>JO J4</u>	0.118	0.500	1	05/03/2019 19:41	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 19:41	WG1275813
(S) Toluene-d8	96.6			80.0-120		05/03/2019 19:41	WG1275813
(S) 4-Bromofluorobenzene	101			77.0-126		05/03/2019 19:41	WG1275813
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		05/03/2019 19:41	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	293000		2710	20000	1	05/07/2019 19:50	WG1276578

Sample Narrative:

L1094387-06 WG1276578: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	25500		51.9	1000	1	05/02/2019 11:27	WG1274986
Nitrate	U		22.7	100	1	05/02/2019 11:27	WG1274986
Sulfate	12200		77.4	5000	1	05/02/2019 11:27	WG1274986

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1580	<u>B</u>	102	1000	1	05/02/2019 21:22	WG1275023

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5730		15.0	100	1	05/12/2019 22:10	WG1275858
Manganese	795		0.250	5.00	1	05/12/2019 22:10	WG1275858

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2019 18:52	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	98.6			78.0-120		05/02/2019 18:52	WG1275218

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	98.1		0.287	0.678	1	05/09/2019 11:39	WG1277421
Ethane	U		0.296	1.29	1	05/09/2019 11:39	WG1277421
Ethene	U		0.422	1.27	1	05/09/2019 11:39	WG1277421

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.21	<u>J J4</u>	1.05	25.0	1	05/03/2019 20:01	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 20:01	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 20:01	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 20:01	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 20:01	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 20:01	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 20:01	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 20:01	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 20:01	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 20:01	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 20:01	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 20:01	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 20:01	WG1275813

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 05/01/19 09:25

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/03/2019 20:01	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 20:01	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 20:01	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 20:01	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 20:01	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 20:01	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 20:01	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 20:01	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 20:01	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 20:01	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 20:01	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 20:01	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 20:01	WG1275813
1,1-Dichloroethene	0.517		0.188	0.500	1	05/03/2019 20:01	WG1275813
cis-1,2-Dichloroethene	1.15		0.0933	0.500	1	05/03/2019 20:01	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 20:01	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 20:01	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 20:01	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 20:01	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 20:01	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 20:01	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 20:01	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 20:01	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 20:01	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 20:01	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 20:01	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 20:01	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 20:01	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 20:01	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 20:01	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 20:01	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 20:01	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 20:01	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 20:01	WG1275813
Naphthalene	U	JO	0.174	2.50	1	05/03/2019 20:01	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 20:01	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 20:01	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 20:01	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 20:01	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 20:01	WG1275813
Tetrachloroethene	0.482	J	0.199	0.500	1	05/03/2019 20:01	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 20:01	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 20:01	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 20:01	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 20:01	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 20:01	WG1275813
Trichloroethene	1.66		0.153	0.500	1	05/03/2019 20:01	WG1275813
Trichlorofluoromethane	U	JO	0.130	2.50	1	05/03/2019 20:01	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 20:01	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 20:01	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 20:01	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 20:01	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/19 09:25

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 20:01	WG1275813
Vinyl chloride	U	<u>JO J4</u>	0.118	0.500	1	05/03/2019 20:01	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 20:01	WG1275813
<i>(S) Toluene-d8</i>	99.3			80.0-120		05/03/2019 20:01	WG1275813
<i>(S) 4-Bromofluorobenzene</i>	102			77.0-126		05/03/2019 20:01	WG1275813
<i>(S) 1,2-Dichloroethane-d4</i>	99.5			70.0-130		05/03/2019 20:01	WG1275813

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/01/19 11:10

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	538000		2710	20000	1	05/07/2019 19:58	WG1276578

Sample Narrative:

L1094387-07 WG1276578: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	41600		51.9	1000	1	05/02/2019 12:24	WG1274986
Nitrate	U		22.7	100	1	05/02/2019 12:24	WG1274986
Sulfate	51800		77.4	5000	1	05/02/2019 12:24	WG1274986

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14200		102	1000	1	05/02/2019 21:58	WG1275023

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2670		15.0	100	1	05/12/2019 22:15	WG1275858
Manganese	1080		0.250	5.00	1	05/12/2019 22:15	WG1275858

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	481		31.6	100	1	05/02/2019 19:16	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	99.0			78.0-120		05/02/2019 19:16	WG1275218

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	18000		5.74	13.6	20	05/09/2019 16:35	WG1278760
Ethane	122		0.296	1.29	1	05/09/2019 11:43	WG1277421
Ethene	93.2		0.422	1.27	1	05/09/2019 11:43	WG1277421

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	5.66	J J4	1.05	25.0	1	05/03/2019 20:21	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 20:21	WG1275813
Benzene	0.188	J	0.0896	0.500	1	05/03/2019 20:21	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 20:21	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 20:21	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 20:21	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 20:21	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 20:21	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 20:21	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 20:21	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 20:21	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 20:21	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 20:21	WG1275813

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 05/01/19 11:10

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/03/2019 20:21	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 20:21	WG1275813
Chloroethane	4.02	JO	0.141	2.50	1	05/03/2019 20:21	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 20:21	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 20:21	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 20:21	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 20:21	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 20:21	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 20:21	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 20:21	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 20:21	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 20:21	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 20:21	WG1275813
1,1-Dichloroethene	13.0		0.188	0.500	1	05/03/2019 20:21	WG1275813
cis-1,2-Dichloroethene	1250		1.87	10.0	20	05/05/2019 18:44	WG1276343
trans-1,2-Dichloroethene	14.1		0.152	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 20:21	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 20:21	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 20:21	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 20:21	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 20:21	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 20:21	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 20:21	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 20:21	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 20:21	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 20:21	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 20:21	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 20:21	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 20:21	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 20:21	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 20:21	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 20:21	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 20:21	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 20:21	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 20:21	WG1275813
Naphthalene	U	JO	0.174	2.50	1	05/03/2019 20:21	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 20:21	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 20:21	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 20:21	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 20:21	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 20:21	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 20:21	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 20:21	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 20:21	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 20:21	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 20:21	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 20:21	WG1275813
Trichloroethene	99.9		0.153	0.500	1	05/03/2019 20:21	WG1275813
Trichlorofluoromethane	U	JO	0.130	2.50	1	05/03/2019 20:21	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 20:21	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 20:21	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 20:21	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 20:21	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/19 11:10

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 20:21	WG1275813
Vinyl chloride	374		2.36	10.0	20	05/05/2019 18:44	WG1276343
Xylenes, Total	U		0.316	1.50	1	05/03/2019 20:21	WG1275813
(S) Toluene-d8	99.0			80.0-120		05/03/2019 20:21	WG1275813
(S) Toluene-d8	102			80.0-120		05/05/2019 18:44	WG1276343
(S) 4-Bromofluorobenzene	105			77.0-126		05/03/2019 20:21	WG1275813
(S) 4-Bromofluorobenzene	105			77.0-126		05/05/2019 18:44	WG1276343
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		05/03/2019 20:21	WG1275813
(S) 1,2-Dichloroethane-d4	98.0			70.0-130		05/05/2019 18:44	WG1276343

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.93	J J4	1.05	25.0	1	05/03/2019 20:42	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 20:42	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 20:42	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 20:42	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 20:42	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 20:42	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 20:42	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 20:42	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 20:42	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 20:42	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 20:42	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 20:42	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 20:42	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 20:42	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 20:42	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 20:42	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 20:42	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 20:42	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 20:42	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 20:42	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 20:42	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 20:42	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 20:42	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 20:42	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 20:42	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 20:42	WG1275813
1,1-Dichloroethene	1.26		0.188	0.500	1	05/03/2019 20:42	WG1275813
cis-1,2-Dichloroethene	372		0.466	2.50	5	05/05/2019 19:04	WG1276343
trans-1,2-Dichloroethene	1.22		0.152	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 20:42	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 20:42	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 20:42	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 20:42	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 20:42	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 20:42	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 20:42	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 20:42	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 20:42	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 20:42	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 20:42	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 20:42	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 20:42	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 20:42	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 20:42	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 20:42	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 20:42	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 20:42	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 20:42	WG1275813
Naphthalene	U	JO	0.174	2.50	1	05/03/2019 20:42	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 20:42	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 20:42	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 20:42	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 20:42	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/19 14:00

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 20:42	WG1275813
Tetrachloroethene	101		0.199	0.500	1	05/03/2019 20:42	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 20:42	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 20:42	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 20:42	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 20:42	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 20:42	WG1275813
Trichloroethene	166		0.153	0.500	1	05/03/2019 20:42	WG1275813
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	05/03/2019 20:42	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 20:42	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 20:42	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 20:42	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 20:42	WG1275813
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 20:42	WG1275813
Vinyl chloride	U		0.590	2.50	5	05/05/2019 19:04	WG1276343
Xylenes, Total	U		0.316	1.50	1	05/03/2019 20:42	WG1275813
(S) Toluene-d8	96.8			80.0-120		05/03/2019 20:42	WG1275813
(S) Toluene-d8	96.5			80.0-120		05/05/2019 19:04	WG1276343
(S) 4-Bromofluorobenzene	101			77.0-126		05/03/2019 20:42	WG1275813
(S) 4-Bromofluorobenzene	101			77.0-126		05/05/2019 19:04	WG1276343
(S) 1,2-Dichloroethane-d4	98.7			70.0-130		05/03/2019 20:42	WG1275813
(S) 1,2-Dichloroethane-d4	94.8			70.0-130		05/05/2019 19:04	WG1276343

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

Sample Narrative:

L1094387-08 WG1275813, WG1276343: Not all compounds reportable at lower dilution.

L1094387-08 WG1275813, WG1276343: Cannot be re-analyzed at lower dilution due to high levels of target analytes.



Collected date/time: 05/01/19 00:00

L1094387

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2019 17:41	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	98.6			78.0-120		05/02/2019 17:41	WG1275218

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.22	J J4	1.05	25.0	1	05/03/2019 17:00	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 17:00	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 17:00	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 17:00	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 17:00	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 17:00	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 17:00	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 17:00	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 17:00	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 17:00	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 17:00	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 17:00	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 17:00	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 17:00	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 17:00	WG1275813
Chloroethane	U	JO	0.141	2.50	1	05/03/2019 17:00	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 17:00	WG1275813
Chloromethane	U	JO	0.153	1.25	1	05/03/2019 17:00	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 17:00	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 17:00	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 17:00	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 17:00	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 17:00	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 17:00	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 17:00	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 17:00	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 17:00	WG1275813
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/03/2019 17:00	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 17:00	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 17:00	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 17:00	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 17:00	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 17:00	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 17:00	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 17:00	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 17:00	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 17:00	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 17:00	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 17:00	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 17:00	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 17:00	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 17:00	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 17:00	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 17:00	WG1275813

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 05/01/19 00:00

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/03/2019 17:00	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 17:00	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 17:00	WG1275813
Naphthalene	U	<u>JO</u>	0.174	2.50	1	05/03/2019 17:00	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 17:00	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 17:00	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 17:00	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 17:00	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 17:00	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 17:00	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 17:00	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 17:00	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 17:00	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 17:00	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 17:00	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 17:00	WG1275813
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	05/03/2019 17:00	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 17:00	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 17:00	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 17:00	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 17:00	WG1275813
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	05/03/2019 17:00	WG1275813
Vinyl chloride	U	<u>JO J4</u>	0.118	0.500	1	05/03/2019 17:00	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 17:00	WG1275813
(S) Toluene-d8	98.6			80.0-120		05/03/2019 17:00	WG1275813
(S) 4-Bromofluorobenzene	105			77.0-126		05/03/2019 17:00	WG1275813
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		05/03/2019 17:00	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3409108-1 05/07/19 18:19

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	5510	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1094450-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1094450-09 05/07/19 22:02 • (DUP) R3409108-4 05/08/19 07:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	555000	547000	1	1.40		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1093607-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1093607-01 05/07/19 18:36 • (DUP) R3409108-2 05/07/19 18:44

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	ND	15700	1	0.000		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3409108-3 05/07/19 20:31

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	102000	102	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3407729-1 05/02/19 09:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1094387-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1094387-06 05/02/19 11:27 • (DUP) R3407729-3 05/02/19 11:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	25500	25600	1	0.444		15
Nitrate	U	0.000	1	0.000		15
Sulfate	12200	12200	1	0.406		15

L1094414-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1094414-03 05/02/19 16:43 • (DUP) R3407729-6 05/02/19 16:58

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	80.6	0.000	1	200	P1	15
Nitrate	U	0.000	1	0.000		15
Sulfate	U	0.000	1	0.000		15

Laboratory Control Sample (LCS)

(LCS) R3407729-2 05/02/19 10:08

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40100	100	80.0-120	
Nitrate	8000	8050	101	80.0-120	
Sulfate	40000	40500	101	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1094387-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	25500	73800	73800	96.5	96.7	1	80.0-120			0.0809	15
Nitrate	5000	U	4620	4630	92.4	92.6	1	80.0-120			0.195	15
Sulfate	50000	12200	60300	60300	96.3	96.3	1	80.0-120			0.0128	15

L1094414-03 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	80.6	49600	99.0	1	80.0-120	
Nitrate	5000	U	4830	96.5	1	80.0-120	
Sulfate	50000	U	48800	97.5	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3407790-1 05/02/19 12:07	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	198	<u>1</u>	102	1000

L1094181-11 Original Sample (OS) • Duplicate (DUP)

(OS) L1094181-11 05/02/19 17:08 • (DUP) R3407790-5 05/02/19 17:25	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	1970	1890	1	4.14	20	20

L1094387-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1094387-06 05/02/19 21:22 • (DUP) R3407790-8 05/02/19 21:39	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	1580	1610	1	2.07	20	20

Laboratory Control Sample (LCS)

(LCS) R3407790-2 05/02/19 12:43	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	76500	102	85.0-115	

Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) • (MS) R3407790-3 05/02/19 14:17 • (MSD) R3407790-4 05/02/19 14:41	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000		2550000	2590000	85.1	89.3	20	80.0-120	<u>E</u>	<u>E</u>	164	20

L1094377-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094377-02 05/02/19 20:04 • (MS) R3407790-6 05/02/19 20:25 • (MSD) R3407790-7 05/02/19 20:45	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	3870	53800	54200	99.9	101	1	80.0-120			0.630	20

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

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05/14/19 16:21

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Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3410561-1 05/12/19 20:24				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3410561-2 05/12/19 20:30 • (LCSD) R3410561-3 05/12/19 20:35										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	500	515	470	103	94.0	80.0-120			9.08	20
Manganese	50.0	49.3	47.8	98.5	95.6	80.0-120			3.05	20

L1094065-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1094065-01 05/12/19 20:40 • (MS) R3410561-5 05/12/19 20:51 • (MSD) R3410561-6 05/12/19 20:56												
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	500	200000	189000	185000	0.000	0.000	1	75.0-125	V	V	2.08	20
Manganese	50.0	5360	5190	4990	0.000	0.000	1	75.0-125	V	V	3.94	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1094387-05.06.07.09](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	U		316 ug/l	100 ug/l
^(S) a,a-o-Trifluorotoluene(FID)	98.4			78.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%			%	%	%	%	%	%	%	%
Gasoline Range Organics-NWTPH	5500		5280		5110		95.9		92.9		70.0-124		3.26		20					
^(S) a,a,o-Trifluorotoluene(FID)							104		104		78.0-120									

L1094387-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount		Original Result		MS Result		MSD Result		MS Rec.		MSD Rec.		Dilution		Rec. Limits		MS Qualifier		MSD Qualifier		RPD		RPD Limits	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%			%	%	%	%	%	%	%	%	%	%
Gasoline Range Organics-NWTPH	5500		U		5760		5590		105		102		1		10.0-155						2.92		21	
^(S) a,a,o-Trifluorotoluene(FID)									107		107				78.0-120									

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Volatile Organic Compounds (GC) by Method RSK175

[L1094387-06.07](#)

Method Blank (MB)

(MB) R3409706-1 05/09/19 11:19

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1094039-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1094039-01 05/09/19 11:34 • (DUP) R3409706-2 05/09/19 11:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	221	79.2	1	94.5		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L1094407-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1094407-05 05/09/19 12:59 • (DUP) R3409706-3 05/09/19 13:02

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	519	536	1	3.25		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L1095146-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1095146-01 05/09/19 13:38 • (DUP) R3409706-4 05/09/19 13:48

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Methane	4330	4280	1	1.22		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

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Volatile Organic Compounds (GC) by Method RSK175

[L1094387-06.07](#)

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3409706-5 05/09/19 13:51 • (LCSD) R3409706-6 05/09/19 13:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	78.0	73.3	115	108	85.0-115			6.21	20
Ethane	129	120	115	93.0	89.2	85.0-115			4.26	20
Ethene	127	119	114	93.9	89.9	85.0-115			4.37	20

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Volatile Organic Compounds (GC) by Method RSK175

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Method Blank (MB)

(MB) R3409768-4 05/09/19 16:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Methane	U		0.287	0.678

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3409768-2 05/09/19 16:38 • (LCSD) R3409768-3 05/09/19 16:51

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Methane	67.8	76.4	75.7	113	112	85.0-115			0.878	20





Method Blank (MB)

(MB) R3408279-3 05/03/19 10:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromochloromethane	U		0.145	0.500
Bromodichloromethane	U		0.0800	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
Carbon disulfide	0.161	J	0.101	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
2-Hexanone	U		0.757	5.00

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1094387-01.02.03.04.05.06.07.08.09](#)

Method Blank (MB)

(MB) R3408279-3 05/03/19 10:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
n-Hexane	U		0.305	5.00
Di-isopropyl ether	U		0.0924	0.500
Iodomethane	U		0.377	10.0
Ethylbenzene	U		0.158	0.500
Hexachloro-1-3-butadiene	0.354	J	0.157	1.00
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl acetate	U		0.645	5.00
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	0.204	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	96.9			80.0-120
(S) 4-Bromofluorobenzene	109			77.0-126
(S) 1,2-Dichloroethane-d4	95.5			70.0-130

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3408279-1 05/03/19 09:11 • (LCSD) R3408279-2 05/03/19 09:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Bromochloromethane	25.0	23.6	23.2	94.4	92.7	76.0-122			1.83	20
Carbon disulfide	25.0	30.4	27.8	122	111	61.0-128			8.91	20
Acetone	125	219	178	175	143	19.0-160	J4		20.2	27
Acrylonitrile	125	158	150	126	120	55.0-149			4.85	20
Benzene	25.0	25.8	25.3	103	101	70.0-123			1.86	20
Bromobenzene	25.0	23.5	22.3	94.1	89.2	73.0-121			5.42	20
Bromodichloromethane	25.0	22.8	23.0	91.1	92.0	75.0-120			0.918	20
Bromoform	25.0	25.6	25.6	103	102	68.0-132			0.0628	20
Bromomethane	25.0	13.6	14.7	54.4	58.7	10.0-160			7.66	25
trans-1,4-Dichloro-2-butene	25.0	21.8	21.0	87.1	83.8	33.0-144			3.80	20
n-Butylbenzene	25.0	20.8	20.4	83.4	81.5	73.0-125			2.25	20
sec-Butylbenzene	25.0	21.8	21.3	87.3	85.1	75.0-125			2.54	20
tert-Butylbenzene	25.0	22.7	22.0	90.9	87.8	76.0-124			3.40	20
2-Hexanone	125	136	141	109	113	67.0-149			3.52	20
Carbon tetrachloride	25.0	23.9	23.2	95.5	92.8	68.0-126			2.86	20
Chlorobenzene	25.0	23.1	22.3	92.6	89.4	80.0-121			3.55	20
n-Hexane	25.0	30.4	26.5	122	106	57.0-133			13.6	20
Chlorodibromomethane	25.0	23.3	22.7	93.2	90.6	77.0-125			2.80	20
Iodomethane	125	136	128	109	103	33.0-147			5.82	26
Chloroethane	25.0	15.9	14.4	63.6	57.6	47.0-150			9.85	20
Chloroform	25.0	21.9	21.6	87.7	86.4	73.0-120			1.44	20
Chloromethane	25.0	23.0	22.7	92.1	90.9	41.0-142			1.34	20
2-Chlorotoluene	25.0	22.3	21.0	89.2	84.1	76.0-123			5.95	20
4-Chlorotoluene	25.0	22.4	21.7	89.8	86.7	75.0-122			3.49	20
1,2-Dibromo-3-Chloropropane	25.0	23.9	24.2	95.8	96.7	58.0-134			0.974	20
1,2-Dibromoethane	25.0	22.3	21.9	89.3	87.4	80.0-122			2.13	20
Dibromomethane	25.0	22.5	22.8	90.2	91.2	80.0-120			1.13	20
1,2-Dichlorobenzene	25.0	22.6	21.9	90.5	87.6	79.0-121			3.21	20
1,3-Dichlorobenzene	25.0	22.3	21.3	89.4	85.0	79.0-120			5.00	20
1,4-Dichlorobenzene	25.0	21.3	20.8	85.4	83.1	79.0-120			2.71	20
Dichlorodifluoromethane	25.0	23.6	23.1	94.4	92.3	51.0-149			2.24	20
1,1-Dichloroethane	25.0	25.7	24.0	103	96.0	70.0-126			6.87	20
1,2-Dichloroethane	25.0	21.7	21.4	86.9	85.7	70.0-128			1.44	20
1,1-Dichloroethene	25.0	26.0	24.4	104	97.5	71.0-124			6.63	20
cis-1,2-Dichloroethene	25.0	24.0	23.2	96.1	93.0	73.0-120			3.33	20
trans-1,2-Dichloroethene	25.0	25.7	23.4	103	93.6	73.0-120			9.57	20
1,2-Dichloropropane	25.0	26.0	26.5	104	106	77.0-125			1.81	20
1,1-Dichloropropene	25.0	24.8	23.8	99.0	95.4	74.0-126			3.76	20
1,3-Dichloropropene	25.0	23.4	23.8	93.7	95.1	80.0-120			1.44	20
cis-1,3-Dichloropropene	25.0	23.2	23.2	92.9	92.6	80.0-123			0.332	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3408279-1 05/03/19 09:11 • (LCSD) R3408279-2 05/03/19 09:31

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Vinyl acetate	125	73.8	88.3	59.0	70.6	11.0-160			17.8	20
trans-1,3-Dichloropropene	25.0	22.1	22.2	88.6	88.9	78.0-124			0.338	20
2,2-Dichloropropane	25.0	27.7	26.5	111	106	58.0-130			4.72	20
Di-isopropyl ether	25.0	30.0	26.8	120	107	58.0-138			11.3	20
Ethylbenzene	25.0	23.3	22.6	93.2	90.5	79.0-123			3.03	20
Hexachloro-1,3-butadiene	25.0	25.3	26.0	101	104	54.0-138			2.57	20
Isopropylbenzene	25.0	24.3	24.0	97.1	96.1	76.0-127			1.00	20
p-Isopropyltoluene	25.0	22.2	21.5	88.7	86.0	76.0-125			3.11	20
2-Butanone (MEK)	125	158	157	126	126	44.0-160			0.414	20
Methylene Chloride	25.0	26.5	23.3	106	93.4	67.0-120			12.5	20
4-Methyl-2-pentanone (MIBK)	125	133	140	107	112	68.0-142			4.67	20
Methyl tert-butyl ether	25.0	26.1	23.2	104	92.9	68.0-125			11.5	20
Naphthalene	25.0	19.8	21.0	79.2	83.9	54.0-135			5.77	20
n-Propylbenzene	25.0	22.1	21.0	88.5	83.8	77.0-124			5.39	20
Styrene	25.0	26.2	26.0	105	104	73.0-130			0.613	20
1,1,1,2-Tetrachloroethane	25.0	23.0	22.5	92.0	90.0	75.0-125			2.14	20
1,1,2,2-Tetrachloroethane	25.0	20.9	20.3	83.5	81.4	65.0-130			2.55	20
Tetrachloroethene	25.0	23.8	23.6	95.2	94.3	72.0-132			0.966	20
Toluene	25.0	25.2	24.2	101	96.6	79.0-120			4.17	20
1,1,2-Trichlorotrifluoroethane	25.0	24.4	22.9	97.5	91.7	69.0-132			6.13	20
1,2,3-Trichlorobenzene	25.0	20.8	21.9	83.3	87.5	50.0-138			4.93	20
1,2,4-Trichlorobenzene	25.0	22.0	22.1	87.8	88.4	57.0-137			0.723	20
1,1,1-Trichloroethane	25.0	24.0	23.4	96.1	93.6	73.0-124			2.65	20
1,1,2-Trichloroethane	25.0	21.3	21.5	85.1	86.2	80.0-120			1.29	20
Trichloroethene	25.0	26.0	24.9	104	99.8	78.0-124			4.20	20
Trichlorofluoromethane	25.0	15.9	15.1	63.4	60.4	59.0-147			4.90	20
1,2,3-Trichloropropane	25.0	20.1	19.3	80.6	77.2	73.0-130			4.21	20
1,2,3-Trimethylbenzene	25.0	21.4	20.8	85.7	83.1	77.0-120			3.06	20
1,2,4-Trimethylbenzene	25.0	21.8	20.7	87.2	82.9	76.0-121			4.96	20
1,3,5-Trimethylbenzene	25.0	22.1	21.1	88.2	84.4	76.0-122			4.41	20
Vinyl chloride	25.0	16.6	16.2	66.5	64.6	67.0-131	J4	J4	2.92	20
Xylenes, Total	75.0	71.1	69.3	94.8	92.4	79.0-123			2.56	20
(S) Toluene-d8				98.5	96.4	80.0-120				
(S) 4-Bromofluorobenzene				107	110	77.0-126				
(S) 1,2-Dichloroethane-d4				96.5	94.6	70.0-130				

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1094387-02.03.07.08](#)

Method Blank (MB)

(MB) R3408889-3 05/05/19 09:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	97.6			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	95.4			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3408889-1 05/05/19 08:45 • (LCSD) R3408889-2 05/05/19 09:05

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	25.0	26.5	26.9	106	107	73.0-120			1.21	20
Tetrachloroethene	25.0	25.6	27.0	103	108	72.0-132			5.20	20
Vinyl chloride	25.0	23.4	23.7	93.8	94.8	67.0-131			1.12	20
(S) Toluene-d8				96.1	102	80.0-120				
(S) 4-Bromofluorobenzene				100	108	77.0-126				
(S) 1,2-Dichloroethane-d4				90.9	96.1	70.0-130				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
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B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

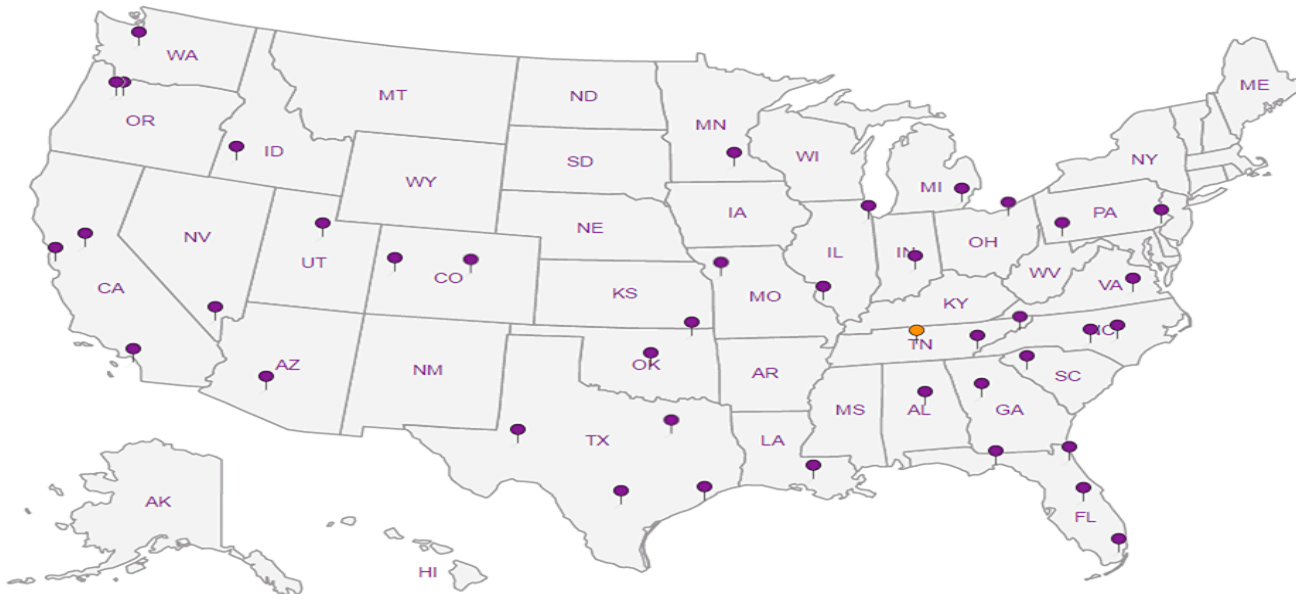
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeaman

Email to: boneal@pesenv.com;
bhaldeaman@pesenv.com;

Project:
Description: *American*

Client Project #
City/State Collected: *Seattle, WA*

Phone: 206-529-3980
Fax: 206-529-3985

Lab Project #
P.O. #

Collected by (print):
Ben Hecht

Site/Facility ID #
Quote #

Collected by (signature):
Ben Hecht

Rush? (Lab MUST Be Notified)
Same Day _____ Five Day _____
Next Day _____ 5 Day (Rad Only) _____
Two Day _____ 10 Day (Rad Only) _____
Three Day _____

Immediately Packed on Ice N Y

Date Results Needed
STAT

Sample ID

Comp/Grab Matrix * Depth

Date Time

NWTPHGX 40mlAmb HCl
VOCs 8260LLC 40mlAmb-HCl

NO3, SO4, Cl (125ml)
Alkalinity (125ml)
BPM (RSK175LL) (40ml)
TOC Fe 250ml
Total Fe Mn 6020

Matrix:	SS - Soil	AIR - Air	F - Filter
	GW - Groundwater	B - Bioassay	
	WW - Wastewater		
	DW - Drinking Water		
	OT - Other		

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Nc. of Cnts
MM109-042919	Grab	GW	40	4/29/19	0845	3
MM108-042919		GW	45	4/29/19	0950	3
MM126-042919		GW	90		1045	3
MM119-042919		GW	40		1220	3
MM121-042919		GW	20		1335	6
MM-161-050119	Grab	GW	125	5/1/19	0925	12
MW107-050119		GW	44-40		1110	12
FMW-129-050119		GW	87		1400	3
TRIP BLANK 050119		GW	-		-	3

Remarks: *Tru 2 103 Q/A/QC, email*

Remarks returned via:
UPS FedEx Courier _____

Tracking # *4686 6469 9419*

Sample Receipt Check List
COC Seal Present/Intact: Y N
COC Signed/accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature) *[Signature]* Date: *5-1-19* Time: *16:00*

Received by: (Signature) *[Signature]* Date: *5-1-19* Time: *16:36*

Received for lab by: (Signature) *[Signature]* Date: *5-2-19* Time: *8:45*

Temp: *22.0* °C Bottles Received: *45*
Date: *5-2-19* Time: *8:45*

Chain of Custody Page ___ of ___

Pace Analytical
National Center for Testing & Innovation

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-8859
Fax: 615-758-5859



L# *1094381*
A006

Account: **PESENVSWA**
Template: **T149294**
Prelogin: **P704872**
TSR: **110 - Brian Ford**
PB:

Shipped Via: _____
Remarks: _____
Sample # (lab only) _____

Condition: NCF / OK



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.78	U J4	1.05	25.0	1	05/03/2019 18:20	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 18:20	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 18:20	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 18:20	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 18:20	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 18:20	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 18:20	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 18:20	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 18:20	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 18:20	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 18:20	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 18:20	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 18:20	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 18:20	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 18:20	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 18:20	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 18:20	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 18:20	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 18:20	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 18:20	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 18:20	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 18:20	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 18:20	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 18:20	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 18:20	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 18:20	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 18:20	WG1275813
cis-1,2-Dichloroethene	4.78		0.0933	0.500	1	05/03/2019 18:20	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 18:20	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 18:20	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 18:20	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 18:20	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 18:20	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 18:20	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 18:20	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 18:20	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 18:20	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 18:20	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 18:20	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 18:20	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 18:20	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 18:20	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 18:20	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 18:20	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 18:20	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 18:20	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 18:20	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 18:20	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 18:20	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 18:20	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 18:20	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 18:20	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 18:20	WG1275813

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 5/22/19



Collected date/time: 04/29/19 08:45

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 18:20	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 18:20	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 18:20	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 18:20	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 18:20	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 18:20	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 18:20	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 18:20	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 18:20	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 18:20	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 18:20	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 18:20	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 18:20	WG1275813
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 18:20	WG1275813
Vinyl chloride	3.06	J JO J4	0.118	0.500	1	05/03/2019 18:20	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 18:20	WG1275813
(S) Toluene-d8	98.4			80.0-120		05/03/2019 18:20	WG1275813
(S) 4-Bromofluorobenzene	104			77.0-126		05/03/2019 18:20	WG1275813
(S) 1,2-Dichloroethane-d4	95.8			70.0-130		05/03/2019 18:20	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.41	U J4	1.05	25.0	1	05/03/2019 18:41	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 18:41	WG1275813
Benzene	3.20		0.0896	0.500	1	05/03/2019 18:41	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 18:41	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 18:41	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 18:41	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 18:41	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 18:41	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 18:41	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 18:41	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 18:41	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 18:41	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 18:41	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 18:41	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 18:41	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 18:41	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 18:41	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 18:41	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 18:41	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 18:41	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 18:41	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 18:41	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 18:41	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 18:41	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 18:41	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 18:41	WG1275813
1,1-Dichloroethene	3.57		0.188	0.500	1	05/03/2019 18:41	WG1275813
cis-1,2-Dichloroethene	970		1.87	10.0	20	05/05/2019 18:24	WG1276343
trans-1,2-Dichloroethene	3.22		0.152	0.500	1	05/03/2019 18:41	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 18:41	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 18:41	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 18:41	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 18:41	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 18:41	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 18:41	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 18:41	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 18:41	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 18:41	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 18:41	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 18:41	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 18:41	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 18:41	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 18:41	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 18:41	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 18:41	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 18:41	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 18:41	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 18:41	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 18:41	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 18:41	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 18:41	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 18:41	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 18:41	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 04/29/19 09:50

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 18:41	WG1275813
Tetrachloroethene	419		3.98	10.0	20	05/05/2019 18:24	WG1276343
Toluene	U		0.412	0.500	1	05/03/2019 18:41	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 18:41	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 18:41	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 18:41	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 18:41	WG1275813
Trichloroethene	171		0.153	0.500	1	05/03/2019 18:41	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 18:41	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 18:41	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 18:41	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 18:41	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 18:41	WG1275813
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 18:41	WG1275813
Vinyl chloride	125	J JO J4	0.118	0.500	1	05/03/2019 18:41	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 18:41	WG1275813
(S) Toluene-d8	99.2			80.0-120		05/03/2019 18:41	WG1275813
(S) Toluene-d8	96.9			80.0-120		05/05/2019 18:24	WG1276343
(S) 4-Bromofluorobenzene	106			77.0-126		05/03/2019 18:41	WG1275813
(S) 4-Bromofluorobenzene	101			77.0-126		05/05/2019 18:24	WG1276343
(S) 1,2-Dichloroethane-d4	95.3			70.0-130		05/03/2019 18:41	WG1275813
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		05/05/2019 18:24	WG1276343

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.18	U J J4	1.05	25.0	1	05/03/2019 19:01	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 19:01	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 19:01	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 19:01	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 19:01	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 19:01	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 19:01	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 19:01	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 19:01	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 19:01	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 19:01	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 19:01	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 19:01	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 19:01	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 19:01	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 19:01	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 19:01	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 19:01	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 19:01	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 19:01	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 19:01	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 19:01	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 19:01	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 19:01	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 19:01	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 19:01	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 19:01	WG1275813
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/05/2019 18:04	WG1276343
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 19:01	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 19:01	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 19:01	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 19:01	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 19:01	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 19:01	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 19:01	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 19:01	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 19:01	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 19:01	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 19:01	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 19:01	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 19:01	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 19:01	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 19:01	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 19:01	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 19:01	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 19:01	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 19:01	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 19:01	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 19:01	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 19:01	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 19:01	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 19:01	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 19:01	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 04/29/19 10:45

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 19:01	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/05/2019 18:04	WG1276343
Toluene	U		0.412	0.500	1	05/03/2019 19:01	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 19:01	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 19:01	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 19:01	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 19:01	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 19:01	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 19:01	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 19:01	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 19:01	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 19:01	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 19:01	WG1275813
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 19:01	WG1275813
Vinyl chloride	U	UJ JO J4	0.118	0.500	1	05/03/2019 19:01	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 19:01	WG1275813
(S) Toluene-d8	98.8			80.0-120		05/03/2019 19:01	WG1275813
(S) Toluene-d8	97.5			80.0-120		05/05/2019 18:04	WG1276343
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 19:01	WG1275813
(S) 4-Bromofluorobenzene	101			77.0-126		05/05/2019 18:04	WG1276343
(S) 1,2-Dichloroethane-d4	98.5			70.0-130		05/03/2019 19:01	WG1275813
(S) 1,2-Dichloroethane-d4	94.4			70.0-130		05/05/2019 18:04	WG1276343

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.90	U J J4	1.05	25.0	1	05/03/2019 19:21	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 19:21	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 19:21	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 19:21	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 19:21	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 19:21	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 19:21	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 19:21	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 19:21	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 19:21	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 19:21	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 19:21	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 19:21	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 19:21	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 19:21	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 19:21	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 19:21	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 19:21	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 19:21	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 19:21	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 19:21	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 19:21	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 19:21	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 19:21	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 19:21	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 19:21	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 19:21	WG1275813
cis-1,2-Dichloroethene	10.9		0.0933	0.500	1	05/03/2019 19:21	WG1275813
trans-1,2-Dichloroethene	0.161	J J	0.152	0.500	1	05/03/2019 19:21	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 19:21	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 19:21	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 19:21	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 19:21	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 19:21	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 19:21	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 19:21	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 19:21	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 19:21	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 19:21	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 19:21	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 19:21	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 19:21	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 19:21	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 19:21	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 19:21	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 19:21	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 19:21	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 19:21	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 19:21	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 19:21	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 19:21	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 19:21	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 19:21	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 04/29/19 12:20

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 19:21	WG1275813
Tetrachloroethene	0.224	J J	0.199	0.500	1	05/03/2019 19:21	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 19:21	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 19:21	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 19:21	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 19:21	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 19:21	WG1275813
Trichloroethene	1.12		0.153	0.500	1	05/03/2019 19:21	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 19:21	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 19:21	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 19:21	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 19:21	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 19:21	WG1275813
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 19:21	WG1275813
Vinyl chloride	U	UJ JO J4	0.118	0.500	1	05/03/2019 19:21	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 19:21	WG1275813
(S) Toluene-d8	98.2			80.0-120		05/03/2019 19:21	WG1275813
(S) 4-Bromofluorobenzene	103			77.0-126		05/03/2019 19:21	WG1275813
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		05/03/2019 19:21	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 04/29/19 13:35

L1094387

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2019 18:28	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	98.1			78.0-120		05/02/2019 18:28	WG1275218

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	4.49	U J J4	1.05	25.0	1	05/03/2019 19:41	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 19:41	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 19:41	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 19:41	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 19:41	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 19:41	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 19:41	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 19:41	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 19:41	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 19:41	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 19:41	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 19:41	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 19:41	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 19:41	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 19:41	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 19:41	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 19:41	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 19:41	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 19:41	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 19:41	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 19:41	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 19:41	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 19:41	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 19:41	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 19:41	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 19:41	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 19:41	WG1275813
cis-1,2-Dichloroethene	5.39		0.0933	0.500	1	05/03/2019 19:41	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 19:41	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 19:41	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 19:41	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 19:41	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 19:41	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 19:41	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 19:41	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 19:41	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 19:41	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 19:41	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 19:41	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 19:41	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 19:41	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 19:41	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 19:41	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 19:41	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 19:41	WG1275813

JC 5/22/19



Collected date/time: 04/29/19 13:35

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/03/2019 19:41	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 19:41	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 19:41	WG1275813
Naphthalene	U	UJ <u>JO</u>	0.174	2.50	1	05/03/2019 19:41	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 19:41	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 19:41	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 19:41	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 19:41	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 19:41	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 19:41	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 19:41	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 19:41	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 19:41	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 19:41	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 19:41	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 19:41	WG1275813
Trichlorofluoromethane	U	UJ <u>JO</u>	0.130	2.50	1	05/03/2019 19:41	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 19:41	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 19:41	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 19:41	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 19:41	WG1275813
Vinyl acetate	U	UJ <u>JO</u>	0.645	5.00	1	05/03/2019 19:41	WG1275813
Vinyl chloride	15.2	J <u>JO J4</u>	0.118	0.500	1	05/03/2019 19:41	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 19:41	WG1275813
(S) Toluene-d8	96.6			80.0-120		05/03/2019 19:41	WG1275813 JC 5/22/19
(S) 4-Bromofluorobenzene	101			77.0-126		05/03/2019 19:41	WG1275813
(S) 1,2-Dichloroethane-d4	96.1			70.0-130		05/03/2019 19:41	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/19 09:25

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	293000		2710	20000	1	05/07/2019 19:50	WG1276578

Sample Narrative:

L1094387-06 WG1276578: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	25500		51.9	1000	1	05/02/2019 11:27	WG1274986
Nitrate	U		22.7	100	1	05/02/2019 11:27	WG1274986
Sulfate	12200		77.4	5000	1	05/02/2019 11:27	WG1274986

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1580	B	102	1000	1	05/02/2019 21:22	WG1275023

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5730		15.0	100	1	05/12/2019 22:10	WG1275858
Manganese	795		0.250	5.00	1	05/12/2019 22:10	WG1275858

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2019 18:52	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	98.6			78.0-120		05/02/2019 18:52	WG1275218

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	98.1		0.287	0.678	1	05/09/2019 11:39	WG1277421
Ethane	U		0.296	1.29	1	05/09/2019 11:39	WG1277421
Ethene	U		0.422	1.27	1	05/09/2019 11:39	WG1277421

Volatile Organic Compounds (GC/MS) by Method 8260C

JC 5/22/19

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.21	U J J4	1.05	25.0	1	05/03/2019 20:01	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 20:01	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 20:01	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 20:01	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 20:01	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 20:01	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 20:01	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 20:01	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 20:01	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 20:01	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 20:01	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 20:01	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 20:01	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/19 09:25

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/03/2019 20:01	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 20:01	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 20:01	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 20:01	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 20:01	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 20:01	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 20:01	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 20:01	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 20:01	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 20:01	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 20:01	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 20:01	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 20:01	WG1275813
1,1-Dichloroethene	0.517		0.188	0.500	1	05/03/2019 20:01	WG1275813
cis-1,2-Dichloroethene	1.15		0.0933	0.500	1	05/03/2019 20:01	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 20:01	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 20:01	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 20:01	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 20:01	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 20:01	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 20:01	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 20:01	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 20:01	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 20:01	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 20:01	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 20:01	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 20:01	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 20:01	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 20:01	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 20:01	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 20:01	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 20:01	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 20:01	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 20:01	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 20:01	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 20:01	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 20:01	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 20:01	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 20:01	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 20:01	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 20:01	WG1275813
Tetrachloroethene	0.482	J U	0.199	0.500	1	05/03/2019 20:01	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 20:01	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 20:01	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 20:01	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 20:01	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 20:01	WG1275813
Trichloroethene	1.66		0.153	0.500	1	05/03/2019 20:01	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 20:01	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 20:01	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 20:01	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 20:01	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 20:01	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 05/01/19 09:25

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 20:01	WG1275813
Vinyl chloride	U	UJ JO J4	0.118	0.500	1	05/03/2019 20:01	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 20:01	WG1275813
(S) Toluene-d8	99.3			80.0-120		05/03/2019 20:01	WG1275813
(S) 4-Bromofluorobenzene	102			77.0-126		05/03/2019 20:01	WG1275813
(S) 1,2-Dichloroethane-d4	99.5			70.0-130		05/03/2019 20:01	WG1275813

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

JC 5/22/19

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	538000		2710	20000	1	05/07/2019 19:58	WG1276578

Sample Narrative:

L1094387-07 WG1276578: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	41600		51.9	1000	1	05/02/2019 12:24	WG1274986
Nitrate	U		22.7	100	1	05/02/2019 12:24	WG1274986
Sulfate	51800		77.4	5000	1	05/02/2019 12:24	WG1274986

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14200		102	1000	1	05/02/2019 21:58	WG1275023

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2670		15.0	100	1	05/12/2019 22:15	WG1275858
Manganese	1080		0.250	5.00	1	05/12/2019 22:15	WG1275858

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	481		31.6	100	1	05/02/2019 19:16	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	99.0			78.0-120		05/02/2019 19:16	WG1275218

JC 5/22/19

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	18000		5.74	13.6	20	05/09/2019 16:35	WG1278760
Ethane	122		0.296	1.29	1	05/09/2019 11:43	WG1277421
Ethene	93.2		0.422	1.27	1	05/09/2019 11:43	WG1277421

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	5.66	U J J4	1.05	25.0	1	05/03/2019 20:21	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 20:21	WG1275813
Benzene	0.188	J J	0.0896	0.500	1	05/03/2019 20:21	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 20:21	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 20:21	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 20:21	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 20:21	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 20:21	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 20:21	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 20:21	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 20:21	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 20:21	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 20:21	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 05/01/19 11:10

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	05/03/2019 20:21	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 20:21	WG1275813
Chloroethane	4.02	J JO	0.141	2.50	1	05/03/2019 20:21	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 20:21	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 20:21	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 20:21	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 20:21	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 20:21	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 20:21	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 20:21	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 20:21	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 20:21	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 20:21	WG1275813
1,1-Dichloroethene	13.0		0.188	0.500	1	05/03/2019 20:21	WG1275813
cis-1,2-Dichloroethene	1250		1.87	10.0	20	05/05/2019 18:44	WG1276343
trans-1,2-Dichloroethene	14.1		0.152	0.500	1	05/03/2019 20:21	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 20:21	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 20:21	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 20:21	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 20:21	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 20:21	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 20:21	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 20:21	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 20:21	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 20:21	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 20:21	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 20:21	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 20:21	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 20:21	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 20:21	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 20:21	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 20:21	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 20:21	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 20:21	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 20:21	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 20:21	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 20:21	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 20:21	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 20:21	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 20:21	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 20:21	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 20:21	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 20:21	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 20:21	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 20:21	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 20:21	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 20:21	WG1275813
Trichloroethene	99.9		0.153	0.500	1	05/03/2019 20:21	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 20:21	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 20:21	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 20:21	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 20:21	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 20:21	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 05/01/19 11:10

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 20:21	WG1275813
Vinyl chloride	374		2.36	10.0	20	05/05/2019 18:44	WG1276343
Xylenes, Total	U		0.316	1.50	1	05/03/2019 20:21	WG1275813
(S) Toluene-d8	99.0			80.0-120		05/03/2019 20:21	WG1275813
(S) Toluene-d8	102			80.0-120		05/05/2019 18:44	WG1276343
(S) 4-Bromofluorobenzene	105			77.0-126		05/03/2019 20:21	WG1275813
(S) 4-Bromofluorobenzene	105			77.0-126		05/05/2019 18:44	WG1276343
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		05/03/2019 20:21	WG1275813
(S) 1,2-Dichloroethane-d4	98.0			70.0-130		05/05/2019 18:44	WG1276343

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 05/01/19 14:00

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.93	U J4	1.05	25.0	1	05/03/2019 20:42	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 20:42	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 20:42	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 20:42	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 20:42	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 20:42	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 20:42	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 20:42	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 20:42	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 20:42	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 20:42	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 20:42	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 20:42	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 20:42	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 20:42	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 20:42	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 20:42	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 20:42	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 20:42	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 20:42	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 20:42	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 20:42	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 20:42	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 20:42	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 20:42	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 20:42	WG1275813
1,1-Dichloroethene	1.26		0.188	0.500	1	05/03/2019 20:42	WG1275813
cis-1,2-Dichloroethene	372		0.466	2.50	5	05/05/2019 19:04	WG1276343
trans-1,2-Dichloroethene	1.22		0.152	0.500	1	05/03/2019 20:42	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 20:42	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 20:42	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 20:42	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 20:42	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 20:42	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 20:42	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 20:42	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 20:42	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 20:42	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 20:42	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 20:42	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 20:42	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 20:42	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 20:42	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 20:42	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 20:42	WG1275813
Methylene Chloride	U		1.07	2.50	1	05/03/2019 20:42	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 20:42	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 20:42	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 20:42	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 20:42	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 20:42	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 20:42	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 20:42	WG1275813

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
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- 7 Gl
- 8 Al
- 9 Sc

JC 5/22/19



Collected date/time: 05/01/19 14:00

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 20:42	WG1275813
Tetrachloroethene	101		0.199	0.500	1	05/03/2019 20:42	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 20:42	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 20:42	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 20:42	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 20:42	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 20:42	WG1275813
Trichloroethene	166		0.153	0.500	1	05/03/2019 20:42	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 20:42	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 20:42	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 20:42	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 20:42	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 20:42	WG1275813
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 20:42	WG1275813
Vinyl chloride	U		0.590	2.50	5	05/05/2019 19:04	WG1276343
Xylenes, Total	U		0.316	1.50	1	05/03/2019 20:42	WG1275813
(S) Toluene-d8	96.8			80.0-120		05/03/2019 20:42	WG1275813
(S) Toluene-d8	96.5			80.0-120		05/05/2019 19:04	WG1276343
(S) 4-Bromofluorobenzene	101			77.0-126		05/03/2019 20:42	WG1275813
(S) 4-Bromofluorobenzene	101			77.0-126		05/05/2019 19:04	WG1276343
(S) 1,2-Dichloroethane-d4	98.7			70.0-130		05/03/2019 20:42	WG1275813
(S) 1,2-Dichloroethane-d4	94.8			70.0-130		05/05/2019 19:04	WG1276343

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1094387-08 WG1275813, WG1276343: Not all compounds reportable at lower dilution.
 L1094387-08 WG1275813, WG1276343: Cannot be re-analyzed at lower dilution due to high levels of target analytes.

JC 5/22/19



Collected date/time: 05/01/19 00:00

L1094387

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	05/02/2019 17:41	WG1275218
(S) a,a,a-Trifluorotoluene(FID)	98.6			78.0-120		05/02/2019 17:41	WG1275218

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.22	J J4	1.05	25.0	1	05/03/2019 17:00	WG1275813
Acrylonitrile	U		0.873	5.00	1	05/03/2019 17:00	WG1275813
Benzene	U		0.0896	0.500	1	05/03/2019 17:00	WG1275813
Bromobenzene	U		0.133	0.500	1	05/03/2019 17:00	WG1275813
Bromodichloromethane	U		0.0800	0.500	1	05/03/2019 17:00	WG1275813
Bromochloromethane	U		0.145	0.500	1	05/03/2019 17:00	WG1275813
Bromoform	U		0.186	0.500	1	05/03/2019 17:00	WG1275813
Bromomethane	U		0.157	2.50	1	05/03/2019 17:00	WG1275813
n-Butylbenzene	U		0.143	0.500	1	05/03/2019 17:00	WG1275813
sec-Butylbenzene	U		0.134	0.500	1	05/03/2019 17:00	WG1275813
tert-Butylbenzene	U		0.183	0.500	1	05/03/2019 17:00	WG1275813
Carbon disulfide	U		0.101	0.500	1	05/03/2019 17:00	WG1275813
Carbon tetrachloride	U		0.159	0.500	1	05/03/2019 17:00	WG1275813
Chlorobenzene	U		0.140	0.500	1	05/03/2019 17:00	WG1275813
Chlorodibromomethane	U		0.128	0.500	1	05/03/2019 17:00	WG1275813
Chloroethane	U	UJ JO	0.141	2.50	1	05/03/2019 17:00	WG1275813
Chloroform	U		0.0860	0.500	1	05/03/2019 17:00	WG1275813
Chloromethane	U	UJ JO	0.153	1.25	1	05/03/2019 17:00	WG1275813
2-Chlorotoluene	U		0.111	0.500	1	05/03/2019 17:00	WG1275813
4-Chlorotoluene	U		0.0972	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	05/03/2019 17:00	WG1275813
1,2-Dibromoethane	U		0.193	0.500	1	05/03/2019 17:00	WG1275813
Dibromomethane	U		0.117	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dichlorobenzene	U		0.101	0.500	1	05/03/2019 17:00	WG1275813
1,3-Dichlorobenzene	U		0.130	0.500	1	05/03/2019 17:00	WG1275813
1,4-Dichlorobenzene	U		0.121	0.500	1	05/03/2019 17:00	WG1275813
Dichlorodifluoromethane	U		0.127	2.50	1	05/03/2019 17:00	WG1275813
1,1-Dichloroethane	U		0.114	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dichloroethane	U		0.108	0.500	1	05/03/2019 17:00	WG1275813
1,1-Dichloroethene	U		0.188	0.500	1	05/03/2019 17:00	WG1275813
cis-1,2-Dichloroethene	U		0.0933	0.500	1	05/03/2019 17:00	WG1275813
trans-1,2-Dichloroethene	U		0.152	0.500	1	05/03/2019 17:00	WG1275813
1,2-Dichloropropane	U		0.190	0.500	1	05/03/2019 17:00	WG1275813
1,1-Dichloropropene	U		0.128	0.500	1	05/03/2019 17:00	WG1275813
1,3-Dichloropropane	U		0.147	1.00	1	05/03/2019 17:00	WG1275813
cis-1,3-Dichloropropene	U		0.0976	0.500	1	05/03/2019 17:00	WG1275813
trans-1,3-Dichloropropene	U		0.222	0.500	1	05/03/2019 17:00	WG1275813
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	05/03/2019 17:00	WG1275813
2,2-Dichloropropane	U		0.0929	0.500	1	05/03/2019 17:00	WG1275813
Di-isopropyl ether	U		0.0924	0.500	1	05/03/2019 17:00	WG1275813
Ethylbenzene	U		0.158	0.500	1	05/03/2019 17:00	WG1275813
Hexachloro-1,3-butadiene	U		0.157	1.00	1	05/03/2019 17:00	WG1275813
2-Hexanone	U		0.757	5.00	1	05/03/2019 17:00	WG1275813
n-Hexane	U		0.305	5.00	1	05/03/2019 17:00	WG1275813
Iodomethane	U		0.377	10.0	1	05/03/2019 17:00	WG1275813
Isopropylbenzene	U		0.126	0.500	1	05/03/2019 17:00	WG1275813
p-Isopropyltoluene	U		0.138	0.500	1	05/03/2019 17:00	WG1275813
2-Butanone (MEK)	U		1.28	5.00	1	05/03/2019 17:00	WG1275813

JC 5/22/19



Collected date/time: 05/01/19 00:00

L1094387

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	05/03/2019 17:00	WG1275813
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	05/03/2019 17:00	WG1275813
Methyl tert-butyl ether	U		0.102	0.500	1	05/03/2019 17:00	WG1275813
Naphthalene	U	UJ JO	0.174	2.50	1	05/03/2019 17:00	WG1275813
n-Propylbenzene	U		0.162	0.500	1	05/03/2019 17:00	WG1275813
Styrene	U		0.117	0.500	1	05/03/2019 17:00	WG1275813
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	05/03/2019 17:00	WG1275813
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	05/03/2019 17:00	WG1275813
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	05/03/2019 17:00	WG1275813
Tetrachloroethene	U		0.199	0.500	1	05/03/2019 17:00	WG1275813
Toluene	U		0.412	0.500	1	05/03/2019 17:00	WG1275813
1,2,3-Trichlorobenzene	U		0.164	0.500	1	05/03/2019 17:00	WG1275813
1,2,4-Trichlorobenzene	U		0.355	0.500	1	05/03/2019 17:00	WG1275813
1,1,1-Trichloroethane	U		0.0940	0.500	1	05/03/2019 17:00	WG1275813
1,1,2-Trichloroethane	U		0.186	0.500	1	05/03/2019 17:00	WG1275813
Trichloroethene	U		0.153	0.500	1	05/03/2019 17:00	WG1275813
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	05/03/2019 17:00	WG1275813
1,2,3-Trichloropropane	U		0.247	2.50	1	05/03/2019 17:00	WG1275813
1,2,4-Trimethylbenzene	U		0.123	0.500	1	05/03/2019 17:00	WG1275813
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	05/03/2019 17:00	WG1275813
1,3,5-Trimethylbenzene	U		0.124	0.500	1	05/03/2019 17:00	WG1275813
Vinyl acetate	U	UJ JO	0.645	5.00	1	05/03/2019 17:00	WG1275813
Vinyl chloride	U	UJ JO J4	0.118	0.500	1	05/03/2019 17:00	WG1275813
Xylenes, Total	U		0.316	1.50	1	05/03/2019 17:00	WG1275813
(S) Toluene-d8	98.6			80.0-120		05/03/2019 17:00	WG1275813
(S) 4-Bromofluorobenzene	105			77.0-126		05/03/2019 17:00	WG1275813
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		05/03/2019 17:00	WG1275813

- 1 Cp
- 2 Tc
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JC 5/22/19



ANALYTICAL REPORT

July 24, 2019

- 1 Cp
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- 5 Sr
- 6 Qc
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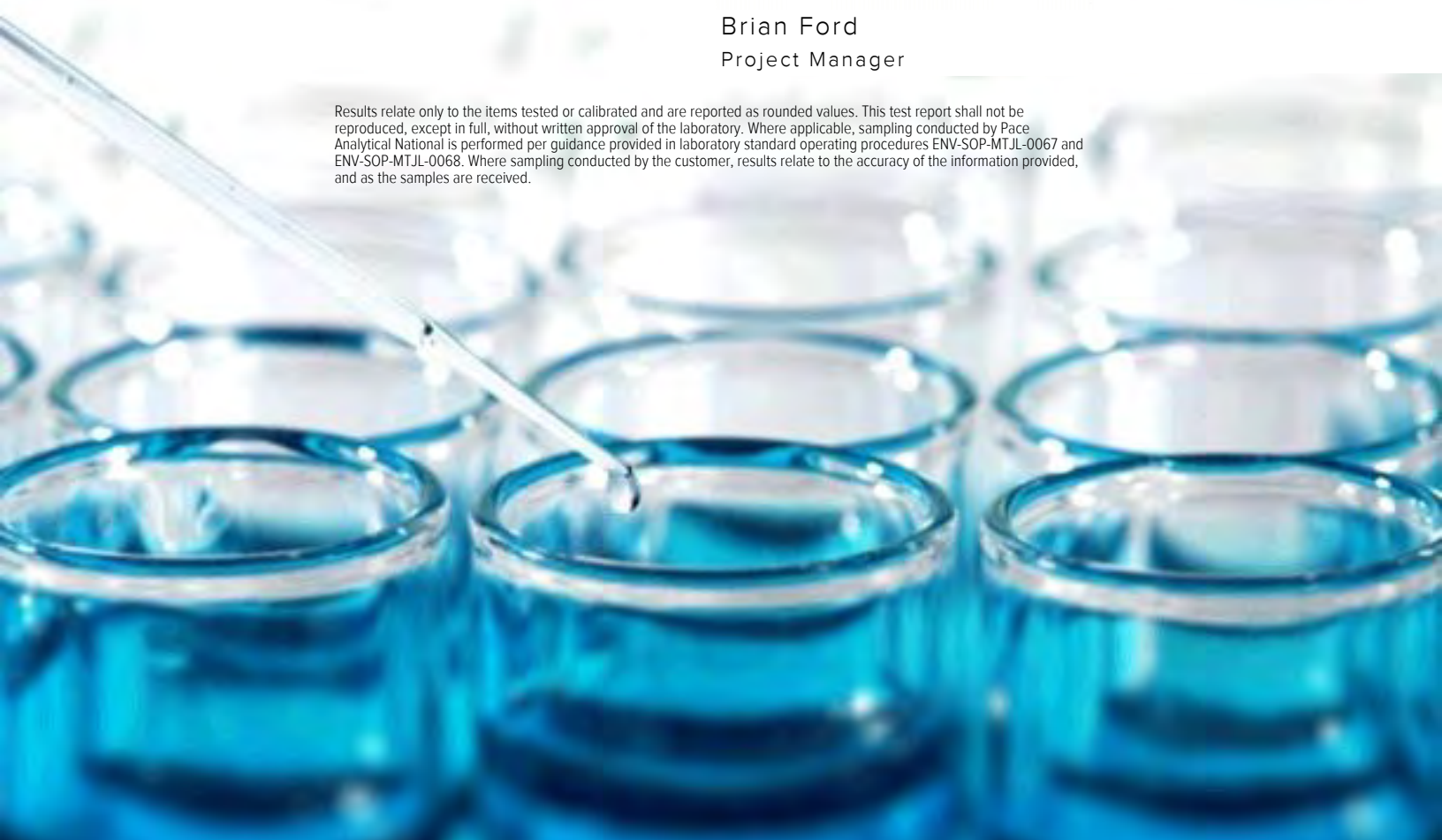
PES Environmental, Inc.- WA

Sample Delivery Group: L119161
 Samples Received: 07/17/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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1 Cp
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FMW-129-071619 L1119161-01 GW

Collected by Ben Hecht
 Collected date/time 07/16/19 11:15
 Received date/time 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315264	1	07/22/19 12:26	07/22/19 12:26	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1312677	1	07/17/19 18:43	07/17/19 18:43	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1312820	1	07/17/19 23:00	07/17/19 23:00	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313436	5	07/19/19 13:55	07/22/19 13:04	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1315671	1	07/23/19 13:32	07/23/19 13:32	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 14:03	07/18/19 14:03	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	20	07/20/19 23:14	07/20/19 23:14	BMB	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

MW112-071619 L1119161-02 GW

Collected by Ben Hecht
 Collected date/time 07/16/19 12:05
 Received date/time 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315264	1	07/22/19 12:33	07/22/19 12:33	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1312677	1	07/17/19 18:59	07/17/19 18:59	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1312820	1	07/17/19 23:13	07/17/19 23:13	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313436	1	07/19/19 13:55	07/22/19 11:18	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 18:12	07/18/19 18:12	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1315671	1	07/23/19 13:52	07/23/19 13:52	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 14:25	07/18/19 14:25	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/20/19 23:33	07/20/19 23:33	BMB	Mt. Juliet, TN

GEI-1-071619 L1119161-03 GW

Collected by Ben Hecht
 Collected date/time 07/16/19 13:45
 Received date/time 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315264	1	07/22/19 12:40	07/22/19 12:40	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1312677	1	07/17/19 19:49	07/17/19 19:49	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1312820	1	07/17/19 23:41	07/17/19 23:41	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313436	10	07/19/19 13:55	07/22/19 13:07	LAT	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313436	20	07/19/19 13:55	07/22/19 13:47	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1315671	1	07/23/19 13:59	07/23/19 13:59	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316246	10	07/23/19 17:16	07/23/19 17:16	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 14:46	07/18/19 14:46	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/20/19 23:53	07/20/19 23:53	BMB	Mt. Juliet, TN

GEI-2-071619 L1119161-04 GW

Collected by Ben Hecht
 Collected date/time 07/16/19 14:55
 Received date/time 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315264	1	07/22/19 13:09	07/22/19 13:09	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1312677	1	07/17/19 20:05	07/17/19 20:05	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1312820	1	07/17/19 23:55	07/17/19 23:55	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313436	5	07/19/19 13:55	07/22/19 13:11	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1315671	1	07/23/19 14:05	07/23/19 14:05	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 15:08	07/18/19 15:08	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/21/19 00:13	07/21/19 00:13	BMB	Mt. Juliet, TN



TRIP-071619 L1119161-05 GW

Collected by: Ben Hecht
 Collected date/time: 07/16/19 00:00
 Received date/time: 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 15:37	07/18/19 15:37	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 12:58	07/18/19 12:58	BMB	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	221000		2710	20000	1	07/22/2019 12:26	WG1315264

Sample Narrative:

L1119161-01 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23700		51.9	1000	1	07/17/2019 18:43	WG1312677
Nitrate	771		22.7	100	1	07/17/2019 18:43	WG1312677
Sulfate	86800		77.4	5000	1	07/17/2019 18:43	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2230	<u>B</u>	102	1000	1	07/17/2019 23:00	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4600		75.0	500	5	07/22/2019 13:04	WG1313436
Manganese	415	<u>V</u>	1.25	25.0	5	07/22/2019 13:04	WG1313436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	40.5		0.287	0.678	1	07/23/2019 13:32	WG1315671
Ethane	6.45		0.296	1.29	1	07/23/2019 13:32	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 13:32	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.75	<u>B J</u>	1.05	25.0	1	07/18/2019 14:03	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 14:03	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 14:03	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 14:03	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 14:03	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 14:03	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 14:03	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 14:03	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 14:03	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 14:03	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 14:03	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 14:03	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 14:03	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 14:03	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 14:03	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 14:03	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 14:03	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 14:03	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 14:03	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 14:03	WG1313581

1 Cp

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Collected date/time: 07/16/19 11:15

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 14:03	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 14:03	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 14:03	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 14:03	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 14:03	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 14:03	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 14:03	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 14:03	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 14:03	WG1313581
1,1-Dichloroethene	1.69		0.188	0.500	1	07/18/2019 14:03	WG1313581
cis-1,2-Dichloroethene	272		1.87	10.0	20	07/20/2019 23:14	WG1314393
trans-1,2-Dichloroethene	1.61		0.152	0.500	1	07/18/2019 14:03	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 14:03	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 14:03	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 14:03	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 14:03	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 14:03	WG1313581
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/18/2019 14:03	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 14:03	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 14:03	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 14:03	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 14:03	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 14:03	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 14:03	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 14:03	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 14:03	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 14:03	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 14:03	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 14:03	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 14:03	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 14:03	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 14:03	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 14:03	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 14:03	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 14:03	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 14:03	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 14:03	WG1313581
Tetrachloroethene	159		0.199	0.500	1	07/18/2019 14:03	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 14:03	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 14:03	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 14:03	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 14:03	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 14:03	WG1313581
Trichloroethene	84.1		3.06	10.0	20	07/20/2019 23:14	WG1314393
Trichlorofluoromethane	U	JO	0.130	2.50	1	07/18/2019 14:03	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 14:03	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 14:03	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 14:03	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 14:03	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 14:03	WG1313581
Vinyl chloride	0.296	J	0.118	0.500	1	07/18/2019 14:03	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 14:03	WG1313581
(S) Toluene-d8	109			80.0-120		07/18/2019 14:03	WG1313581
(S) Toluene-d8	110			80.0-120		07/20/2019 23:14	WG1314393
(S) 4-Bromofluorobenzene	106			77.0-126		07/18/2019 14:03	WG1313581
(S) 4-Bromofluorobenzene	96.9			77.0-126		07/20/2019 23:14	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	109			70.0-130		07/18/2019 14:03	WG1313581
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/20/2019 23:14	WG1314393

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	112000		2710	20000	1	07/22/2019 12:33	WG1315264

Sample Narrative:

L1119161-02 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	8610		51.9	1000	1	07/17/2019 18:59	WG1312677
Nitrate	U		22.7	100	1	07/17/2019 18:59	WG1312677
Sulfate	17100		77.4	5000	1	07/17/2019 18:59	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6120		102	1000	1	07/17/2019 23:13	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1280		15.0	100	1	07/22/2019 11:18	WG1313436
Manganese	154		0.250	5.00	1	07/22/2019 11:18	WG1313436

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	31.7	<u>B</u>	31.6	100	1	07/18/2019 18:12	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 18:12	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	149		0.287	0.678	1	07/23/2019 13:52	WG1315671
Ethane	3.81		0.296	1.29	1	07/23/2019 13:52	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 13:52	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.24	<u>B</u>	1.05	25.0	1	07/18/2019 14:25	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 14:25	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 14:25	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 14:25	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 14:25	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 14:25	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 14:25	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 14:25	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 14:25	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 14:25	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 14:25	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 14:25	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 14:25	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 12:05

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/18/2019 14:25	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 14:25	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 14:25	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 14:25	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 14:25	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 14:25	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 14:25	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 14:25	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 14:25	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 14:25	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 14:25	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 14:25	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 14:25	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 14:25	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 23:33	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 14:25	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 14:25	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 14:25	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 14:25	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 14:25	WG1313581
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/18/2019 14:25	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 14:25	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 14:25	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 14:25	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 14:25	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 14:25	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 14:25	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 14:25	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 14:25	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 14:25	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 14:25	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 14:25	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 14:25	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 14:25	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 14:25	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 14:25	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 14:25	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 14:25	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 14:25	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 14:25	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 23:33	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 14:25	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 14:25	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 14:25	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 14:25	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 14:25	WG1313581
Trichloroethene	U		0.153	0.500	1	07/20/2019 23:33	WG1314393
Trichlorofluoromethane	U	JO	0.130	2.50	1	07/18/2019 14:25	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 14:25	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 14:25	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 14:25	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 14:25	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 12:05

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/18/2019 14:25	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 14:25	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 14:25	WG1313581
(S) Toluene-d8	105			80.0-120		07/18/2019 14:25	WG1313581
(S) Toluene-d8	111			80.0-120		07/20/2019 23:33	WG1314393
(S) 4-Bromofluorobenzene	100			77.0-126		07/18/2019 14:25	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/20/2019 23:33	WG1314393
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/18/2019 14:25	WG1313581
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 23:33	WG1314393

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	529000		2710	20000	1	07/22/2019 12:40	WG1315264

Sample Narrative:

L1119161-03 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13400		51.9	1000	1	07/17/2019 19:49	WG1312677
Nitrate	U		22.7	100	1	07/17/2019 19:49	WG1312677
Sulfate	U		77.4	5000	1	07/17/2019 19:49	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8290		102	1000	1	07/17/2019 23:41	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	17100		150	1000	10	07/22/2019 13:07	WG1313436
Manganese	2480		5.00	100	20	07/22/2019 13:47	WG1313436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	16100		2.87	6.78	10	07/23/2019 17:16	WG1316246
Ethane	U		0.296	1.29	1	07/23/2019 13:59	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 13:59	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.32	B J	1.05	25.0	1	07/18/2019 14:46	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 14:46	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 14:46	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 14:46	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 14:46	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 14:46	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 14:46	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 14:46	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 14:46	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 14:46	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 14:46	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 14:46	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 14:46	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 14:46	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 14:46	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 14:46	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 14:46	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 14:46	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 14:46	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 14:46	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 13:45

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 14:46	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 14:46	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 14:46	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 14:46	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 14:46	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 14:46	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 14:46	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 14:46	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 14:46	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 14:46	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 23:53	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 14:46	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 14:46	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 14:46	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 14:46	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 14:46	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 14:46	WG1313581
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/18/2019 14:46	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 14:46	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 14:46	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 14:46	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 14:46	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 14:46	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 14:46	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 14:46	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 14:46	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 14:46	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 14:46	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 14:46	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 14:46	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 14:46	WG1313581
Naphthalene	0.189	J	0.174	2.50	1	07/18/2019 14:46	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 14:46	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 14:46	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 14:46	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 14:46	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 14:46	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 23:53	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 14:46	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 14:46	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 14:46	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 14:46	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 14:46	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 14:46	WG1313581
Trichlorofluoromethane	U	JO	0.130	2.50	1	07/18/2019 14:46	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 14:46	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 14:46	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 14:46	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 14:46	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 14:46	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 14:46	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 14:46	WG1313581
(S) Toluene-d8	109			80.0-120		07/18/2019 14:46	WG1313581
(S) Toluene-d8	111			80.0-120		07/20/2019 23:53	WG1314393
(S) 4-Bromofluorobenzene	104			77.0-126		07/18/2019 14:46	WG1313581
(S) 4-Bromofluorobenzene	104			77.0-126		07/20/2019 23:53	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 14:46	WG1313581
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/20/2019 23:53	WG1314393

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	340000		2710	20000	1	07/22/2019 13:09	WG1315264

Sample Narrative:

L1119161-04 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	27100		51.9	1000	1	07/17/2019 20:05	WG1312677
Nitrate	U		22.7	100	1	07/17/2019 20:05	WG1312677
Sulfate	36100		77.4	5000	1	07/17/2019 20:05	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6600		102	1000	1	07/17/2019 23:55	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	7510		75.0	500	5	07/22/2019 13:11	WG1313436
Manganese	432		1.25	25.0	5	07/22/2019 13:11	WG1313436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	4550		0.287	0.678	1	07/23/2019 14:05	WG1315671
Ethane	15.0		0.296	1.29	1	07/23/2019 14:05	WG1315671
Ethene	11.5		0.422	1.27	1	07/23/2019 14:05	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.77	<u>B J</u>	1.05	25.0	1	07/18/2019 15:08	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 15:08	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 15:08	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 15:08	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 15:08	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 15:08	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 15:08	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 15:08	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 15:08	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 15:08	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 15:08	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 15:08	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 15:08	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 15:08	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 15:08	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 15:08	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 15:08	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 15:08	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 15:08	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 15:08	WG1313581

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/16/19 14:55

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 15:08	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 15:08	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 15:08	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 15:08	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 15:08	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 15:08	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 15:08	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 15:08	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 15:08	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 15:08	WG1313581
cis-1,2-Dichloroethene	1.37		0.0933	0.500	1	07/21/2019 00:13	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 15:08	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 15:08	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 15:08	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 15:08	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 15:08	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 15:08	WG1313581
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/18/2019 15:08	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 15:08	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 15:08	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 15:08	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 15:08	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 15:08	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 15:08	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 15:08	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 15:08	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 15:08	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 15:08	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 15:08	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 15:08	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 15:08	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 15:08	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 15:08	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 15:08	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 15:08	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 15:08	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 15:08	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/18/2019 15:08	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 15:08	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 15:08	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 15:08	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 15:08	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 15:08	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 15:08	WG1313581
Trichlorofluoromethane	U	JO	0.130	2.50	1	07/18/2019 15:08	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 15:08	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 15:08	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 15:08	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 15:08	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 15:08	WG1313581
Vinyl chloride	46.4		0.118	0.500	1	07/18/2019 15:08	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 15:08	WG1313581
(S) Toluene-d8	107			80.0-120		07/18/2019 15:08	WG1313581
(S) Toluene-d8	113			80.0-120		07/21/2019 00:13	WG1314393
(S) 4-Bromofluorobenzene	101			77.0-126		07/18/2019 15:08	WG1313581
(S) 4-Bromofluorobenzene	101			77.0-126		07/21/2019 00:13	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 15:08	WG1313581
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/21/2019 00:13	WG1314393

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 00:00

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	35.3	<u>B</u>	31.6	100	1	07/18/2019 15:37	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		07/18/2019 15:37	WG1313748

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.41	<u>B</u>	1.05	25.0	1	07/18/2019 12:58	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 12:58	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 12:58	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 12:58	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 12:58	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 12:58	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 12:58	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 12:58	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 12:58	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 12:58	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 12:58	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 12:58	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 12:58	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 12:58	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 12:58	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 12:58	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 12:58	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 12:58	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 12:58	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 12:58	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 12:58	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 12:58	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 12:58	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 12:58	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 12:58	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 12:58	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 12:58	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/18/2019 12:58	WG1313581
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 12:58	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 12:58	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 12:58	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 12:58	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 12:58	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 12:58	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 12:58	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 12:58	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 12:58	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 12:58	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 12:58	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 12:58	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 12:58	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 12:58	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 12:58	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 12:58	WG1313581



Collected date/time: 07/16/19 00:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 12:58	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 12:58	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 12:58	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 12:58	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 12:58	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 12:58	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 12:58	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 12:58	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 12:58	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/18/2019 12:58	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 12:58	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 12:58	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 12:58	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 12:58	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 12:58	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 12:58	WG1313581
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 12:58	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 12:58	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 12:58	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 12:58	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 12:58	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 12:58	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 12:58	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 12:58	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 12:58	WG1313581
(S) 4-Bromofluorobenzene	103			77.0-126		07/18/2019 12:58	WG1313581
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/18/2019 12:58	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3433012-1 07/22/19 11:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Alkalinity	3000	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1119200-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1119200-01 07/22/19 12:47 • (DUP) R3433012-2 07/22/19 12:54

Analyte	Original Result ug/l	DUP Result	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	1650000	1660000	1	0.247		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1120696-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120696-01 07/22/19 14:36 • (DUP) R3433012-4 07/22/19 14:43

Analyte	Original Result ug/l	DUP Result	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Alkalinity	82700	82100	1	0.740		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3433012-3 07/22/19 13:02

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Alkalinity	100000	107000	107	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3431615-1 07/17/19 09:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	289	J	51.9	1000
Nitrate	U	J	22.7	100
Sulfate	312	J	77.4	5000

L119086-02 Original Sample (OS) • Duplicate (DUP)

(OS) L119086-02 07/17/19 11:20 • (DUP) R3431615-3 07/17/19 11:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	10600	10600	1	0.0839		15
Nitrate	3110	3080	1	0.785		15

L119086-02 Original Sample (OS) • Duplicate (DUP)

(OS) L119086-02 07/17/19 11:53 • (DUP) R3431615-4 07/17/19 12:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Sulfate	197000	196000	5	0.215		15

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L119171-08 Original Sample (OS) • Duplicate (DUP)

(OS) L119171-08 07/17/19 20:21 • (DUP) R3431615-7 07/17/19 20:38

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	19900	19800	1	0.325		15
Nitrate	1760	1760	1	0.0341		15
Sulfate	67100	66900	1	0.218		15

Laboratory Control Sample (LCS)

(LCS) R3431615-2 07/17/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39400	98.6	80.0-120	
Nitrate	8000	8140	102	80.0-120	
Sulfate	40000	39100	97.9	80.0-120	

1 Cp
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ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc.- WA

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07/24/19 15:11

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L119086-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	Dilution %	MSD Rec. %	Dilution %	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
										E	E		
Chloride	50000	33600	84200	84100	101	101	101	1	80.0-120			0.0534	15
Nitrate	5000	6710	11300	11300	91.6	91.6	91.6	1	80.0-120	E	E	0.0106	15
Sulfate	50000	347000	382000	382000	68.5	68.5	69.0	1	80.0-120	E	E	0.0655	15

L119171-08 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution %	Rec. Limits %	MS Qualifier
							E
Chloride	50000	19900	71600	103	1	80.0-120	
Nitrate	5000	1760	7060	106	1	80.0-120	
Sulfate	50000	67100	118000	102	1	80.0-120	E

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Method Blank (MB)

(MB) R3431810-1 07/17/19 14:30	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	284	<u>1</u>	102	1000

L1118699-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1118699-05 07/17/19 19:38 • (DUP) R3431810-6 07/17/19 19:51	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC	1580	1600	1	1.76	20	20

L1119161-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1119161-02 07/17/19 23:13 • (DUP) R3431810-9 07/17/19 23:26	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC	6120	6180	1	1.06	20	20

Laboratory Control Sample (LCS)

(LCS) R3431810-2 07/17/19 15:04	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC	75000	75500	101	85.0-115	

L1118633-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118633-04 07/17/19 16:00 • (MS) R3431810-4 07/17/19 17:12 • (MSD) R3431810-5 07/17/19 17:28	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
TOC	50000	7950	5700	56300	98.2	96.7	1	80.0-120	1.34		20	

L1118705-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1118705-01 07/17/19 20:16 • (MS) R3431810-10 07/18/19 08:44 • (MSD) R3431810-11 07/18/19 09:00	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
TOC	50000	1400	55600	55400	108	108	1	80.0-120	0.288		20	



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3432889-1 07/22/19 10:48				
Analyte	ug/l		ug/l	ug/l
Iron	16.9	J	15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3432889-2 07/22/19 10:51 • (LCSD) R3432889-3 07/22/19 10:54									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	4920	4940	98.4	98.8	80.0-120			0.375	20
Manganese	50.0	49.1	48.9	98.1	97.8	80.0-120			0.372	20

L1119161-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1119161-01 07/22/19 10:58 • (MS) R3432889-5 07/22/19 11:04 • (MSD) R3432889-6 07/22/19 11:08											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	3470	8280	8260	96.2	95.7	1	75.0-125			0.322	20
Manganese	50.0	370	421	406	101	71.4	1	75.0-125		V	3.59	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1119161-02.05](#)

Method Blank (MB)

(MB) R3432675-1 07/18/19 12:27

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	36.8	J	316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	104			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3432675-2 07/18/19 14:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5660	103	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			106	78.0-120	

L1119004-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1119004-03 07/18/19 16:21 • (MS) R3432675-3 07/18/19 22:17 • (MSD) R3432675-4 07/18/19 23:29

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Gasoline Range Organics-NWTPH	5500	46.6	3100	3280	55.4	58.9	1	10.0-155			5.93	21
^(S) <i>a,a</i> -Trifluorotoluene(FID)					103	103		78.0-120				

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Volatile Organic Compounds (GC) by Method RSK175

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Method Blank (MB)

(MB) R343363-1 07/23/19 12:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L119205-01 Original Sample (OS) • Duplicate (DUP)

(OS) L119205-01 07/23/19 13:07 • (DUP) R343363-2 07/23/19 13:55

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	ND	0.000	1	0.000			20
Ethane	ND	0.000	1	0.000			20
Ethene	ND	0.000	1	0.000			20

L119221-04 Original Sample (OS) • Duplicate (DUP)

(OS) L119221-04 07/23/19 14:19 • (DUP) R343363-3 07/23/19 14:43

Analyte	Original Result		DUP Result	Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l			%	%		
Methane	2920	2950	1	0.951			20	
Ethane	U	0.000	1	0.000			20	
Ethene	U	0.000	1	0.000			20	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R343363-4 07/23/19 14:48 • (LCSD) R343363-5 07/23/19 14:52

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	
Methane	67.8	71.8	73.5	106	108	85.0-115	2.35	20										
Ethane	129	118	119	91.1	92.3	85.0-115	1.27	20										
Ethene	127	118	118	92.6	92.7	85.0-115	0.118	20										

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Volatile Organic Compounds (GC) by Method RSK175

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Method Blank (MB)

(MB) R3433456-1 07/23/19 17:14

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433456-2 07/23/19 17:38 • (LCSD) R3433456-3 07/23/19 17:43

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	72.4	71.7	107	106	85.0-115			0.886	20



Method Blank (MB)

(MB) R3432355-3 07/18/19 11:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	1.34	J	1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3432355-3 07/18/19 11:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.263	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	109			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432355-1 07/18/19 09:04 • (LCSD) R3432355-2 07/18/19 09:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	135	133	108	107	19.0-160			1.03	27
Acrylonitrile	125	137	138	110	111	55.0-149			1.08	20
Benzene	25.0	24.0	24.1	96.0	96.5	70.0-123			0.454	20
Bromobenzene	25.0	23.3	23.3	93.2	93.1	73.0-121			0.148	20
Bromodichloromethane	25.0	25.5	25.2	102	101	75.0-120			1.36	20
Bromochloromethane	25.0	26.0	25.4	104	102	76.0-122			2.29	20
Bromoform	25.0	23.4	24.1	93.4	96.3	68.0-132			3.08	20
Bromomethane	25.0	23.8	23.8	95.4	95.1	10.0-160			0.261	25
n-Butylbenzene	25.0	26.6	26.8	106	107	73.0-125			0.918	20
sec-Butylbenzene	25.0	25.7	26.2	103	105	75.0-125			2.24	20
tert-Butylbenzene	25.0	25.6	25.6	102	103	76.0-124			0.0882	20
Carbon disulfide	25.0	24.4	24.3	97.4	97.0	61.0-128			0.411	20
Carbon tetrachloride	25.0	26.5	28.4	106	114	68.0-126			6.90	20
Chlorobenzene	25.0	25.4	25.7	101	103	80.0-121			1.41	20
Chlorodibromomethane	25.0	26.4	26.9	106	108	77.0-125			1.87	20
Chloroethane	25.0	23.8	24.0	95.1	96.1	47.0-150			1.07	20
Chloroform	25.0	24.1	23.8	96.3	95.3	73.0-120			1.05	20
Chloromethane	25.0	23.1	22.7	92.4	90.9	41.0-142			1.64	20
2-Chlorotoluene	25.0	24.6	24.4	98.5	97.6	76.0-123			0.890	20
4-Chlorotoluene	25.0	25.4	24.5	101	97.8	75.0-122			3.62	20
1,2-Dibromoethane	25.0	25.6	25.9	102	104	58.0-134			1.27	20
1,2-Dibromo-3-Chloropropane	25.0	26.0	27.1	104	108	80.0-122			4.10	20
Dibromomethane	25.0	26.0	26.3	104	105	80.0-120			0.939	20
1,2-Dichlorobenzene	25.0	24.5	24.8	98.1	99.3	79.0-121			1.27	20
1,3-Dichlorobenzene	25.0	25.3	25.2	101	101	79.0-120			0.288	20
1,4-Dichlorobenzene	25.0	24.7	24.5	98.6	98.1	79.0-120			0.525	20
Dichlorodifluoromethane	25.0	24.4	23.8	97.6	95.4	51.0-149			2.34	20
1,1-Dichloroethane	25.0	25.5	25.0	102	99.8	70.0-126			2.13	20
1,2-Dichloroethane	25.0	25.1	25.0	101	99.9	70.0-128			0.617	20
1,1-Dichloroethene	25.0	25.3	25.6	101	102	71.0-124			0.989	20
cis-1,2-Dichloroethene	25.0	24.5	24.5	97.8	97.9	73.0-120			0.117	20
trans-1,2-Dichloroethene	25.0	24.5	25.3	97.9	101	73.0-120			3.20	20
1,2-Dichloropropane	25.0	25.5	25.2	102	101	77.0-125			1.44	20
1,1-Dichloropropene	25.0	25.5	24.7	102	98.6	74.0-126			3.56	20
1,3-Dichloropropene	25.0	25.6	25.6	102	103	80.0-120			0.304	20
cis-1,3-Dichloropropene	25.0	26.5	26.4	106	105	80.0-123			0.411	20
trans-1,3-Dichloropropene	25.0	26.1	26.6	105	107	78.0-124			1.88	20
trans-1,4-Dichloro-2-butene	25.0	18.9	19.4	75.6	77.6	33.0-144			2.58	20
2,2-Dichloropropane	25.0	25.3	26.0	101	104	58.0-130			2.42	20
Diisopropyl ether	25.0	25.0	25.2	99.9	101	58.0-138			0.986	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432355-1 07/18/19 09:04 • (LCSD) R3432355-2 07/18/19 09:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.6	25.3	98.3	101	79.0-123			3.04	20
Hexachloro-1,3-butadiene	25.0	24.9	25.7	99.6	103	54.0-138			3.12	20
2-Hexanone	125	137	138	109	111	67.0-149			1.31	20
n-Hexane	25.0	27.4	27.9	109	111	57.0-133			1.77	20
Iodomethane	125	121	120	97.0	96.1	33.0-147			0.880	26
Isopropylbenzene	25.0	25.2	26.3	101	105	76.0-127			4.22	20
p-Isopropyltoluene	25.0	26.4	26.6	106	106	76.0-125			0.627	20
2-Butanone (MEK)	125	134	133	107	106	44.0-160			0.335	20
Methylene Chloride	25.0	25.1	24.7	100	98.8	67.0-120			1.51	20
4-Methyl-2-pentanone (MIBK)	125	127	130	102	104	68.0-142			2.15	20
Methyl tert-butyl ether	25.0	25.5	25.4	102	102	68.0-125			0.0121	20
Naphthalene	25.0	25.8	26.8	103	107	54.0-135			3.92	20
n-Propylbenzene	25.0	25.0	25.0	100	99.9	77.0-124			0.299	20
Styrene	25.0	26.7	27.0	107	108	73.0-130			1.15	20
1,1,1,2-Tetrachloroethane	25.0	26.1	27.1	104	108	75.0-125			3.69	20
1,1,2,2-Tetrachloroethane	25.0	26.7	26.6	107	106	65.0-130			0.380	20
1,1,2-Trichlorotrifluoroethane	25.0	22.9	23.0	91.4	91.9	69.0-132			0.498	20
Tetrachloroethene	25.0	25.3	25.3	101	101	72.0-132			0.180	20
Toluene	25.0	24.1	24.4	96.4	97.5	79.0-120			1.09	20
1,2,3-Trichlorobenzene	25.0	25.2	25.2	101	101	50.0-138			0.101	20
1,2,4-Trichlorobenzene	25.0	26.2	26.1	105	105	57.0-137			0.128	20
1,1,1-Trichloroethane	25.0	25.3	25.0	101	100	73.0-124			1.02	20
1,1,2-Trichloroethane	25.0	26.3	27.0	105	108	80.0-120			2.93	20
Trichloroethene	25.0	23.6	23.4	94.4	93.8	78.0-124			0.621	20
Trichlorofluoromethane	25.0	19.0	19.5	76.1	78.2	59.0-147			2.71	20
1,2,3-Trichloropropane	25.0	25.5	25.8	102	103	73.0-130			1.19	20
1,2,4-Trimethylbenzene	25.0	24.8	25.1	99.2	101	76.0-121			1.40	20
1,2,3-Trimethylbenzene	25.0	24.8	24.9	99.1	99.5	77.0-120			0.404	20
1,3,5-Trimethylbenzene	25.0	24.2	24.1	96.6	96.4	76.0-122			0.243	20
Vinyl acetate	125	148	143	119	114	11.0-160			3.81	20
Vinyl chloride	25.0	25.3	25.2	101	101	67.0-131			0.218	20
Xylenes, Total	75.0	73.2	75.4	97.6	101	79.0-123			2.96	20
(S) Toluene-d8				107	109	80.0-120				
(S) 4-Bromofluorobenzene				103	106	77.0-126				
(S) 1,2-Dichloroethane-d4				105	105	70.0-130				

Public Review Draft

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

[L1119161-01.02.03.04](#)

Method Blank (MB)

(MB) R3433434-2 07/20/19 21:20

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	111			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	108			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3433434-1 07/20/19 20:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	24.1	96.6	73.0-120	
Tetrachloroethene	25.0	27.8	111	72.0-132	
Trichloroethene	25.0	25.1	100	78.0-124	
(S) Toluene-d8			107	80.0-120	
(S) 4-Bromofluorobenzene			103	77.0-126	
(S) 1,2-Dichloroethane-d4			106	70.0-130	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

PAGE:

PES Environmental, Inc.- WA

1413.001.05.601

L1119161

07/24/19 15:11

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

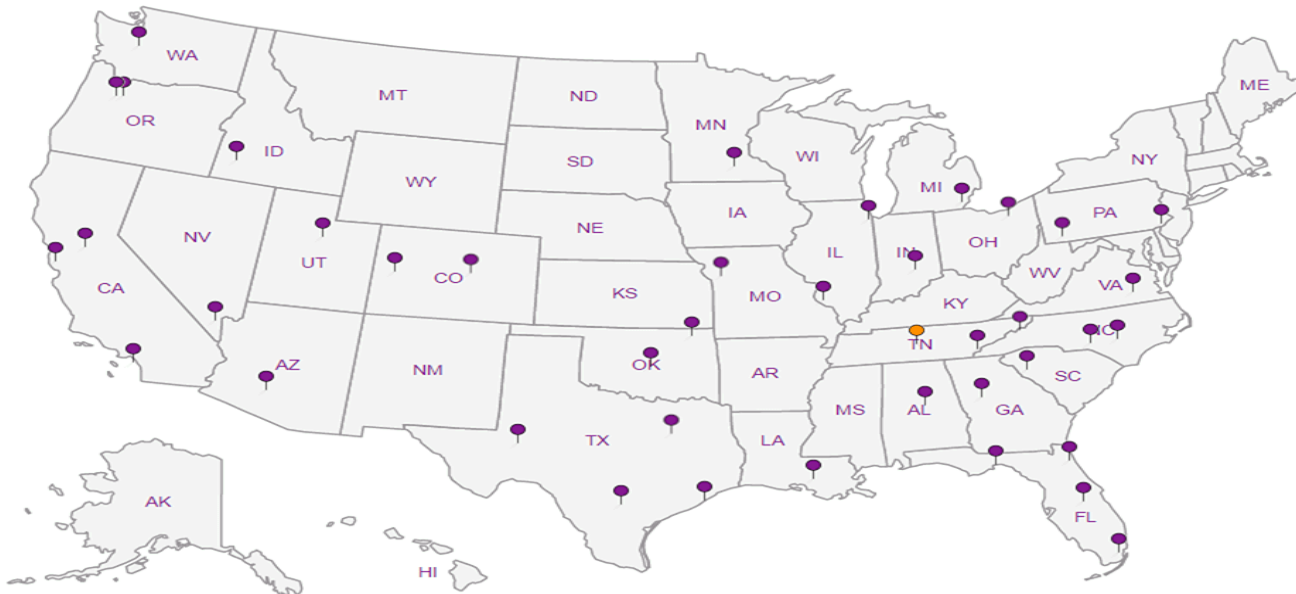
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Pres
Chk

Analysis / Container / Preservative

12055 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Pace Analytical
National Center for Testing & Innovation

Report to: **Brian O'Neal/Bill Haldeman**
Email To: boneal@pesenv.com; bhaldeaman@pesenv.com; kvzick@pesenv.com

Project: **American Cyan**
Client Project #: **1413.001.05.601**
City/State Collected: **Seattle, WA**
Lab Project #: **PESENVSWA-ALP**
P.O. #

Collected by (signature): *[Signature]*
Collected by (print): **Ben Hecht**
Immediately Packed on Ice **N** **Y**
Date Results Needed: **Standard**

Sample ID: **FMW-124-071619**
Comp/Grab: **Grab**
Matrix: **GW**
Depth: **86.5**
Date: **7/16/19**
Time: **11:15**
No. of Cntrs: **9**

Sample ID: **MW112-071619**
Comp/Grab: **Grab**
Matrix: **GW**
Depth: **80**
Date: **7/16/19**
Time: **12:05**
No. of Cntrs: **12**

Sample ID: **GEI-1-071619**
Comp/Grab: **Grab**
Matrix: **GW**
Depth: **31**
Date: **7/16/19**
Time: **13:45**
No. of Cntrs: **9**

Sample ID: **GEI-2-071619**
Comp/Grab: **Grab**
Matrix: **GW**
Depth: **55.5**
Date: **7/16/19**
Time: **14:55**
No. of Cntrs: **9**

Sample ID: **TRIP-071619**
Comp/Grab: **Grab**
Matrix: **GW**
Depth: **-**
Date: **7/16/19**
Time: **-**
No. of Cntrs: **1**

Remarks: *Nitrate has a 48 hour holding time.

* Matrix: **SS - Soil** **AIR - Air** **F - Filter**
GW - Groundwater **B - Biossary**
WW - Waste Water
DW - Drinking Water
OT - Other

Samples returned via:
UPS FedEx Courier

Relinquished by: (Signature) *[Signature]* Date: **7/16/19** Time: **17:00**

Relinquished by: (Signature) *[Signature]* Date: **7/16/19** Time: **17:00**

NO3,Cl, SO4 125mlHDPE-NoPres	
Alkalinity 125mlHDPE-NoPres	
EEM RSK175LL 40mlAmb-HCl	
NWTPHGX 40mlAmb HCl	
TOC 250mlAmb-HCl	
Total Fe Mn 6020 250mlHDPE-HNO3	27
VOCs 8260LLC 40mlAmb-HCl	

pH _____ Temp _____
Flow _____ Other _____

Trip Blank Received: **Yes/No**
(HCL/Meoh)
Bottles Received: **39**

Temp: **ASDF °C**
1.9 ± 1 = 1.8
Date: **7/17/19** Time: **8:45**

Sample Receipt Checklist
COC Seal Present/Intact: **NP** **Y** **N**
COC Signed/Accurate: **Y** **N**
Bottles arrive intact: **Y** **N**
Correct bottles used: **Y** **N**
Sufficient volume sent: **Y** **N**
If Applicable
VQA zero Headspace: **Y** **N**
Preservation Correct/Checked: **Z** **Y** **N**
RAD SCREEN: <0.5 mR/hr

Hold: _____
Condition: **NCF / OK**

C155
6119161

Actnum: **PESENVSWA**
Template: **T152679**
Prelogin: **P718645**
TSR: **110 - Brian Ford**
PB: **7-5-19 ES**
Shipped Via: **FedEx Ground**



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	221000		2710	20000	1	07/22/2019 12:26	WG1315264

Sample Narrative:

L1119161-01 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	23700		51.9	1000	1	07/17/2019 18:43	WG1312677
Nitrate	771		22.7	100	1	07/17/2019 18:43	WG1312677
Sulfate	86800		77.4	5000	1	07/17/2019 18:43	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2230	B	102	1000	1	07/17/2019 23:00	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4600		75.0	500	5	07/22/2019 13:04	WG1313436
Manganese	415	V	1.25	25.0	5	07/22/2019 13:04	WG1313436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	40.5		0.287	0.678	1	07/23/2019 13:32	WG1315671
Ethane	6.45		0.296	1.29	1	07/23/2019 13:32	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 13:32	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.75	U BJ	1.05	25.0	1	07/18/2019 14:03	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 14:03	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 14:03	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 14:03	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 14:03	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 14:03	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 14:03	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 14:03	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 14:03	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 14:03	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 14:03	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 14:03	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 14:03	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 14:03	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 14:03	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 14:03	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 14:03	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 14:03	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 14:03	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 14:03	WG1313581

JC 8/5/19

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 11:15

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 14:03	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 14:03	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 14:03	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 14:03	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 14:03	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 14:03	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 14:03	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 14:03	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 14:03	WG1313581
1,1-Dichloroethene	1.69		0.188	0.500	1	07/18/2019 14:03	WG1313581
cis-1,2-Dichloroethene	272		1.87	10.0	20	07/20/2019 23:14	WG1314393
trans-1,2-Dichloroethene	1.61		0.152	0.500	1	07/18/2019 14:03	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 14:03	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 14:03	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 14:03	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 14:03	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 14:03	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 14:03	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 14:03	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 14:03	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 14:03	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 14:03	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 14:03	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 14:03	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 14:03	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 14:03	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 14:03	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 14:03	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 14:03	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 14:03	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 14:03	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 14:03	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 14:03	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 14:03	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 14:03	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 14:03	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 14:03	WG1313581
Tetrachloroethene	159		0.199	0.500	1	07/18/2019 14:03	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 14:03	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 14:03	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 14:03	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 14:03	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 14:03	WG1313581
Trichloroethene	84.1		3.06	10.0	20	07/20/2019 23:14	WG1314393
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 14:03	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 14:03	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 14:03	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 14:03	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 14:03	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 14:03	WG1313581
Vinyl chloride	0.296	J J	0.118	0.500	1	07/18/2019 14:03	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 14:03	WG1313581
(S) Toluene-d8	109			80.0-120		07/18/2019 14:03	WG1313581
(S) Toluene-d8	110			80.0-120		07/20/2019 23:14	WG1314393
(S) 4-Bromofluorobenzene	106			77.0-126		07/18/2019 14:03	WG1313581
(S) 4-Bromofluorobenzene	96.9			77.0-126		07/20/2019 23:14	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	109			70.0-130		07/18/2019 14:03	WG1313581
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/20/2019 23:14	WG1314393

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/5/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	112000		2710	20000	1	07/22/2019 12:33	WG1315264

Sample Narrative:

L1119161-02 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	8610		51.9	1000	1	07/17/2019 18:59	WG1312677
Nitrate	U		22.7	100	1	07/17/2019 18:59	WG1312677
Sulfate	17100		77.4	5000	1	07/17/2019 18:59	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6120		102	1000	1	07/17/2019 23:13	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1280		15.0	100	1	07/22/2019 11:18	WG1313436
Manganese	154		0.250	5.00	1	07/22/2019 11:18	WG1313436

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	31.7	U BJ	31.6	100	1	07/18/2019 18:12	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 18:12	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	149		0.287	0.678	1	07/23/2019 13:52	WG1315671
Ethane	3.81		0.296	1.29	1	07/23/2019 13:52	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 13:52	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.24	U BJ	1.05	25.0	1	07/18/2019 14:25	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 14:25	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 14:25	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 14:25	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 14:25	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 14:25	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 14:25	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 14:25	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 14:25	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 14:25	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 14:25	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 14:25	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 14:25	WG1313581

JC 8/5/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/16/19 12:05

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	07/18/2019 14:25	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 14:25	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 14:25	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 14:25	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 14:25	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 14:25	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 14:25	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 14:25	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 14:25	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 14:25	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 14:25	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 14:25	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 14:25	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 14:25	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 23:33	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 14:25	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 14:25	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 14:25	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 14:25	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 14:25	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 14:25	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 14:25	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 14:25	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 14:25	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 14:25	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 14:25	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 14:25	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 14:25	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 14:25	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 14:25	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 14:25	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 14:25	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 14:25	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 14:25	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 14:25	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 14:25	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 14:25	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 14:25	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 14:25	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 14:25	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 14:25	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 23:33	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 14:25	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 14:25	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 14:25	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 14:25	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 14:25	WG1313581
Trichloroethene	U		0.153	0.500	1	07/20/2019 23:33	WG1314393
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 14:25	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 14:25	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 14:25	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 14:25	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 14:25	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/18/2019 14:25	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 14:25	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 14:25	WG1313581
(S) Toluene-d8	105			80.0-120		07/18/2019 14:25	WG1313581
(S) Toluene-d8	111			80.0-120		07/20/2019 23:33	WG1314393
(S) 4-Bromofluorobenzene	100			77.0-126		07/18/2019 14:25	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/20/2019 23:33	WG1314393
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/18/2019 14:25	WG1313581
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 23:33	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	529000		2710	20000	1	07/22/2019 12:40	WG1315264

Sample Narrative:

L1119161-03 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13400		51.9	1000	1	07/17/2019 19:49	WG1312677
Nitrate	U		22.7	100	1	07/17/2019 19:49	WG1312677
Sulfate	U		77.4	5000	1	07/17/2019 19:49	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8290		102	1000	1	07/17/2019 23:41	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	17100		150	1000	10	07/22/2019 13:07	WG1313436
Manganese	2480		5.00	100	20	07/22/2019 13:47	WG1313436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	16100		2.87	6.78	10	07/23/2019 17:16	WG1316246
Ethane	U		0.296	1.29	1	07/23/2019 13:59	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 13:59	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.32	U	1.05	25.0	1	07/18/2019 14:46	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 14:46	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 14:46	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 14:46	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 14:46	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 14:46	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 14:46	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 14:46	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 14:46	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 14:46	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 14:46	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 14:46	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 14:46	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 14:46	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 14:46	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 14:46	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 14:46	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 14:46	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 14:46	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 14:46	WG1313581

JC 8/5/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/16/19 13:45

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 14:46	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 14:46	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 14:46	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 14:46	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 14:46	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 14:46	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 14:46	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 14:46	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 14:46	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 14:46	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 23:53	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 14:46	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 14:46	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 14:46	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 14:46	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 14:46	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 14:46	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 14:46	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 14:46	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 14:46	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 14:46	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 14:46	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 14:46	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 14:46	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 14:46	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 14:46	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 14:46	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 14:46	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 14:46	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 14:46	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 14:46	WG1313581
Naphthalene	0.189	J U	0.174	2.50	1	07/18/2019 14:46	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 14:46	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 14:46	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 14:46	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 14:46	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 14:46	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 23:53	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 14:46	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 14:46	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 14:46	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 14:46	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 14:46	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 14:46	WG1313581
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 14:46	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 14:46	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 14:46	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 14:46	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 14:46	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 14:46	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 14:46	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 14:46	WG1313581
(S) Toluene-d8	109			80.0-120		07/18/2019 14:46	WG1313581
(S) Toluene-d8	111			80.0-120		07/20/2019 23:53	WG1314393
(S) 4-Bromofluorobenzene	104			77.0-126		07/18/2019 14:46	WG1313581
(S) 4-Bromofluorobenzene	104			77.0-126		07/20/2019 23:53	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 14:46	WG1313581
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/20/2019 23:53	WG1314393

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/5/19



Collected date/time: 07/16/19 14:55

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	340000		2710	20000	1	07/22/2019 13:09	WG1315264

Sample Narrative:

L1119161-04 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	27100		51.9	1000	1	07/17/2019 20:05	WG1312677
Nitrate	U		22.7	100	1	07/17/2019 20:05	WG1312677
Sulfate	36100		77.4	5000	1	07/17/2019 20:05	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6600		102	1000	1	07/17/2019 23:55	WG1312820

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	7510		75.0	500	5	07/22/2019 13:11	WG1313436
Manganese	432		1.25	25.0	5	07/22/2019 13:11	WG1313436

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	4550		0.287	0.678	1	07/23/2019 14:05	WG1315671
Ethane	15.0		0.296	1.29	1	07/23/2019 14:05	WG1315671
Ethene	11.5		0.422	1.27	1	07/23/2019 14:05	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.77	U	1.05	25.0	1	07/18/2019 15:08	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 15:08	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 15:08	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 15:08	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 15:08	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 15:08	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 15:08	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 15:08	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 15:08	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 15:08	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 15:08	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 15:08	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 15:08	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 15:08	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 15:08	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 15:08	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 15:08	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 15:08	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 15:08	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 15:08	WG1313581

JC 8/5/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/16/19 14:55

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 15:08	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 15:08	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 15:08	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 15:08	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 15:08	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 15:08	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 15:08	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 15:08	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 15:08	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 15:08	WG1313581
cis-1,2-Dichloroethene	1.37		0.0933	0.500	1	07/21/2019 00:13	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 15:08	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 15:08	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 15:08	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 15:08	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 15:08	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 15:08	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 15:08	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 15:08	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 15:08	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 15:08	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 15:08	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 15:08	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 15:08	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 15:08	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 15:08	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 15:08	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 15:08	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 15:08	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 15:08	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 15:08	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 15:08	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 15:08	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 15:08	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 15:08	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 15:08	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 15:08	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/18/2019 15:08	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 15:08	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 15:08	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 15:08	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 15:08	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 15:08	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 15:08	WG1313581
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 15:08	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 15:08	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 15:08	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 15:08	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 15:08	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 15:08	WG1313581
Vinyl chloride	46.4		0.118	0.500	1	07/18/2019 15:08	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 15:08	WG1313581
(S) Toluene-d8	107			80.0-120		07/18/2019 15:08	WG1313581
(S) Toluene-d8	113			80.0-120		07/21/2019 00:13	WG1314393
(S) 4-Bromofluorobenzene	101			77.0-126		07/18/2019 15:08	WG1313581
(S) 4-Bromofluorobenzene	101			77.0-126		07/21/2019 00:13	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 15:08	WG1313581
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/21/2019 00:13	WG1314393

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/5/19



Collected date/time: 07/16/19 00:00

L1119161

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	35.3	<u>B</u> <u>J</u>	31.6	100	1	07/18/2019 15:37	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		07/18/2019 15:37	WG1313748

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.41	<u>B</u> <u>J</u>	1.05	25.0	1	07/18/2019 12:58	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 12:58	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 12:58	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 12:58	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 12:58	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 12:58	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 12:58	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 12:58	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 12:58	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 12:58	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 12:58	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 12:58	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 12:58	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 12:58	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 12:58	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 12:58	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 12:58	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 12:58	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 12:58	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 12:58	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 12:58	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 12:58	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 12:58	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 12:58	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 12:58	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 12:58	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 12:58	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/18/2019 12:58	WG1313581
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 12:58	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 12:58	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 12:58	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 12:58	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 12:58	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 12:58	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>U</u> <u>J</u> <u>J</u> <u>O</u>	0.257	5.00	1	07/18/2019 12:58	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 12:58	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 12:58	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 12:58	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 12:58	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 12:58	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 12:58	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 12:58	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 12:58	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 12:58	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 12:58	WG1313581

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/5/19



Collected date/time: 07/16/19 00:00

L1119161

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 12:58	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 12:58	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 12:58	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 12:58	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 12:58	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 12:58	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 12:58	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 12:58	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 12:58	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/18/2019 12:58	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 12:58	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 12:58	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 12:58	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 12:58	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 12:58	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 12:58	WG1313581
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 12:58	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 12:58	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 12:58	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 12:58	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 12:58	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 12:58	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 12:58	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 12:58	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 12:58	WG1313581
(S) 4-Bromofluorobenzene	103			77.0-126		07/18/2019 12:58	WG1313581
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/18/2019 12:58	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



ANALYTICAL REPORT

July 24, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

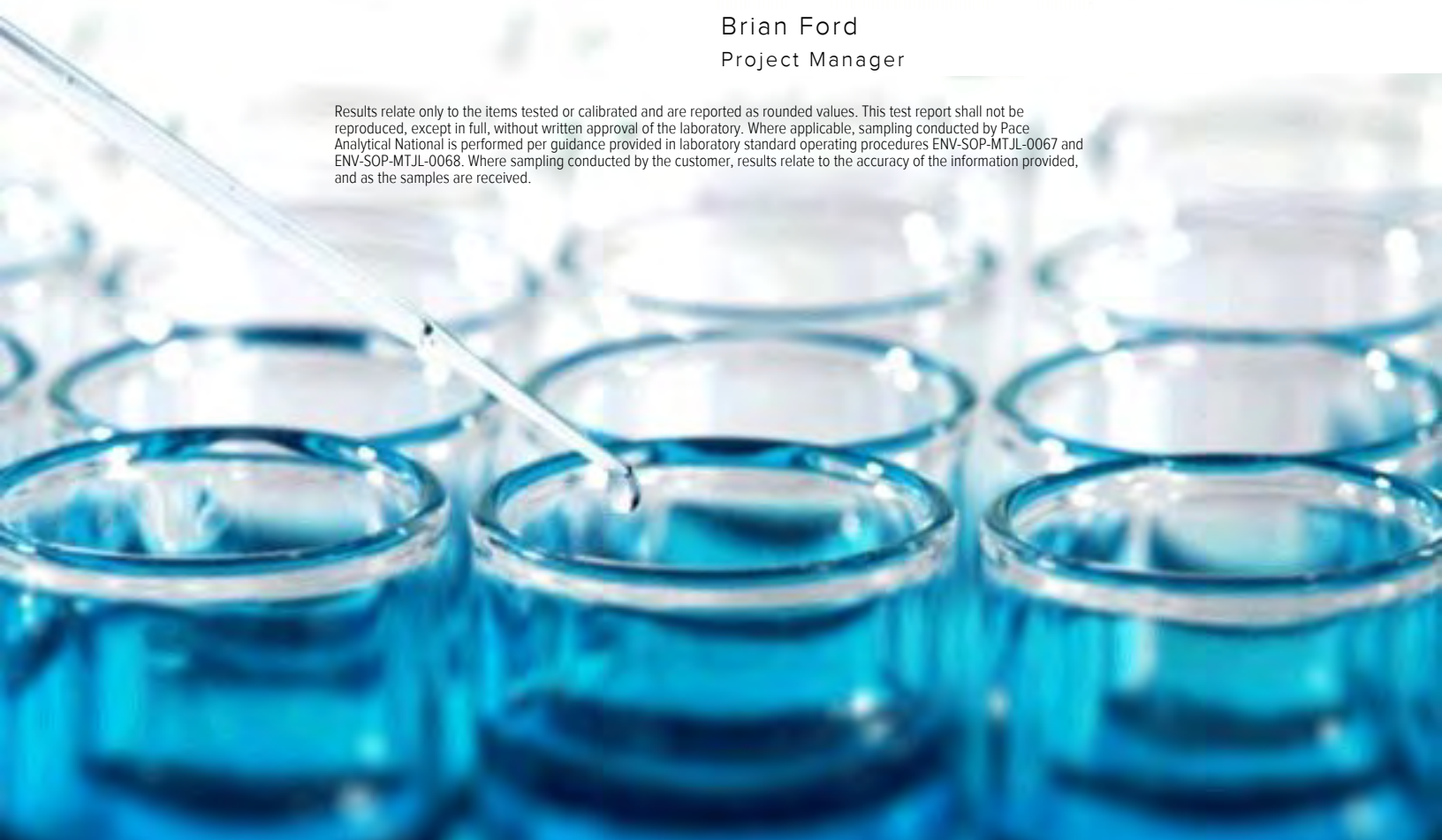
PES Environmental, Inc.- WA

Sample Delivery Group: L1119171
 Samples Received: 07/17/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-110-071519 L119171-01 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by	Ben Hecht		Collected date/time	07/15/19 09:55	Received date/time	07/17/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 15:30	07/18/19 15:30	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	20	07/21/19 00:32	07/21/19 00:32	BMB	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW-111-071519 L119171-02 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by	Ben Hecht		Collected date/time	07/15/19 12:20	Received date/time	07/17/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 15:51	07/18/19 15:51	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/21/19 00:52	07/21/19 00:52	BMB	Mt. Juliet, TN

MW-103-071519 L119171-03 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by	Ben Hecht		Collected date/time	07/15/19 12:45	Received date/time	07/17/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 16:12	07/18/19 16:12	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/21/19 01:11	07/21/19 01:11	BMB	Mt. Juliet, TN

MW-109-071519 L119171-04 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by	Ben Hecht		Collected date/time	07/15/19 13:45	Received date/time	07/17/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 16:34	07/18/19 16:34	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/21/19 01:31	07/21/19 01:31	BMB	Mt. Juliet, TN

MW-154-071519 L119171-05 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by	Ben Hecht		Collected date/time	07/15/19 14:40	Received date/time	07/17/19 08:45
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 18:35	07/18/19 18:35	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 17:52	07/18/19 17:52	BMB	Mt. Juliet, TN

MW-108-071519 L119171-06 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by	Ben Hecht		Collected date/time	07/15/19 14:45	Received date/time	07/17/19 08:45
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 18:14	07/18/19 18:14	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	25	07/21/19 02:10	07/21/19 02:10	BMB	Mt. Juliet, TN

MW-9-071619 L119171-07 GW

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Collected by	Ben Hecht		Collected date/time	07/16/19 08:35	Received date/time	07/17/19 08:45
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 18:57	07/18/19 18:57	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 18:36	07/18/19 18:36	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/21/19 02:29	07/21/19 02:29	BMB	Mt. Juliet, TN



MW-120-071619 L1119171-08 GW

Collected by Ben Hecht
Collected date/time 07/16/19 08:45
Received date/time 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315264	1	07/22/19 13:16	07/22/19 13:16	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1312677	1	07/17/19 20:21	07/17/19 20:21	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1313391	1	07/18/19 13:36	07/18/19 13:36	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1312768	5	07/17/19 14:21	07/17/19 20:48	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 19:19	07/18/19 19:19	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1315671	1	07/23/19 14:08	07/23/19 14:08	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 18:58	07/18/19 18:58	BMB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

R-MW5-071619 L1119171-09 GW

Collected by Ben Hecht
Collected date/time 07/16/19 10:10
Received date/time 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 19:41	07/18/19 19:41	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 19:19	07/18/19 19:19	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314393	1	07/21/19 03:08	07/21/19 03:08	BMB	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

TRIP-071619 L1119171-10 GW

Collected by Ben Hecht
Collected date/time 07/16/19 00:00
Received date/time 07/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 15:59	07/18/19 15:59	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1313581	1	07/18/19 13:20	07/18/19 13:20	BMB	Mt. Juliet, TN

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.38	<u>BJ</u>	1.05	25.0	1	07/18/2019 15:30	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 15:30	WG1313581
Benzene	0.285	<u>J</u>	0.0896	0.500	1	07/18/2019 15:30	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 15:30	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 15:30	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 15:30	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 15:30	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 15:30	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 15:30	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 15:30	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 15:30	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 15:30	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 15:30	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 15:30	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 15:30	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 15:30	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 15:30	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 15:30	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 15:30	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 15:30	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 15:30	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 15:30	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 15:30	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 15:30	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 15:30	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 15:30	WG1313581
1,1-Dichloroethene	8.44		0.188	0.500	1	07/18/2019 15:30	WG1313581
cis-1,2-Dichloroethene	578		1.87	10.0	20	07/21/2019 00:32	WG1314393
trans-1,2-Dichloroethene	5.87		0.152	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 15:30	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 15:30	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 15:30	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 15:30	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 15:30	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 15:30	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 15:30	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 15:30	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 15:30	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 15:30	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 15:30	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 15:30	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 15:30	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 15:30	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 15:30	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 15:30	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 15:30	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 15:30	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 15:30	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 15:30	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 15:30	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 15:30	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 15:30	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 15:30	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/15/19 09:55

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 15:30	WG1313581
Tetrachloroethene	1220		3.98	10.0	20	07/21/2019 00:32	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 15:30	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 15:30	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 15:30	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 15:30	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 15:30	WG1313581
Trichloroethene	455		3.06	10.0	20	07/21/2019 00:32	WG1314393
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 15:30	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 15:30	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 15:30	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 15:30	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 15:30	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 15:30	WG1313581
Vinyl chloride	1.26		0.118	0.500	1	07/18/2019 15:30	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 15:30	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 15:30	WG1313581
(S) Toluene-d8	112			80.0-120		07/21/2019 00:32	WG1314393
(S) 4-Bromofluorobenzene	105			77.0-126		07/18/2019 15:30	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/21/2019 00:32	WG1314393
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/18/2019 15:30	WG1313581
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/21/2019 00:32	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/15/19 12:20

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.55	<u>BJ</u>	1.05	25.0	1	07/18/2019 15:51	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 15:51	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 15:51	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 15:51	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 15:51	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 15:51	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 15:51	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 15:51	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 15:51	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 15:51	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 15:51	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 15:51	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 15:51	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 15:51	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 15:51	WG1313581
Chloroethane	0.275	<u>J</u>	0.141	2.50	1	07/18/2019 15:51	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 15:51	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 15:51	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 15:51	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 15:51	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 15:51	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 15:51	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 15:51	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 15:51	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 15:51	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 15:51	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 15:51	WG1313581
cis-1,2-Dichloroethene	0.596		0.0933	0.500	1	07/21/2019 00:52	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 15:51	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 15:51	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 15:51	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 15:51	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 15:51	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 15:51	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 15:51	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 15:51	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 15:51	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 15:51	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 15:51	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 15:51	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 15:51	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 15:51	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 15:51	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 15:51	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 15:51	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 15:51	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 15:51	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 15:51	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 15:51	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 15:51	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 15:51	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 15:51	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/15/19 12:20

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 15:51	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 00:52	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 15:51	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 15:51	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 15:51	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 15:51	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 15:51	WG1313581
Trichloroethene	U		0.153	0.500	1	07/21/2019 00:52	WG1314393
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 15:51	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 15:51	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 15:51	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 15:51	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 15:51	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 15:51	WG1313581
Vinyl chloride	15.0		0.118	0.500	1	07/18/2019 15:51	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 15:51	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 15:51	WG1313581
(S) Toluene-d8	108			80.0-120		07/21/2019 00:52	WG1314393
(S) 4-Bromofluorobenzene	103			77.0-126		07/18/2019 15:51	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/21/2019 00:52	WG1314393
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/18/2019 15:51	WG1313581
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/21/2019 00:52	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.13	<u>BJ</u>	1.05	25.0	1	07/18/2019 16:12	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 16:12	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 16:12	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 16:12	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 16:12	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 16:12	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 16:12	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 16:12	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 16:12	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 16:12	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 16:12	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 16:12	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 16:12	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 16:12	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 16:12	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 16:12	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 16:12	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 16:12	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 16:12	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 16:12	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 16:12	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 16:12	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 16:12	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 16:12	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 16:12	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 16:12	WG1313581
1,1-Dichloroethene	1.36		0.188	0.500	1	07/18/2019 16:12	WG1313581
cis-1,2-Dichloroethene	118		0.0933	0.500	1	07/18/2019 16:12	WG1313581
trans-1,2-Dichloroethene	0.232	<u>J</u>	0.152	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 16:12	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 16:12	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 16:12	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 16:12	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 16:12	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 16:12	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 16:12	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 16:12	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 16:12	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 16:12	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 16:12	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 16:12	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 16:12	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 16:12	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 16:12	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 16:12	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 16:12	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 16:12	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 16:12	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 16:12	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 16:12	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 16:12	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 16:12	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 16:12	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/15/19 12:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 16:12	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 01:11	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 16:12	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 16:12	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 16:12	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 16:12	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 16:12	WG1313581
Trichloroethene	2.37		0.153	0.500	1	07/21/2019 01:11	WG1314393
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 16:12	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 16:12	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 16:12	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 16:12	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 16:12	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 16:12	WG1313581
Vinyl chloride	55.4		0.118	0.500	1	07/18/2019 16:12	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 16:12	WG1313581
(S) Toluene-d8	107			80.0-120		07/18/2019 16:12	WG1313581
(S) Toluene-d8	111			80.0-120		07/21/2019 01:11	WG1314393
(S) 4-Bromofluorobenzene	104			77.0-126		07/18/2019 16:12	WG1313581
(S) 4-Bromofluorobenzene	105			77.0-126		07/21/2019 01:11	WG1314393
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/18/2019 16:12	WG1313581
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/21/2019 01:11	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.78	<u>BJ</u>	1.05	25.0	1	07/18/2019 16:34	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 16:34	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 16:34	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 16:34	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 16:34	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 16:34	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 16:34	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 16:34	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 16:34	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 16:34	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 16:34	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 16:34	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 16:34	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 16:34	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 16:34	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 16:34	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 16:34	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 16:34	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 16:34	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 16:34	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 16:34	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 16:34	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 16:34	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 16:34	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 16:34	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 16:34	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 16:34	WG1313581
cis-1,2-Dichloroethene	30.8		0.0933	0.500	1	07/18/2019 16:34	WG1313581
trans-1,2-Dichloroethene	0.199	<u>J</u>	0.152	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 16:34	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 16:34	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 16:34	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 16:34	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 16:34	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 16:34	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 16:34	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 16:34	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 16:34	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 16:34	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 16:34	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 16:34	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 16:34	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 16:34	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 16:34	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 16:34	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 16:34	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 16:34	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 16:34	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 16:34	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 16:34	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 16:34	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 16:34	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 16:34	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/15/19 13:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 16:34	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 01:31	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 16:34	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 16:34	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 16:34	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 16:34	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 16:34	WG1313581
Trichloroethene	0.265	<u>J</u>	0.153	0.500	1	07/21/2019 01:31	WG1314393
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 16:34	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 16:34	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 16:34	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 16:34	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 16:34	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 16:34	WG1313581
Vinyl chloride	24.4		0.118	0.500	1	07/18/2019 16:34	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 16:34	WG1313581
(S) Toluene-d8	110			80.0-120		07/18/2019 16:34	WG1313581
(S) Toluene-d8	114			80.0-120		07/21/2019 01:31	WG1314393
(S) 4-Bromofluorobenzene	107			77.0-126		07/18/2019 16:34	WG1313581
(S) 4-Bromofluorobenzene	104			77.0-126		07/21/2019 01:31	WG1314393
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/18/2019 16:34	WG1313581
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/21/2019 01:31	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/15/19 14:40

L1119171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	68.0	<u>B</u> <u>J</u>	31.6	100	1	07/18/2019 18:35	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 18:35	WG1313748

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.42	<u>B</u> <u>J</u>	1.05	25.0	1	07/18/2019 17:52	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 17:52	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 17:52	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 17:52	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 17:52	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 17:52	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 17:52	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 17:52	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 17:52	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 17:52	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 17:52	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 17:52	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 17:52	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 17:52	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 17:52	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 17:52	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 17:52	WG1313581
Chloromethane	0.161	<u>J</u>	0.153	1.25	1	07/18/2019 17:52	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 17:52	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 17:52	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 17:52	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 17:52	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 17:52	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 17:52	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 17:52	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 17:52	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 17:52	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 17:52	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 17:52	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 17:52	WG1313581
cis-1,2-Dichloroethene	2.55		0.0933	0.500	1	07/18/2019 17:52	WG1313581
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 17:52	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 17:52	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 17:52	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 17:52	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 17:52	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 17:52	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 17:52	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 17:52	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 17:52	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 17:52	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 17:52	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 17:52	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 17:52	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 17:52	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 17:52	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 17:52	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 17:52	WG1313581

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/15/19 14:40

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 17:52	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 17:52	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 17:52	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 17:52	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 17:52	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 17:52	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 17:52	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 17:52	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 17:52	WG1313581
Tetrachloroethene	69.5		0.199	0.500	1	07/18/2019 17:52	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 17:52	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 17:52	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 17:52	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 17:52	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 17:52	WG1313581
Trichloroethene	5.75		0.153	0.500	1	07/18/2019 17:52	WG1313581
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 17:52	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 17:52	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 17:52	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 17:52	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 17:52	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 17:52	WG1313581
Vinyl chloride	0.211	<u>J</u>	0.118	0.500	1	07/18/2019 17:52	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 17:52	WG1313581
(S) Toluene-d8	105			80.0-120		07/18/2019 17:52	WG1313581
(S) 4-Bromofluorobenzene	101			77.0-126		07/18/2019 17:52	WG1313581
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/18/2019 17:52	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.90	<u>BJ</u>	1.05	25.0	1	07/18/2019 18:14	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 18:14	WG1313581
Benzene	2.90		0.0896	0.500	1	07/18/2019 18:14	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 18:14	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 18:14	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 18:14	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 18:14	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 18:14	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 18:14	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 18:14	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 18:14	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 18:14	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 18:14	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 18:14	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 18:14	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 18:14	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 18:14	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 18:14	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 18:14	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 18:14	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 18:14	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 18:14	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 18:14	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 18:14	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 18:14	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 18:14	WG1313581
1,1-Dichloroethene	4.09		0.188	0.500	1	07/18/2019 18:14	WG1313581
cis-1,2-Dichloroethene	918		2.33	12.5	25	07/21/2019 02:10	WG1314393
trans-1,2-Dichloroethene	3.48		0.152	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 18:14	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 18:14	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 18:14	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 18:14	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 18:14	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 18:14	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 18:14	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 18:14	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 18:14	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 18:14	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 18:14	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 18:14	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 18:14	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 18:14	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 18:14	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 18:14	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 18:14	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 18:14	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 18:14	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 18:14	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 18:14	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 18:14	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 18:14	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 18:14	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/15/19 14:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 18:14	WG1313581
Tetrachloroethene	567		4.98	12.5	25	07/21/2019 02:10	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 18:14	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 18:14	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 18:14	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 18:14	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 18:14	WG1313581
Trichloroethene	189		0.153	0.500	1	07/18/2019 18:14	WG1313581
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 18:14	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 18:14	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 18:14	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 18:14	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 18:14	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 18:14	WG1313581
Vinyl chloride	197		0.118	0.500	1	07/18/2019 18:14	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 18:14	WG1313581
(S) Toluene-d8	109			80.0-120		07/18/2019 18:14	WG1313581
(S) Toluene-d8	116			80.0-120		07/21/2019 02:10	WG1314393
(S) 4-Bromofluorobenzene	104			77.0-126		07/18/2019 18:14	WG1313581
(S) 4-Bromofluorobenzene	100			77.0-126		07/21/2019 02:10	WG1314393
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/18/2019 18:14	WG1313581
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/21/2019 02:10	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/16/19 08:35

L1119171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	57.4	<u>B</u>	31.6	100	1	07/18/2019 18:57	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 18:57	WG1313748

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.40	<u>B</u>	1.05	25.0	1	07/18/2019 18:36	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 18:36	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 18:36	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 18:36	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 18:36	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 18:36	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 18:36	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 18:36	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 18:36	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 18:36	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 18:36	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 18:36	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 18:36	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 18:36	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 18:36	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 18:36	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 18:36	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 18:36	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 18:36	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 18:36	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 18:36	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 18:36	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 18:36	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 18:36	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 18:36	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 18:36	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 18:36	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/21/2019 02:29	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 18:36	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 18:36	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 18:36	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 18:36	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 18:36	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 18:36	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 18:36	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 18:36	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 18:36	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 18:36	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 18:36	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 18:36	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 18:36	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 18:36	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 18:36	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 18:36	WG1313581

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 08:35

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 18:36	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 18:36	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 18:36	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 18:36	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 18:36	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 18:36	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 18:36	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 18:36	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 18:36	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 02:29	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 18:36	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 18:36	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 18:36	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 18:36	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 18:36	WG1313581
Trichloroethene	U		0.153	0.500	1	07/21/2019 02:29	WG1314393
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 18:36	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 18:36	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 18:36	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 18:36	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 18:36	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 18:36	WG1313581
Vinyl chloride	0.619		0.118	0.500	1	07/18/2019 18:36	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 18:36	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 18:36	WG1313581
(S) Toluene-d8	109			80.0-120		07/21/2019 02:29	WG1314393
(S) 4-Bromofluorobenzene	105			77.0-126		07/18/2019 18:36	WG1313581
(S) 4-Bromofluorobenzene	99.9			77.0-126		07/21/2019 02:29	WG1314393
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/18/2019 18:36	WG1313581
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/21/2019 02:29	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	211000		2710	20000	1	07/22/2019 13:16	WG1315264

Sample Narrative:

L1119171-08 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	19900		51.9	1000	1	07/17/2019 20:21	WG1312677
Nitrate	1760		22.7	100	1	07/17/2019 20:21	WG1312677
Sulfate	67100		77.4	5000	1	07/17/2019 20:21	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1700		102	1000	1	07/18/2019 13:36	WG1313391

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2850		75.0	500	5	07/17/2019 20:48	WG1312768
Manganese	391		1.25	25.0	5	07/17/2019 20:48	WG1312768

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	152	<u>B</u>	31.6	100	1	07/18/2019 19:19	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		07/18/2019 19:19	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	72.4		0.287	0.678	1	07/23/2019 14:08	WG1315671
Ethane	U		0.296	1.29	1	07/23/2019 14:08	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 14:08	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.01	<u>B, J</u>	1.05	25.0	1	07/18/2019 18:58	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 18:58	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 18:58	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 18:58	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 18:58	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 18:58	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 18:58	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 18:58	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 18:58	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 18:58	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 18:58	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 18:58	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 18:58	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 08:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/18/2019 18:58	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 18:58	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 18:58	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 18:58	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 18:58	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 18:58	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 18:58	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 18:58	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 18:58	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 18:58	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 18:58	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 18:58	WG1313581
1,1-Dichloroethane	1.43		0.114	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dichloroethane	0.271	U	0.108	0.500	1	07/18/2019 18:58	WG1313581
1,1-Dichloroethene	0.738		0.188	0.500	1	07/18/2019 18:58	WG1313581
cis-1,2-Dichloroethene	74.9		0.0933	0.500	1	07/18/2019 18:58	WG1313581
trans-1,2-Dichloroethene	0.217	U	0.152	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dichloropropane	0.746		0.190	0.500	1	07/18/2019 18:58	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 18:58	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 18:58	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 18:58	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 18:58	WG1313581
trans-1,4-Dichloro-2-butene	U	UO	0.257	5.00	1	07/18/2019 18:58	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 18:58	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 18:58	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 18:58	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 18:58	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 18:58	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 18:58	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 18:58	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 18:58	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 18:58	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 18:58	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 18:58	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 18:58	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 18:58	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 18:58	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 18:58	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 18:58	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 18:58	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 18:58	WG1313581
1,1,2-Trichlorotrifluoroethane	0.631		0.164	0.500	1	07/18/2019 18:58	WG1313581
Tetrachloroethene	134		0.199	0.500	1	07/18/2019 18:58	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 18:58	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 18:58	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 18:58	WG1313581
1,1,1-Trichloroethane	0.302	U	0.0940	0.500	1	07/18/2019 18:58	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 18:58	WG1313581
Trichloroethene	40.1		0.153	0.500	1	07/18/2019 18:58	WG1313581
Trichlorofluoromethane	U	UO	0.130	2.50	1	07/18/2019 18:58	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 18:58	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 18:58	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 18:58	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 18:58	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 08:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/18/2019 18:58	WG1313581
Vinyl chloride	1.01		0.118	0.500	1	07/18/2019 18:58	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 18:58	WG1313581
<i>(S) Toluene-d8</i>	110			80.0-120		07/18/2019 18:58	WG1313581
<i>(S) 4-Bromofluorobenzene</i>	104			77.0-126		07/18/2019 18:58	WG1313581
<i>(S) 1,2-Dichloroethane-d4</i>	107			70.0-130		07/18/2019 18:58	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 10:10

L1119171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/18/2019 19:41	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 19:41	WG1313748

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.65	<u>B J</u>	1.05	25.0	1	07/18/2019 19:19	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 19:19	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 19:19	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 19:19	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 19:19	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 19:19	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 19:19	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 19:19	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 19:19	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 19:19	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 19:19	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 19:19	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 19:19	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 19:19	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 19:19	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 19:19	WG1313581
Chloroform	0.152	<u>J</u>	0.0860	0.500	1	07/18/2019 19:19	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 19:19	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 19:19	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 19:19	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 19:19	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 19:19	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 19:19	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 19:19	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 19:19	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 19:19	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 19:19	WG1313581
cis-1,2-Dichloroethene	0.131	<u>J</u>	0.0933	0.500	1	07/21/2019 03:08	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 19:19	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 19:19	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 19:19	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 19:19	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 19:19	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 19:19	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 19:19	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 19:19	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 19:19	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 19:19	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 19:19	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 19:19	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 19:19	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 19:19	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 19:19	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 19:19	WG1313581



Collected date/time: 07/16/19 10:10

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 19:19	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 19:19	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 19:19	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 19:19	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 19:19	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 19:19	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 19:19	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 19:19	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 19:19	WG1313581
Tetrachloroethene	0.736		0.199	0.500	1	07/21/2019 03:08	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 19:19	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 19:19	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 19:19	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 19:19	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 19:19	WG1313581
Trichloroethene	U		0.153	0.500	1	07/21/2019 03:08	WG1314393
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 19:19	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 19:19	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 19:19	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 19:19	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 19:19	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 19:19	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 19:19	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 19:19	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 19:19	WG1313581
(S) Toluene-d8	112			80.0-120		07/21/2019 03:08	WG1314393
(S) 4-Bromofluorobenzene	101			77.0-126		07/18/2019 19:19	WG1313581
(S) 4-Bromofluorobenzene	105			77.0-126		07/21/2019 03:08	WG1314393
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 19:19	WG1313581
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/21/2019 03:08	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/16/19 00:00

L1119171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/18/2019 15:59	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		07/18/2019 15:59	WG1313748

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/18/2019 13:20	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 13:20	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 13:20	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 13:20	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 13:20	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 13:20	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 13:20	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 13:20	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 13:20	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 13:20	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 13:20	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 13:20	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 13:20	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 13:20	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 13:20	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 13:20	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 13:20	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 13:20	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 13:20	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 13:20	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 13:20	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 13:20	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 13:20	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 13:20	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 13:20	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 13:20	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 13:20	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/18/2019 13:20	WG1313581
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 13:20	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 13:20	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 13:20	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 13:20	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 13:20	WG1313581
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/18/2019 13:20	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 13:20	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 13:20	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 13:20	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 13:20	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 13:20	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 13:20	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 13:20	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 13:20	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 13:20	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 13:20	WG1313581

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/16/19 00:00

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 13:20	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 13:20	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 13:20	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 13:20	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 13:20	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 13:20	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 13:20	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 13:20	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 13:20	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/18/2019 13:20	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 13:20	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 13:20	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 13:20	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 13:20	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 13:20	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 13:20	WG1313581
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/18/2019 13:20	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 13:20	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 13:20	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 13:20	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 13:20	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 13:20	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 13:20	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 13:20	WG1313581
(S) Toluene-d8	110			80.0-120		07/18/2019 13:20	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/18/2019 13:20	WG1313581
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 13:20	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3433012-1 07/22/19 11:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	3000	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L119200-01 Original Sample (OS) • Duplicate (DUP)

(OS) L119200-01 07/22/19 12:47 • (DUP) R3433012-2 07/22/19 12:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	1650000	1660000	1	0.247		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1120696-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120696-01 07/22/19 14:36 • (DUP) R3433012-4 07/22/19 14:43

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	82700	82100	1	0.740		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3433012-3 07/22/19 13:02

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	107000	107	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3431615-1 07/17/19 09:06

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	289	J	51.9	1000
Nitrate	U		22.7	100
Sulfate	312	J	77.4	5000

L119086-02 Original Sample (OS) • Duplicate (DUP)

(OS) L119086-02 07/17/19 11:20 • (DUP) R3431615-3 07/17/19 11:37

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	10600	10600	1	0.0839		15
Nitrate	3110	3080	1	0.785		15

L119086-02 Original Sample (OS) • Duplicate (DUP)

(OS) L119086-02 07/17/19 11:53 • (DUP) R3431615-4 07/17/19 12:09

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Sulfate	197000	196000	5	0.215		15

L119171-08 Original Sample (OS) • Duplicate (DUP)

(OS) L119171-08 07/17/19 20:21 • (DUP) R3431615-7 07/17/19 20:38

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	19900	19800	1	0.325		15
Nitrate	1760	1760	1	0.0341		15
Sulfate	67100	66900	1	0.218		15

Laboratory Control Sample (LCS)

(LCS) R3431615-2 07/17/19 09:23

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39400	98.6	80.0-120	
Nitrate	8000	8140	102	80.0-120	
Sulfate	40000	39100	97.9	80.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.05.601

SDG:

L119171

DATE/TIME:

07/24/19 15:12

PAGE:

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L119086-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution %	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	33600	84200	84100	101	101	1	80.0-120	E	E	0.0534	15
Nitrate	5000	6710	11300	11300	91.6	91.6	1	80.0-120	E	E	0.0106	15
Sulfate	50000	347000	382000	382000	68.5	69.0	1	80.0-120	E	E	0.0655	15

L119171-08 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution %	Rec. Limits %	MS Qualifier
Chloride	50000	19900	71600	103	1	80.0-120	E
Nitrate	5000	1760	7060	106	1	80.0-120	E
Sulfate	50000	67100	118000	102	1	80.0-120	E

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3432168-1 07/18/19 11:39	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	117	<u>1</u>	102	1000

L119384-01 Original Sample (OS) • Duplicate (DUP)

(OS) L119384-01 07/18/19 13:07 • (DUP) R3432168-3 07/18/19 13:23	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	5510	5610	1	1.87		20

L119442-01 Original Sample (OS) • Duplicate (DUP)

(OS) L119442-01 07/18/19 20:27 • (DUP) R3432168-8 07/18/19 20:42	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	4430	4220	1	4.78		20

Laboratory Control Sample (LCS)

(LCS) R3432168-2 07/18/19 12:10	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	76900	103	85.0-115	

L119244-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L119244-12 07/18/19 17:08 • (MS) R3432168-4 07/18/19 17:24 • (MSD) R3432168-5 07/18/19 17:51	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	1480	51800	52800	101	103	1	80.0-120			2.07	20

L119365-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L119365-01 07/18/19 19:28 • (MS) R3432168-6 07/18/19 19:54 • (MSD) R3432168-7 07/18/19 20:13	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	33700	83800	84300	100	101	1	80.0-120			0.536	20

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Iron	U		15.0 ug/l	100 ug/l
Manganese	U		0.250 ug/l	5.00 ug/l

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS R3431693-2 07/17/19 19:16 • (LCSD) R3431693-3 07/17/19 19:20		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier		LCSD Qualifier	
	Spike Amount	LCS Result				LCSD Result	%	RPD	%
Iron	5000 ug/l	5380 ug/l	5360 ug/l	108 %	107 %	80.0-120 %	0.239 %	20 %	
Manganese	50.0 ug/l	52.3 ug/l	50.7 ug/l	105 %	101 %	80.0-120 %	3.16 %	20 %	

L119171-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS L119171-08 07/17/19 19:23 • (MS) R3431693-5 07/17/19 19:29 • (MSD) R3431693-6 07/17/19 19:33		MS Rec.	MSD Rec.	Dilution	MS Qualifier		MSD Qualifier	
	Spike Amount	Original Result				MS Result	%	RPD	%
Iron	5000 ug/l	2840 ug/l	8050 ug/l	8620 ug/l	1	75.0-125 %	6.83 %	20 %	
Manganese	50.0 ug/l	384 ug/l	440 ug/l	435 ug/l	1	75.0-125 %	1.28 %	20 %	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method NWTPHGX

[L1119171-05.07.08.09.10](#)

Method Blank (MB)

	(MB) R3432675-1 07/18/19 12:27										
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL							
Gasoline Range Organics-NWTPH	36.8	J	316	100							
^(S) a,a-o-Trifluorotoluene(FID)	104			78.0-120							

Laboratory Control Sample (LCS)

	(LCS) R3432675-2 07/18/19 14:44										
Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier						
Gasoline Range Organics-NWTPH	5500	5660	103	70.0-124							
^(S) a,a-o-Trifluorotoluene(FID)			106	78.0-120							

L1119004-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1119004-03 07/18/19 16:21 • (MS) R3432675-3 07/18/19 22:17 • (MSD) R3432675-4 07/18/19 23:29											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	46.6	3100	3280	55.4	58.9	1	10.0-155			5.93	21
^(S) a,a-o-Trifluorotoluene(FID)					103	103		78.0-120				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R343363-1 07/23/19 12:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L119205-01 Original Sample (OS) • Duplicate (DUP)

(OS) L119205-01 07/23/19 13:07 • (DUP) R343363-2 07/23/19 13:55

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Methane	ND	0.000	1	0.000				20
Ethane	ND	0.000	1	0.000				20
Ethene	ND	0.000	1	0.000				20

L119221-04 Original Sample (OS) • Duplicate (DUP)

(OS) L119221-04 07/23/19 14:19 • (DUP) R343363-3 07/23/19 14:43

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%	%	%	
Methane	2920	2950	1	0.951				20
Ethane	U	0.000	1	0.000				20
Ethene	U	0.000	1	0.000				20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R343363-4 07/23/19 14:48 • (LCSD) R343363-5 07/23/19 14:52

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%
Methane	67.8	71.8	73.5	106	108	85.0-115	2.35	20										
Ethane	129	118	119	91.1	92.3	85.0-115	1.27	20										
Ethene	127	118	118	92.6	92.7	85.0-115	0.118	20										

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3432355-3 07/18/19 11:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	1.34	J	1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
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4 Cn
5 Sr
6 Qc
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PES Environmental, Inc.- WA

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Method Blank (MB)

(MB) R3432355-3 07/18/19 11:05

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.263	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	109			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432355-1 07/18/19 09:04 • (LCSD) R3432355-2 07/18/19 09:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	135	133	108	107	19.0-160			103	27
Acrylonitrile	125	137	138	110	111	55.0-149			108	20
Benzene	25.0	24.0	24.1	96.0	96.5	70.0-123			0.454	20
Bromobenzene	25.0	23.3	23.3	93.2	93.1	73.0-121			0.148	20
Bromodichloromethane	25.0	25.5	25.2	102	101	75.0-120			1.36	20
Bromochloromethane	25.0	26.0	25.4	104	102	76.0-122			2.29	20
Bromoform	25.0	23.4	24.1	93.4	96.3	68.0-132			3.08	20
n-Butylbenzene	25.0	26.6	26.8	106	107	73.0-125			0.918	20
sec-Butylbenzene	25.0	25.7	26.2	103	105	75.0-125			2.24	20
tert-Butylbenzene	25.0	25.6	25.6	102	103	76.0-124			0.0882	20
Carbon disulfide	25.0	24.4	24.3	97.4	97.0	61.0-128			0.411	20
Carbon tetrachloride	25.0	26.5	28.4	106	114	68.0-126			6.90	20
Chlorobenzene	25.0	25.4	25.7	101	103	80.0-121			1.41	20
Chlorodibromomethane	25.0	26.4	26.9	106	108	77.0-125			1.87	20
Chloroethane	25.0	23.8	24.0	95.1	96.1	47.0-150			1.07	20
Chloroform	25.0	24.1	23.8	96.3	95.3	73.0-120			1.05	20
Chloromethane	25.0	23.1	22.7	92.4	90.9	41.0-142			1.64	20
2-Chlorotoluene	25.0	24.6	24.4	98.5	97.6	76.0-123			0.890	20
4-Chlorotoluene	25.0	25.4	24.5	101	97.8	75.0-122			3.62	20
1,2-Dibromo-3-Chloropropane	25.0	25.6	25.9	102	104	58.0-134			1.27	20
1,2-Dibromoethane	25.0	26.0	27.1	104	108	80.0-122			4.10	20
Dibromomethane	25.0	26.0	26.3	104	105	80.0-120			0.939	20
1,2-Dichlorobenzene	25.0	24.5	24.8	98.1	99.3	79.0-121			1.27	20
1,3-Dichlorobenzene	25.0	25.3	25.2	101	101	79.0-120			0.288	20
1,4-Dichlorobenzene	25.0	24.7	24.5	98.6	98.1	79.0-120			0.525	20
Dichlorodifluoromethane	25.0	24.4	23.8	97.6	95.4	51.0-149			2.34	20
1,1-Dichloroethane	25.0	25.5	25.0	102	99.8	70.0-126			2.13	20
1,2-Dichloroethane	25.0	25.1	25.0	101	99.9	70.0-128			0.617	20
1,1-Dichloroethene	25.0	25.3	25.6	101	102	71.0-124			0.989	20
cis-1,2-Dichloroethene	25.0	24.5	24.5	97.8	97.9	73.0-120			0.117	20
trans-1,2-Dichloroethene	25.0	24.5	25.3	97.9	101	73.0-120			3.20	20
1,2-Dichloropropane	25.0	25.5	25.2	102	101	77.0-125			1.44	20
1,1-Dichloropropene	25.0	25.5	24.7	102	98.6	74.0-126			3.56	20
1,3-Dichloropropene	25.0	25.6	25.6	102	103	80.0-120			0.304	20
cis-1,3-Dichloropropene	25.0	26.5	26.4	106	105	80.0-123			0.411	20
trans-1,3-Dichloropropene	25.0	26.1	26.6	105	107	78.0-124			1.88	20
trans-1,4-Dichloro-2-butene	25.0	18.9	19.4	75.6	77.6	33.0-144			2.58	20
2,2-Dichloropropane	25.0	25.3	26.0	101	104	58.0-130			2.42	20
Diisopropyl ether	25.0	25.0	25.2	99.9	101	58.0-138			0.986	20

Public Review Draft

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3432355-1 07/18/19 09:04 • (LCSD) R3432355-2 07/18/19 09:48

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	24.6	25.3	98.3	101	79.0-123			3.04	20
Hexachloro-1,3-butadiene	25.0	24.9	25.7	99.6	103	54.0-138			3.12	20
2-Hexanone	125	137	138	109	111	67.0-149			1.31	20
n-Hexane	25.0	27.4	27.9	109	111	57.0-133			1.77	20
Iodomethane	125	121	120	97.0	96.1	33.0-147			0.880	26
Isopropylbenzene	25.0	25.2	26.3	101	105	76.0-127			4.22	20
p-Isopropyltoluene	25.0	26.4	26.6	106	106	76.0-125			0.627	20
2-Butanone (MEK)	125	134	133	107	106	44.0-160			0.335	20
Methylene Chloride	25.0	25.1	24.7	100	98.8	67.0-120			1.51	20
4-Methyl-2-pentanone (MIBK)	125	127	130	102	104	68.0-142			2.15	20
Methyl tert-butyl ether	25.0	25.5	25.4	102	102	68.0-125			0.0121	20
Naphthalene	25.0	25.8	26.8	103	107	54.0-135			3.92	20
n-Propylbenzene	25.0	25.0	25.0	100	99.9	77.0-124			0.299	20
Styrene	25.0	26.7	27.0	107	108	73.0-130			1.15	20
1,1,1,2-Tetrachloroethane	25.0	26.1	27.1	104	108	75.0-125			3.69	20
1,1,2,2-Tetrachloroethane	25.0	26.7	26.6	107	106	65.0-130			0.380	20
1,1,2-Trichlorotrifluoroethane	25.0	22.9	23.0	91.4	91.9	69.0-132			0.498	20
Tetrachloroethene	25.0	25.3	25.3	101	101	72.0-132			0.180	20
Toluene	25.0	24.1	24.4	96.4	97.5	79.0-120			1.09	20
1,2,3-Trichlorobenzene	25.0	25.2	25.2	101	101	50.0-138			0.101	20
1,2,4-Trichlorobenzene	25.0	26.2	26.1	105	105	57.0-137			0.128	20
1,1,1-Trichloroethane	25.0	25.3	25.0	101	100	73.0-124			1.02	20
1,1,2-Trichloroethane	25.0	26.3	27.0	105	108	80.0-120			2.93	20
Trichloroethene	25.0	23.6	23.4	94.4	93.8	78.0-124			0.621	20
Trichlorofluoromethane	25.0	19.0	19.5	76.1	78.2	59.0-147			2.71	20
1,2,3-Trichloropropane	25.0	25.5	25.8	102	103	73.0-130			1.19	20
1,2,4-Trimethylbenzene	25.0	24.8	25.1	99.2	101	76.0-121			1.40	20
1,2,3-Trimethylbenzene	25.0	24.8	24.9	99.1	99.5	77.0-120			0.404	20
1,3,5-Trimethylbenzene	25.0	24.2	24.1	96.6	96.4	76.0-122			0.243	20
Vinyl acetate	125	148	143	119	114	11.0-160			3.81	20
Vinyl chloride	25.0	25.3	25.2	101	101	67.0-131			0.218	20
Xylenes, Total	75.0	73.2	75.4	97.6	101	79.0-123			2.96	20
(S) Toluene-d8				107	109	80.0-120				
(S) 4-Bromofluorobenzene				103	106	77.0-126				
(S) 1,2-Dichloroethane-d4				105	105	70.0-130				

Public Review Draft

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6 Qc
7 Gl
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9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

[L1119171-01.02.03.04.06.07.09](#)

Method Blank (MB)

(MB) R3433434-2 07/20/19 21:20

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	111			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	108			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3433434-1 07/20/19 20:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	24.1	96.6	73.0-120	
Tetrachloroethene	25.0	27.8	111	72.0-132	
Trichloroethene	25.0	25.1	100	78.0-124	
(S) Toluene-d8			107	80.0-120	
(S) 4-Bromofluorobenzene			103	77.0-126	
(S) 1,2-Dichloroethane-d4			106	70.0-130	

Public Review Draft

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
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Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

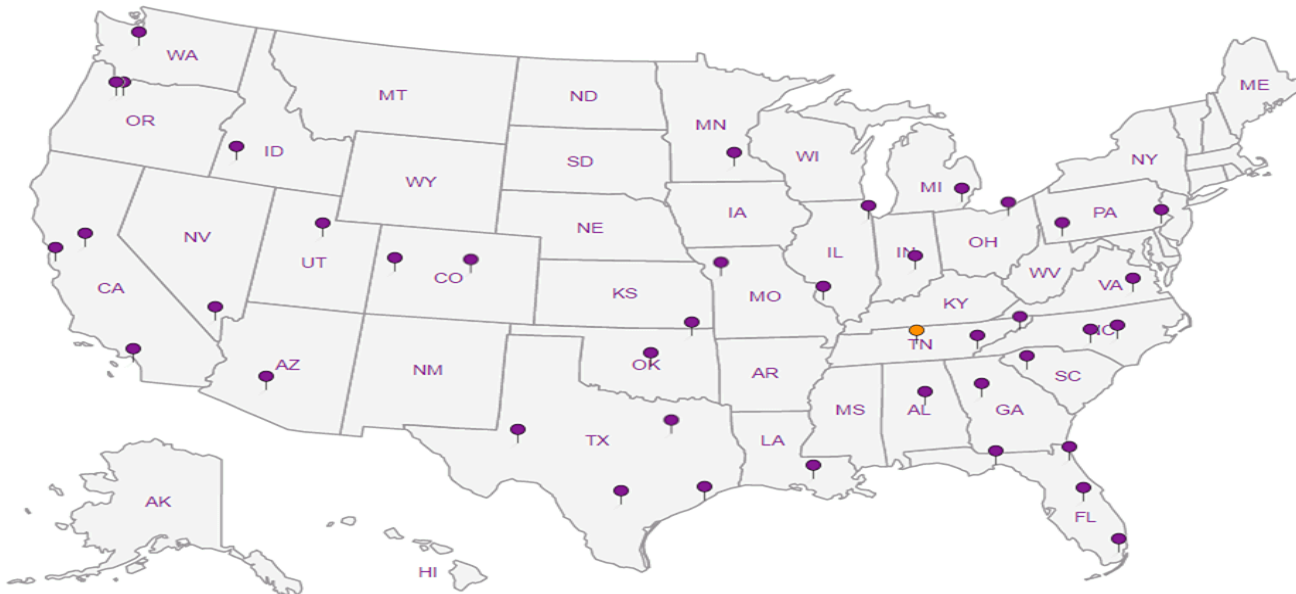
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com
bhaldeman@pesenv.com; KSPRINS@PESENV.COM

Project: **American Lin**

City/State Collected: **Seattle, WA**

Phone: **206-529-3980**
Fax: **206-529-3985**

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

Collected by (print):
Ben Hecht

Site/Facility ID #
American Lin

Collected by (signature):
[Signature]

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on ice N Y

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

No. of Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cntrs

NO3,Cl, SO4 125mlHDPE-NoPres

Alkalinity 125mlHDPE-NoPres

EEM RSK175LL 40mlAmb-HCl

NWTPHGX 40mlAmb HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

VOCs 8260LLC 40mlAmb-HCl

GRO **SH 7/16/19**

Billing Information:

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L # **A184**
419171

Actnum: **PESENVSWA**

Template: **T152679**

Prelogin: **P718645**

TSR: **110 - Brian Ford**

PB: **9-5-19 ES**

Shipped Via: **FedEx Ground**

Remarks Sample # (lab only)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	Cntrs	No. of Cntrs	*NO3,Cl, SO4* 125mlHDPE-NoPres	Alkalinity 125mlHDPE-NoPres	EEM RSK175LL 40mlAmb-HCl	NWTPHGX 40mlAmb HCl	TOC 250mlAmb-HCl	Total Fe Mn 6020 250mlHDPE-HNO3	VOCs 8260LLC 40mlAmb-HCl	Condition
MW-110-071519	GMB	GW	40	7/15/19	0955	3									-01
MW-111-071519		GW	75		1220	3									-02
MW103-071519		GW	1085		1245	3									-03
MW109-071519		GW	40		1345	3									-04
MW-154-071519		GW	30		1440	8									-05
MW108-071519		GW	45		1445	3									-06
MW-9-071619	Grab	GW	18.5	7/16/19	0835	6									-07
MW120-071619		GW	45		845	12									-08
R-MW5-071619		GW	27		1010	6									-09
TRIP-071619		GW		7/15/19		1									-10

Remarks: *Nitrate has a 48 hour holding time.

Tier 2 Lab QA/QC

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Biossay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS FedEx Courier

Tracking #

Received by: (Signature)

Trip Blank Received: **1 (GL/MeOH)**

Sample Receipt Checklist
COC Seal Present/Intact: NP Y
COC Signed/Accurate: NP Y
Bottles arrive intact: NP Y
Correct bottles used: NP Y
Sufficient volume sent: NP Y
If Applicable
VOA Zero Headspace: Y N
Preservation Correct/Checked: Y N

Relinquished by: (Signature)

Date:

Time:

Received by: (Signature)

Temp: **15.5°C** Bottles Received: **1 (GL/MeOH)**

Temp: **43-44.2** **45 + TB**

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date: **7/17** Time: **8:45**

Condition: **OK**

Received by: (Signature)

Date: **7/17** Time: **8:45**

Condition: **OK**



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.38	U B J	1.05	25.0	1	07/18/2019 15:30	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 15:30	WG1313581
Benzene	0.285	J J	0.0896	0.500	1	07/18/2019 15:30	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 15:30	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 15:30	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 15:30	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 15:30	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 15:30	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 15:30	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 15:30	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 15:30	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 15:30	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 15:30	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 15:30	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 15:30	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 15:30	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 15:30	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 15:30	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 15:30	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 15:30	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 15:30	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 15:30	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 15:30	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 15:30	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 15:30	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 15:30	WG1313581
1,1-Dichloroethene	8.44		0.188	0.500	1	07/18/2019 15:30	WG1313581
cis-1,2-Dichloroethene	578		1.87	10.0	20	07/21/2019 00:32	WG1314393
trans-1,2-Dichloroethene	5.87		0.152	0.500	1	07/18/2019 15:30	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 15:30	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 15:30	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 15:30	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 15:30	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 15:30	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 15:30	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 15:30	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 15:30	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 15:30	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 15:30	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 15:30	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 15:30	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 15:30	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 15:30	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 15:30	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 15:30	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 15:30	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 15:30	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 15:30	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 15:30	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 15:30	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 15:30	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 15:30	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 15:30	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Collected date/time: 07/15/19 09:55

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 15:30	WG1313581
Tetrachloroethene	1220		3.98	10.0	20	07/21/2019 00:32	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 15:30	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 15:30	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 15:30	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 15:30	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 15:30	WG1313581
Trichloroethene	455		3.06	10.0	20	07/21/2019 00:32	WG1314393
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 15:30	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 15:30	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 15:30	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 15:30	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 15:30	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 15:30	WG1313581
Vinyl chloride	1.26		0.118	0.500	1	07/18/2019 15:30	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 15:30	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 15:30	WG1313581
(S) Toluene-d8	112			80.0-120		07/21/2019 00:32	WG1314393
(S) 4-Bromofluorobenzene	105			77.0-126		07/18/2019 15:30	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/21/2019 00:32	WG1314393
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/18/2019 15:30	WG1313581
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/21/2019 00:32	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.55	U B J	1.05	25.0	1	07/18/2019 15:51	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 15:51	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 15:51	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 15:51	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 15:51	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 15:51	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 15:51	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 15:51	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 15:51	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 15:51	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 15:51	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 15:51	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 15:51	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 15:51	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 15:51	WG1313581
Chloroethane	0.275	J J	0.141	2.50	1	07/18/2019 15:51	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 15:51	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 15:51	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 15:51	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 15:51	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 15:51	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 15:51	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 15:51	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 15:51	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 15:51	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 15:51	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 15:51	WG1313581
cis-1,2-Dichloroethene	0.596		0.0933	0.500	1	07/21/2019 00:52	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 15:51	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 15:51	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 15:51	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 15:51	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 15:51	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 15:51	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 15:51	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 15:51	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 15:51	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 15:51	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 15:51	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 15:51	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 15:51	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 15:51	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 15:51	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 15:51	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 15:51	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 15:51	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 15:51	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 15:51	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 15:51	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 15:51	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 15:51	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 15:51	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 15:51	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
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JC 8/5/19



Collected date/time: 07/15/19 12:20

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 15:51	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 00:52	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 15:51	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 15:51	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 15:51	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 15:51	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 15:51	WG1313581
Trichloroethene	U		0.153	0.500	1	07/21/2019 00:52	WG1314393
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 15:51	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 15:51	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 15:51	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 15:51	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 15:51	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 15:51	WG1313581
Vinyl chloride	15.0		0.118	0.500	1	07/18/2019 15:51	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 15:51	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 15:51	WG1313581
(S) Toluene-d8	108			80.0-120		07/21/2019 00:52	WG1314393
(S) 4-Bromofluorobenzene	103			77.0-126		07/18/2019 15:51	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/21/2019 00:52	WG1314393
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/18/2019 15:51	WG1313581
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/21/2019 00:52	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
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JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.13	U B J	1.05	25.0	1	07/18/2019 16:12	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 16:12	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 16:12	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 16:12	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 16:12	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 16:12	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 16:12	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 16:12	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 16:12	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 16:12	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 16:12	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 16:12	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 16:12	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 16:12	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 16:12	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 16:12	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 16:12	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 16:12	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 16:12	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 16:12	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 16:12	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 16:12	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 16:12	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 16:12	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 16:12	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 16:12	WG1313581
1,1-Dichloroethene	1.36		0.188	0.500	1	07/18/2019 16:12	WG1313581
cis-1,2-Dichloroethene	118		0.0933	0.500	1	07/18/2019 16:12	WG1313581
trans-1,2-Dichloroethene	0.232	J J	0.152	0.500	1	07/18/2019 16:12	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 16:12	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 16:12	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 16:12	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 16:12	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 16:12	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 16:12	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 16:12	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 16:12	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 16:12	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 16:12	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 16:12	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 16:12	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 16:12	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 16:12	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 16:12	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 16:12	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 16:12	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 16:12	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 16:12	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 16:12	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 16:12	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 16:12	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 16:12	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 16:12	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Collected date/time: 07/15/19 12:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 16:12	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 01:11	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 16:12	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 16:12	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 16:12	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 16:12	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 16:12	WG1313581
Trichloroethene	2.37		0.153	0.500	1	07/21/2019 01:11	WG1314393
Trichlorofluoromethane	U	UJ <u>JO</u>	0.130	2.50	1	07/18/2019 16:12	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 16:12	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 16:12	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 16:12	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 16:12	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 16:12	WG1313581
Vinyl chloride	55.4		0.118	0.500	1	07/18/2019 16:12	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 16:12	WG1313581
(S) Toluene-d8	107			80.0-120		07/18/2019 16:12	WG1313581
(S) Toluene-d8	111			80.0-120		07/21/2019 01:11	WG1314393
(S) 4-Bromofluorobenzene	104			77.0-126		07/18/2019 16:12	WG1313581
(S) 4-Bromofluorobenzene	105			77.0-126		07/21/2019 01:11	WG1314393
(S) 1,2-Dichloroethane-d4	110			70.0-130		07/18/2019 16:12	WG1313581
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/21/2019 01:11	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.78	U BJ	1.05	25.0	1	07/18/2019 16:34	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 16:34	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 16:34	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 16:34	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 16:34	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 16:34	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 16:34	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 16:34	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 16:34	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 16:34	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 16:34	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 16:34	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 16:34	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 16:34	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 16:34	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 16:34	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 16:34	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 16:34	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 16:34	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 16:34	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 16:34	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 16:34	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 16:34	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 16:34	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 16:34	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 16:34	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 16:34	WG1313581
cis-1,2-Dichloroethene	30.8		0.0933	0.500	1	07/18/2019 16:34	WG1313581
trans-1,2-Dichloroethene	0.199	J J	0.152	0.500	1	07/18/2019 16:34	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 16:34	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 16:34	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 16:34	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 16:34	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 16:34	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 16:34	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 16:34	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 16:34	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 16:34	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 16:34	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 16:34	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 16:34	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 16:34	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 16:34	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 16:34	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 16:34	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 16:34	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 16:34	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 16:34	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 16:34	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 16:34	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 16:34	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 16:34	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 16:34	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Collected date/time: 07/15/19 13:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 16:34	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 01:31	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 16:34	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 16:34	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 16:34	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 16:34	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 16:34	WG1313581
Trichloroethene	0.265	J J	0.153	0.500	1	07/21/2019 01:31	WG1314393
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 16:34	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 16:34	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 16:34	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 16:34	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 16:34	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 16:34	WG1313581
Vinyl chloride	24.4		0.118	0.500	1	07/18/2019 16:34	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 16:34	WG1313581
(S) Toluene-d8	110			80.0-120		07/18/2019 16:34	WG1313581
(S) Toluene-d8	114			80.0-120		07/21/2019 01:31	WG1314393
(S) 4-Bromofluorobenzene	107			77.0-126		07/18/2019 16:34	WG1313581
(S) 4-Bromofluorobenzene	104			77.0-126		07/21/2019 01:31	WG1314393
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/18/2019 16:34	WG1313581
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/21/2019 01:31	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Collected date/time: 07/15/19 14:40

L1119171

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	68.0	U	B _J	31.6	100	1	07/18/2019 18:35 WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104				78.0-120		07/18/2019 18:35 WG1313748

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	3.42	U	B _J	1.05	25.0	1	07/18/2019 17:52 WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 17:52 WG1313581	
Benzene	U		0.0896	0.500	1	07/18/2019 17:52 WG1313581	
Bromobenzene	U		0.133	0.500	1	07/18/2019 17:52 WG1313581	
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 17:52 WG1313581	
Bromochloromethane	U		0.145	0.500	1	07/18/2019 17:52 WG1313581	
Bromoform	U		0.186	0.500	1	07/18/2019 17:52 WG1313581	
Bromomethane	U		0.157	2.50	1	07/18/2019 17:52 WG1313581	
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 17:52 WG1313581	
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 17:52 WG1313581	
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 17:52 WG1313581	
Carbon disulfide	U		0.101	0.500	1	07/18/2019 17:52 WG1313581	
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 17:52 WG1313581	
Chlorobenzene	U		0.140	0.500	1	07/18/2019 17:52 WG1313581	
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 17:52 WG1313581	
Chloroethane	U		0.141	2.50	1	07/18/2019 17:52 WG1313581	
Chloroform	U		0.0860	0.500	1	07/18/2019 17:52 WG1313581	
Chloromethane	0.161	J	J	0.153	1.25	1	07/18/2019 17:52 WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 17:52 WG1313581	
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 17:52 WG1313581	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 17:52 WG1313581	
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 17:52 WG1313581	
Dibromomethane	U		0.117	0.500	1	07/18/2019 17:52 WG1313581	
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 17:52 WG1313581	
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 17:52 WG1313581	
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 17:52 WG1313581	
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 17:52 WG1313581	
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 17:52 WG1313581	
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 17:52 WG1313581	
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 17:52 WG1313581	
cis-1,2-Dichloroethene	2.55		0.0933	0.500	1	07/18/2019 17:52 WG1313581	
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 17:52 WG1313581	
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 17:52 WG1313581	
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 17:52 WG1313581	
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 17:52 WG1313581	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 17:52 WG1313581	
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 17:52 WG1313581	
trans-1,4-Dichloro-2-butene	U	UJ	J _O	0.257	5.00	1	07/18/2019 17:52 WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 17:52 WG1313581	
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 17:52 WG1313581	
Ethylbenzene	U		0.158	0.500	1	07/18/2019 17:52 WG1313581	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 17:52 WG1313581	
2-Hexanone	U		0.757	5.00	1	07/18/2019 17:52 WG1313581	
n-Hexane	U		0.305	5.00	1	07/18/2019 17:52 WG1313581	
Iodomethane	U		0.377	10.0	1	07/18/2019 17:52 WG1313581	
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 17:52 WG1313581	
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 17:52 WG1313581	
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 17:52 WG1313581	

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/5/19



Collected date/time: 07/15/19 14:40

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 17:52	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 17:52	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 17:52	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 17:52	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 17:52	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 17:52	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 17:52	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 17:52	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 17:52	WG1313581
Tetrachloroethene	69.5		0.199	0.500	1	07/18/2019 17:52	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 17:52	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 17:52	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 17:52	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 17:52	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 17:52	WG1313581
Trichloroethene	5.75		0.153	0.500	1	07/18/2019 17:52	WG1313581
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 17:52	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 17:52	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 17:52	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 17:52	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 17:52	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 17:52	WG1313581
Vinyl chloride	0.211	J U	0.118	0.500	1	07/18/2019 17:52	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 17:52	WG1313581
(S) Toluene-d8	105			80.0-120		07/18/2019 17:52	WG1313581
(S) 4-Bromofluorobenzene	101			77.0-126		07/18/2019 17:52	WG1313581
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/18/2019 17:52	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.90	U BJ	1.05	25.0	1	07/18/2019 18:14	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 18:14	WG1313581
Benzene	2.90		0.0896	0.500	1	07/18/2019 18:14	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 18:14	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 18:14	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 18:14	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 18:14	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 18:14	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 18:14	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 18:14	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 18:14	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 18:14	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 18:14	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 18:14	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 18:14	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 18:14	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 18:14	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 18:14	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 18:14	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 18:14	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 18:14	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 18:14	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 18:14	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 18:14	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 18:14	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 18:14	WG1313581
1,1-Dichloroethene	4.09		0.188	0.500	1	07/18/2019 18:14	WG1313581
cis-1,2-Dichloroethene	918		2.33	12.5	25	07/21/2019 02:10	WG1314393
trans-1,2-Dichloroethene	3.48		0.152	0.500	1	07/18/2019 18:14	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 18:14	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 18:14	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 18:14	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 18:14	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 18:14	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 18:14	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 18:14	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 18:14	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 18:14	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 18:14	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 18:14	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 18:14	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 18:14	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 18:14	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 18:14	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 18:14	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 18:14	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 18:14	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 18:14	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 18:14	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 18:14	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 18:14	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 18:14	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 18:14	WG1313581

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Collected date/time: 07/15/19 14:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 18:14	WG1313581
Tetrachloroethene	567		4.98	12.5	25	07/21/2019 02:10	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 18:14	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 18:14	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 18:14	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 18:14	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 18:14	WG1313581
Trichloroethene	189		0.153	0.500	1	07/18/2019 18:14	WG1313581
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 18:14	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 18:14	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 18:14	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 18:14	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 18:14	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 18:14	WG1313581
Vinyl chloride	197		0.118	0.500	1	07/18/2019 18:14	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 18:14	WG1313581
(S) Toluene-d8	109			80.0-120		07/18/2019 18:14	WG1313581
(S) Toluene-d8	116			80.0-120		07/21/2019 02:10	WG1314393
(S) 4-Bromofluorobenzene	104			77.0-126		07/18/2019 18:14	WG1313581
(S) 4-Bromofluorobenzene	100			77.0-126		07/21/2019 02:10	WG1314393
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/18/2019 18:14	WG1313581
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/21/2019 02:10	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Collected date/time: 07/16/19 08:35

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	57.4	U B _J	31.6	100	1	07/18/2019 18:57	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 18:57	WG1313748

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.40	U B _J	1.05	25.0	1	07/18/2019 18:36	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 18:36	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 18:36	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 18:36	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 18:36	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 18:36	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 18:36	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 18:36	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 18:36	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 18:36	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 18:36	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 18:36	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 18:36	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 18:36	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 18:36	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 18:36	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 18:36	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 18:36	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 18:36	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 18:36	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 18:36	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 18:36	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 18:36	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 18:36	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 18:36	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 18:36	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 18:36	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/21/2019 02:29	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 18:36	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 18:36	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 18:36	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 18:36	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 18:36	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 18:36	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 18:36	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 18:36	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 18:36	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 18:36	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 18:36	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 18:36	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 18:36	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 18:36	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 18:36	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 18:36	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 18:36	WG1313581

JC 8/5/19



Collected date/time: 07/16/19 08:35

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 18:36	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 18:36	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 18:36	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 18:36	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 18:36	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 18:36	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 18:36	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 18:36	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 18:36	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/21/2019 02:29	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 18:36	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 18:36	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 18:36	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 18:36	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 18:36	WG1313581
Trichloroethene	U		0.153	0.500	1	07/21/2019 02:29	WG1314393
Trichlorofluoromethane	U	UJ <u>JO</u>	0.130	2.50	1	07/18/2019 18:36	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 18:36	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 18:36	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 18:36	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 18:36	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 18:36	WG1313581
Vinyl chloride	0.619		0.118	0.500	1	07/18/2019 18:36	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 18:36	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 18:36	WG1313581
(S) Toluene-d8	109			80.0-120		07/21/2019 02:29	WG1314393
(S) 4-Bromofluorobenzene	105			77.0-126		07/18/2019 18:36	WG1313581
(S) 4-Bromofluorobenzene	99.9			77.0-126		07/21/2019 02:29	WG1314393
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/18/2019 18:36	WG1313581
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/21/2019 02:29	WG1314393

- 1 Cp
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JC 8/5/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	211000		2710	20000	1	07/22/2019 13:16	WG1315264

Sample Narrative:

L1119171-08 WG1315264: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	19900		51.9	1000	1	07/17/2019 20:21	WG1312677
Nitrate	1760		22.7	100	1	07/17/2019 20:21	WG1312677
Sulfate	67100		77.4	5000	1	07/17/2019 20:21	WG1312677

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1700		102	1000	1	07/18/2019 13:36	WG1313391

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2850		75.0	500	5	07/17/2019 20:48	WG1312768
Manganese	391		1.25	25.0	5	07/17/2019 20:48	WG1312768

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	152	J+ B	31.6	100	1	07/18/2019 19:19	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		07/18/2019 19:19	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	72.4		0.287	0.678	1	07/23/2019 14:08	WG1315671
Ethane	U		0.296	1.29	1	07/23/2019 14:08	WG1315671
Ethene	U		0.422	1.27	1	07/23/2019 14:08	WG1315671

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.01	U B J	1.05	25.0	1	07/18/2019 18:58	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 18:58	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 18:58	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 18:58	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 18:58	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 18:58	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 18:58	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 18:58	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 18:58	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 18:58	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 18:58	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 18:58	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 18:58	WG1313581

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/5/19



Collected date/time: 07/16/19 08:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/18/2019 18:58	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 18:58	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 18:58	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 18:58	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 18:58	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 18:58	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 18:58	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 18:58	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 18:58	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 18:58	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 18:58	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 18:58	WG1313581
1,1-Dichloroethane	1.43		0.114	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dichloroethane	0.271	J U	0.108	0.500	1	07/18/2019 18:58	WG1313581
1,1-Dichloroethene	0.738		0.188	0.500	1	07/18/2019 18:58	WG1313581
cis-1,2-Dichloroethene	74.9		0.0933	0.500	1	07/18/2019 18:58	WG1313581
trans-1,2-Dichloroethene	0.217	J U	0.152	0.500	1	07/18/2019 18:58	WG1313581
1,2-Dichloropropane	0.746		0.190	0.500	1	07/18/2019 18:58	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 18:58	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 18:58	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 18:58	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 18:58	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 18:58	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 18:58	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 18:58	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 18:58	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 18:58	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 18:58	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 18:58	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 18:58	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 18:58	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 18:58	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 18:58	WG1313581
Methylene Chloride	U		1.07	2.50	1	07/18/2019 18:58	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 18:58	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 18:58	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 18:58	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 18:58	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 18:58	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 18:58	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 18:58	WG1313581
1,1,2-Trichlorotrifluoroethane	0.631		0.164	0.500	1	07/18/2019 18:58	WG1313581
Tetrachloroethene	134		0.199	0.500	1	07/18/2019 18:58	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 18:58	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 18:58	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 18:58	WG1313581
1,1,1-Trichloroethane	0.302	J U	0.0940	0.500	1	07/18/2019 18:58	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 18:58	WG1313581
Trichloroethene	40.1		0.153	0.500	1	07/18/2019 18:58	WG1313581
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 18:58	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 18:58	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 18:58	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 18:58	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 18:58	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/5/19



Collected date/time: 07/16/19 08:45

L1119171

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/18/2019 18:58	WG1313581
Vinyl chloride	1.01		0.118	0.500	1	07/18/2019 18:58	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 18:58	WG1313581
<i>(S) Toluene-d8</i>	110			80.0-120		07/18/2019 18:58	WG1313581
<i>(S) 4-Bromofluorobenzene</i>	104			77.0-126		07/18/2019 18:58	WG1313581
<i>(S) 1,2-Dichloroethane-d4</i>	107			70.0-130		07/18/2019 18:58	WG1313581

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/5/19



Collected date/time: 07/16/19 10:10

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/18/2019 19:41	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 19:41	WG1313748

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.65	U B J	1.05	25.0	1	07/18/2019 19:19	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 19:19	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 19:19	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 19:19	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 19:19	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 19:19	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 19:19	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 19:19	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 19:19	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 19:19	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 19:19	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 19:19	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 19:19	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 19:19	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 19:19	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 19:19	WG1313581
Chloroform	0.152	J J	0.0860	0.500	1	07/18/2019 19:19	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 19:19	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 19:19	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 19:19	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 19:19	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 19:19	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 19:19	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 19:19	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 19:19	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 19:19	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 19:19	WG1313581
cis-1,2-Dichloroethene	0.131	J J	0.0933	0.500	1	07/21/2019 03:08	WG1314393
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 19:19	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 19:19	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 19:19	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 19:19	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 19:19	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 19:19	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/18/2019 19:19	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 19:19	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 19:19	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 19:19	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 19:19	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 19:19	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 19:19	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 19:19	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 19:19	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 19:19	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 19:19	WG1313581

JC 8/5/19



Collected date/time: 07/16/19 10:10

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 19:19	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 19:19	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 19:19	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 19:19	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 19:19	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 19:19	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 19:19	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 19:19	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 19:19	WG1313581
Tetrachloroethene	0.736		0.199	0.500	1	07/21/2019 03:08	WG1314393
Toluene	U		0.412	0.500	1	07/18/2019 19:19	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 19:19	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 19:19	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 19:19	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 19:19	WG1313581
Trichloroethene	U		0.153	0.500	1	07/21/2019 03:08	WG1314393
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 19:19	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 19:19	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 19:19	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 19:19	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 19:19	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 19:19	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 19:19	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 19:19	WG1313581
(S) Toluene-d8	108			80.0-120		07/18/2019 19:19	WG1313581
(S) Toluene-d8	112			80.0-120		07/21/2019 03:08	WG1314393
(S) 4-Bromofluorobenzene	101			77.0-126		07/18/2019 19:19	WG1313581
(S) 4-Bromofluorobenzene	105			77.0-126		07/21/2019 03:08	WG1314393
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 19:19	WG1313581
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/21/2019 03:08	WG1314393

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/5/19



Collected date/time: 07/16/19 00:00

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/18/2019 15:59	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		07/18/2019 15:59	WG1313748

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	07/18/2019 13:20	WG1313581
Acrylonitrile	U		0.873	5.00	1	07/18/2019 13:20	WG1313581
Benzene	U		0.0896	0.500	1	07/18/2019 13:20	WG1313581
Bromobenzene	U		0.133	0.500	1	07/18/2019 13:20	WG1313581
Bromodichloromethane	U		0.0800	0.500	1	07/18/2019 13:20	WG1313581
Bromochloromethane	U		0.145	0.500	1	07/18/2019 13:20	WG1313581
Bromoform	U		0.186	0.500	1	07/18/2019 13:20	WG1313581
Bromomethane	U		0.157	2.50	1	07/18/2019 13:20	WG1313581
n-Butylbenzene	U		0.143	0.500	1	07/18/2019 13:20	WG1313581
sec-Butylbenzene	U		0.134	0.500	1	07/18/2019 13:20	WG1313581
tert-Butylbenzene	U		0.183	0.500	1	07/18/2019 13:20	WG1313581
Carbon disulfide	U		0.101	0.500	1	07/18/2019 13:20	WG1313581
Carbon tetrachloride	U		0.159	0.500	1	07/18/2019 13:20	WG1313581
Chlorobenzene	U		0.140	0.500	1	07/18/2019 13:20	WG1313581
Chlorodibromomethane	U		0.128	0.500	1	07/18/2019 13:20	WG1313581
Chloroethane	U		0.141	2.50	1	07/18/2019 13:20	WG1313581
Chloroform	U		0.0860	0.500	1	07/18/2019 13:20	WG1313581
Chloromethane	U		0.153	1.25	1	07/18/2019 13:20	WG1313581
2-Chlorotoluene	U		0.111	0.500	1	07/18/2019 13:20	WG1313581
4-Chlorotoluene	U		0.0972	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/18/2019 13:20	WG1313581
1,2-Dibromoethane	U		0.193	0.500	1	07/18/2019 13:20	WG1313581
Dibromomethane	U		0.117	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dichlorobenzene	U		0.101	0.500	1	07/18/2019 13:20	WG1313581
1,3-Dichlorobenzene	U		0.130	0.500	1	07/18/2019 13:20	WG1313581
1,4-Dichlorobenzene	U		0.121	0.500	1	07/18/2019 13:20	WG1313581
Dichlorodifluoromethane	U		0.127	2.50	1	07/18/2019 13:20	WG1313581
1,1-Dichloroethane	U		0.114	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dichloroethane	U		0.108	0.500	1	07/18/2019 13:20	WG1313581
1,1-Dichloroethene	U		0.188	0.500	1	07/18/2019 13:20	WG1313581
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/18/2019 13:20	WG1313581
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/18/2019 13:20	WG1313581
1,2-Dichloropropane	U		0.190	0.500	1	07/18/2019 13:20	WG1313581
1,1-Dichloropropene	U		0.128	0.500	1	07/18/2019 13:20	WG1313581
1,3-Dichloropropane	U		0.147	1.00	1	07/18/2019 13:20	WG1313581
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/18/2019 13:20	WG1313581
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/18/2019 13:20	WG1313581
trans-1,4-Dichloro-2-butene	U	UJ <u>JO</u>	0.257	5.00	1	07/18/2019 13:20	WG1313581
2,2-Dichloropropane	U		0.0929	0.500	1	07/18/2019 13:20	WG1313581
Di-isopropyl ether	U		0.0924	0.500	1	07/18/2019 13:20	WG1313581
Ethylbenzene	U		0.158	0.500	1	07/18/2019 13:20	WG1313581
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/18/2019 13:20	WG1313581
2-Hexanone	U		0.757	5.00	1	07/18/2019 13:20	WG1313581
n-Hexane	U		0.305	5.00	1	07/18/2019 13:20	WG1313581
Iodomethane	U		0.377	10.0	1	07/18/2019 13:20	WG1313581
Isopropylbenzene	U		0.126	0.500	1	07/18/2019 13:20	WG1313581
p-Isopropyltoluene	U		0.138	0.500	1	07/18/2019 13:20	WG1313581
2-Butanone (MEK)	U		1.28	5.00	1	07/18/2019 13:20	WG1313581

JC 8/5/19



Collected date/time: 07/16/19 00:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/18/2019 13:20	WG1313581
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/18/2019 13:20	WG1313581
Methyl tert-butyl ether	U		0.102	0.500	1	07/18/2019 13:20	WG1313581
Naphthalene	U		0.174	2.50	1	07/18/2019 13:20	WG1313581
n-Propylbenzene	U		0.162	0.500	1	07/18/2019 13:20	WG1313581
Styrene	U		0.117	0.500	1	07/18/2019 13:20	WG1313581
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/18/2019 13:20	WG1313581
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/18/2019 13:20	WG1313581
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/18/2019 13:20	WG1313581
Tetrachloroethene	U		0.199	0.500	1	07/18/2019 13:20	WG1313581
Toluene	U		0.412	0.500	1	07/18/2019 13:20	WG1313581
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/18/2019 13:20	WG1313581
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/18/2019 13:20	WG1313581
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/18/2019 13:20	WG1313581
1,1,2-Trichloroethane	U		0.186	0.500	1	07/18/2019 13:20	WG1313581
Trichloroethene	U		0.153	0.500	1	07/18/2019 13:20	WG1313581
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/18/2019 13:20	WG1313581
1,2,3-Trichloropropane	U		0.247	2.50	1	07/18/2019 13:20	WG1313581
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/18/2019 13:20	WG1313581
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/18/2019 13:20	WG1313581
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/18/2019 13:20	WG1313581
Vinyl acetate	U		0.645	5.00	1	07/18/2019 13:20	WG1313581
Vinyl chloride	U		0.118	0.500	1	07/18/2019 13:20	WG1313581
Xylenes, Total	U		0.316	1.50	1	07/18/2019 13:20	WG1313581
(S) Toluene-d8	110			80.0-120		07/18/2019 13:20	WG1313581
(S) 4-Bromofluorobenzene	102			77.0-126		07/18/2019 13:20	WG1313581
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/18/2019 13:20	WG1313581

- 1 Cp
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JC 8/5/19



ANALYTICAL REPORT

July 25, 2019

- 1 Cp
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- 7 Gl
- 8 Al
- 9 Sc

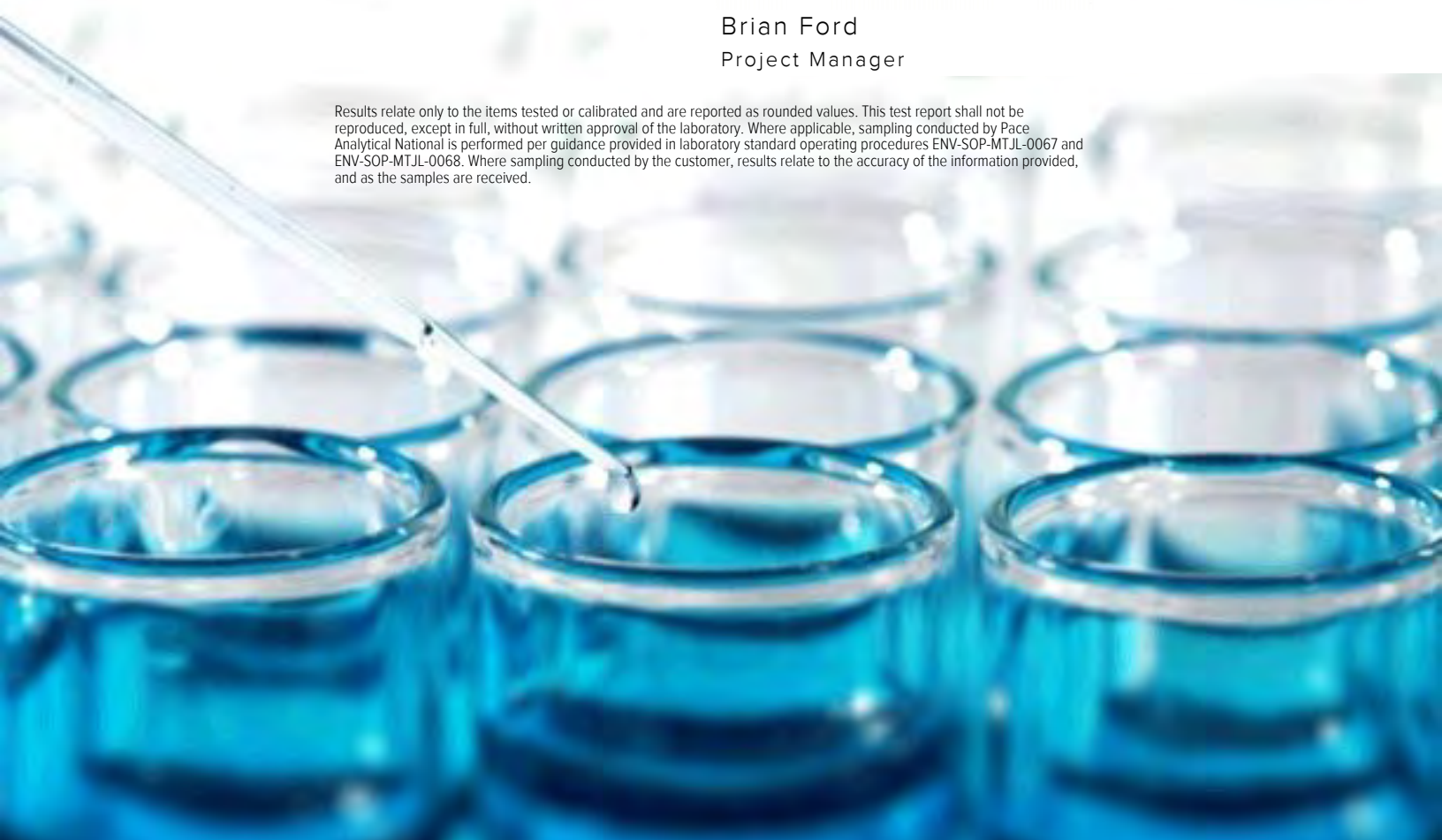
PES Environmental, Inc.- WA

Sample Delivery Group: L1119726
 Samples Received: 07/18/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW116-071719 L1119726-01 GW

Collected by Ben Hecht
Collected date/time 07/17/19 10:15
Received date/time 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 13:06	07/20/19 13:06	BMB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW113-071719 L1119726-02 GW

Collected by Ben Hecht
Collected date/time 07/17/19 10:20
Received date/time 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315387	1	07/23/19 21:05	07/23/19 21:05	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1313370	1	07/18/19 13:19	07/18/19 13:19	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1313370	5	07/18/19 13:35	07/18/19 13:35	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1314078	1	07/19/19 12:56	07/19/19 12:56	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313694	1	07/18/19 14:34	07/18/19 19:27	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 21:09	07/18/19 21:09	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316403	1	07/24/19 13:37	07/24/19 13:37	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 13:27	07/20/19 13:27	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	100	07/24/19 22:33	07/24/19 22:33	ACG	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW115-071719 L1119726-03 GW

Collected by Ben Hecht
Collected date/time 07/17/19 11:35
Received date/time 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 13:47	07/20/19 13:47	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	1	07/24/19 19:53	07/24/19 19:53	ACG	Mt. Juliet, TN

MW105-071719 L1119726-04 GW

Collected by Ben Hecht
Collected date/time 07/17/19 13:45
Received date/time 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315387	1	07/23/19 21:12	07/23/19 21:12	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1313370	1	07/18/19 13:51	07/18/19 13:51	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1314078	1	07/19/19 14:15	07/19/19 14:15	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313694	2	07/18/19 14:34	07/18/19 20:05	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313694	5	07/18/19 14:34	07/18/19 20:09	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 21:32	07/18/19 21:32	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316403	1	07/24/19 13:43	07/24/19 13:43	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 14:08	07/20/19 14:08	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	1	07/24/19 20:14	07/24/19 20:14	ACG	Mt. Juliet, TN

BB-8-071719 L1119726-05 GW

Collected by Ben Hecht
Collected date/time 07/17/19 13:55
Received date/time 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315387	1	07/23/19 21:19	07/23/19 21:19	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1313370	1	07/18/19 14:57	07/18/19 14:57	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1314078	1	07/19/19 14:30	07/19/19 14:30	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1313694	1	07/18/19 14:34	07/18/19 19:36	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1313748	1	07/18/19 21:54	07/18/19 21:54	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316403	1	07/24/19 13:45	07/24/19 13:45	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 14:28	07/20/19 14:28	BMB	Mt. Juliet, TN



TRIP BLANK-071719 L1119726-06 GW

Collected by: Ben Hecht
 Collected date/time: 07/17/19 16:00
 Received date/time: 07/18/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 14:10	07/24/19 14:10	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 12:05	07/20/19 12:05	BMB	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.28	J JO	1.05	25.0	1	07/20/2019 13:06	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 13:06	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 13:06	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 13:06	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 13:06	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 13:06	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 13:06	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 13:06	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 13:06	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 13:06	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 13:06	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 13:06	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 13:06	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 13:06	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 13:06	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 13:06	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 13:06	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 13:06	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 13:06	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 13:06	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 13:06	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 13:06	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 13:06	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 13:06	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 13:06	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 13:06	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 13:06	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 13:06	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 13:06	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 13:06	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 13:06	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 13:06	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 13:06	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 13:06	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 13:06	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 13:06	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 13:06	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 13:06	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 13:06	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 13:06	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 13:06	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 13:06	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 13:06	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 13:06	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 13:06	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 13:06	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 13:06	WG1314770
Naphthalene	U	JO	0.174	2.50	1	07/20/2019 13:06	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 13:06	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 13:06	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 13:06	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 13:06	WG1314770

1 Cp

2 Tc

3 Ss

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Collected date/time: 07/17/19 10:15

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 13:06	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 13:06	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 13:06	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 13:06	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 13:06	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 13:06	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 13:06	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 13:06	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 13:06	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 13:06	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 13:06	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 13:06	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 13:06	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 13:06	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 13:06	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 13:06	WG1314770
(S) Toluene-d8	98.9			80.0-120		07/20/2019 13:06	WG1314770
(S) 4-Bromofluorobenzene	91.0			77.0-126		07/20/2019 13:06	WG1314770
(S) 1,2-Dichloroethane-d4	97.7			70.0-130		07/20/2019 13:06	WG1314770

- 1 Cp
- 2 Tc
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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	139000		2710	20000	1	07/23/2019 21:05	WG1315387

Sample Narrative:

L1119726-02 WG1315387: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	152000		260	5000	5	07/18/2019 13:35	WG1313370
Nitrate	992		22.7	100	1	07/18/2019 13:19	WG1313370
Sulfate	15100		77.4	5000	1	07/18/2019 13:19	WG1313370

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2380		102	1000	1	07/19/2019 12:56	WG1314078

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	786		15.0	100	1	07/18/2019 19:27	WG1313694
Manganese	79.9		0.250	5.00	1	07/18/2019 19:27	WG1313694

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2560		31.6	100	1	07/18/2019 21:09	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 21:09	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1130		0.287	0.678	1	07/24/2019 13:37	WG1316403
Ethane	9.87		0.296	1.29	1	07/24/2019 13:37	WG1316403
Ethene	27.2		0.422	1.27	1	07/24/2019 13:37	WG1316403

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.54	J JO	1.05	25.0	1	07/20/2019 13:27	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 13:27	WG1314770
Benzene	0.172	J	0.0896	0.500	1	07/20/2019 13:27	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 13:27	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 13:27	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 13:27	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 13:27	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 13:27	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 13:27	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 13:27	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 13:27	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 13:27	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 13:27	WG1314770

1 Cp

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5 Sr

6 Qc

7 Gl

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9 Sc



Collected date/time: 07/17/19 10:20

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 13:27	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 13:27	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 13:27	WG1314770
Chloroform	0.226	J	0.0860	0.500	1	07/20/2019 13:27	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 13:27	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 13:27	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 13:27	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 13:27	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 13:27	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 13:27	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 13:27	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 13:27	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 13:27	WG1314770
1,1-Dichloroethene	3.40		0.188	0.500	1	07/20/2019 13:27	WG1314770
cis-1,2-Dichloroethene	4940		9.33	50.0	100	07/24/2019 22:33	WG1316884
trans-1,2-Dichloroethene	13.1		0.152	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 13:27	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 13:27	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 13:27	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 13:27	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 13:27	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 13:27	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 13:27	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 13:27	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 13:27	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 13:27	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 13:27	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 13:27	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 13:27	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 13:27	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 13:27	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 13:27	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 13:27	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 13:27	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 13:27	WG1314770
Naphthalene	U	JO	0.174	2.50	1	07/20/2019 13:27	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 13:27	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 13:27	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 13:27	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 13:27	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 13:27	WG1314770
Tetrachloroethene	3.14		0.199	0.500	1	07/20/2019 13:27	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 13:27	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 13:27	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 13:27	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 13:27	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 13:27	WG1314770
Trichloroethene	20.4		0.153	0.500	1	07/20/2019 13:27	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 13:27	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 13:27	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 13:27	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 13:27	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 13:27	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/17/19 10:20

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 13:27	WG1314770
Vinyl chloride	103		0.118	0.500	1	07/20/2019 13:27	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 13:27	WG1314770
(S) Toluene-d8	99.7			80.0-120		07/20/2019 13:27	WG1314770
(S) Toluene-d8	106			80.0-120		07/24/2019 22:33	WG1316884
(S) 4-Bromofluorobenzene	92.4			77.0-126		07/20/2019 13:27	WG1314770
(S) 4-Bromofluorobenzene	100			77.0-126		07/24/2019 22:33	WG1316884
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		07/20/2019 13:27	WG1314770
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/24/2019 22:33	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.55	J JO	1.05	25.0	1	07/20/2019 13:47	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 13:47	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 13:47	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 13:47	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 13:47	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 13:47	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 13:47	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 13:47	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 13:47	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 13:47	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 13:47	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 13:47	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 13:47	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 13:47	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 13:47	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 13:47	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 13:47	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 13:47	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 13:47	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 13:47	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 13:47	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 13:47	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 13:47	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 13:47	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 13:47	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 13:47	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 13:47	WG1314770
cis-1,2-Dichloroethene	0.787		0.0933	0.500	1	07/24/2019 19:53	WG1316884
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 13:47	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 13:47	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 13:47	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 13:47	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 13:47	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 13:47	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 13:47	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 13:47	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 13:47	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 13:47	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 13:47	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 13:47	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 13:47	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 13:47	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 13:47	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 13:47	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 13:47	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 13:47	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 13:47	WG1314770
Naphthalene	U	JO	0.174	2.50	1	07/20/2019 13:47	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 13:47	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 13:47	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 13:47	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 13:47	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/17/19 11:35

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 13:47	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 13:47	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 13:47	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 13:47	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 13:47	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 13:47	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 13:47	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 13:47	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 13:47	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 13:47	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 13:47	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 13:47	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 13:47	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 13:47	WG1314770
Vinyl chloride	24.3		0.118	0.500	1	07/20/2019 13:47	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 13:47	WG1314770
(S) Toluene-d8	99.6			80.0-120		07/20/2019 13:47	WG1314770
(S) Toluene-d8	107			80.0-120		07/24/2019 19:53	WG1316884
(S) 4-Bromofluorobenzene	89.4			77.0-126		07/20/2019 13:47	WG1314770
(S) 4-Bromofluorobenzene	100			77.0-126		07/24/2019 19:53	WG1316884
(S) 1,2-Dichloroethane-d4	100			70.0-130		07/20/2019 13:47	WG1314770
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/24/2019 19:53	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	314000		2710	20000	1	07/23/2019 21:12	WG1315387

Sample Narrative:

L1119726-04 WG1315387: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	34900		51.9	1000	1	07/18/2019 13:51	WG1313370
Nitrate	U		22.7	100	1	07/18/2019 13:51	WG1313370
Sulfate	7660		77.4	5000	1	07/18/2019 13:51	WG1313370

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3380		102	1000	1	07/19/2019 14:15	WG1314078

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2290		30.0	200	2	07/18/2019 20:05	WG1313694
Manganese	945		1.25	25.0	5	07/18/2019 20:09	WG1313694

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	37.8	<u>B</u>	31.6	100	1	07/18/2019 21:32	WG1313748
^(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 21:32	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1830		0.287	0.678	1	07/24/2019 13:43	WG1316403
Ethane	U		0.296	1.29	1	07/24/2019 13:43	WG1316403
Ethene	U		0.422	1.27	1	07/24/2019 13:43	WG1316403

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.18	<u>J</u>	1.05	25.0	1	07/20/2019 14:08	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 14:08	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 14:08	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 14:08	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 14:08	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 14:08	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 14:08	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 14:08	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 14:08	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 14:08	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 14:08	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 14:08	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 14:08	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/17/19 13:45

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 14:08	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 14:08	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 14:08	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 14:08	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 14:08	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 14:08	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 14:08	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 14:08	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 14:08	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 14:08	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 14:08	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 14:08	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 14:08	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 14:08	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 14:08	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 14:08	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 14:08	WG1314770
cis-1,2-Dichloroethene	0.891		0.0933	0.500	1	07/24/2019 20:14	WG1316884
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 14:08	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 14:08	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 14:08	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 14:08	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 14:08	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 14:08	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 14:08	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 14:08	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 14:08	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 14:08	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 14:08	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 14:08	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 14:08	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 14:08	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 14:08	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 14:08	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 14:08	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 14:08	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 14:08	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 14:08	WG1314770
Naphthalene	U	JO	0.174	2.50	1	07/20/2019 14:08	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 14:08	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 14:08	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 14:08	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 14:08	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 14:08	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 14:08	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 14:08	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 14:08	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 14:08	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 14:08	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 14:08	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 14:08	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 14:08	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 14:08	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 14:08	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 14:08	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 14:08	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/17/19 13:45

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 14:08	WG1314770
Vinyl chloride	0.265	↓	0.118	0.500	1	07/20/2019 14:08	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 14:08	WG1314770
(S) Toluene-d8	96.8			80.0-120		07/20/2019 14:08	WG1314770
(S) Toluene-d8	108			80.0-120		07/24/2019 20:14	WG1316884
(S) 4-Bromofluorobenzene	90.7			77.0-126		07/20/2019 14:08	WG1314770
(S) 4-Bromofluorobenzene	102			77.0-126		07/24/2019 20:14	WG1316884
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/20/2019 14:08	WG1314770
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/24/2019 20:14	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	240000		2710	20000	1	07/23/2019 21:19	WG1315387

Sample Narrative:

L1119726-05 WG1315387: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10400		51.9	1000	1	07/18/2019 14:57	WG1313370
Nitrate	1940		22.7	100	1	07/18/2019 14:57	WG1313370
Sulfate	59000		77.4	5000	1	07/18/2019 14:57	WG1313370

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4360		102	1000	1	07/19/2019 14:30	WG1314078

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	691		15.0	100	1	07/18/2019 19:36	WG1313694
Manganese	97.9		0.250	5.00	1	07/18/2019 19:36	WG1313694

Volatile Organic Compounds (GC) by Method NWTPHGX

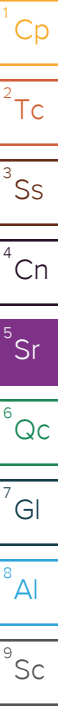
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	112	<u>B</u>	31.6	100	1	07/18/2019 21:54	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 21:54	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	62.2		0.287	0.678	1	07/24/2019 13:45	WG1316403
Ethane	U		0.296	1.29	1	07/24/2019 13:45	WG1316403
Ethene	U		0.422	1.27	1	07/24/2019 13:45	WG1316403

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.06	<u>J JO</u>	1.05	25.0	1	07/20/2019 14:28	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 14:28	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 14:28	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 14:28	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 14:28	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 14:28	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 14:28	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 14:28	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 14:28	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 14:28	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 14:28	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 14:28	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 14:28	WG1314770





Collected date/time: 07/17/19 13:55

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 14:28	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 14:28	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 14:28	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 14:28	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 14:28	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 14:28	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 14:28	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 14:28	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 14:28	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 14:28	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 14:28	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 14:28	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 14:28	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 14:28	WG1314770
cis-1,2-Dichloroethene	19.3		0.0933	0.500	1	07/20/2019 14:28	WG1314770
trans-1,2-Dichloroethene	0.262	<u>J</u>	0.152	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 14:28	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 14:28	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 14:28	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 14:28	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 14:28	WG1314770
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/20/2019 14:28	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 14:28	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 14:28	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 14:28	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 14:28	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 14:28	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 14:28	WG1314770
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/20/2019 14:28	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 14:28	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 14:28	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 14:28	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 14:28	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 14:28	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 14:28	WG1314770
Naphthalene	U	<u>JO</u>	0.174	2.50	1	07/20/2019 14:28	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 14:28	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 14:28	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 14:28	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 14:28	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 14:28	WG1314770
Tetrachloroethene	169		0.199	0.500	1	07/20/2019 14:28	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 14:28	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 14:28	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 14:28	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 14:28	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 14:28	WG1314770
Trichloroethene	28.9		0.153	0.500	1	07/20/2019 14:28	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 14:28	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 14:28	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 14:28	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 14:28	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 14:28	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/17/19 13:55

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 14:28	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 14:28	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 14:28	WG1314770
<i>(S) Toluene-d8</i>	101			80.0-120		07/20/2019 14:28	WG1314770
<i>(S) 4-Bromofluorobenzene</i>	92.8			77.0-126		07/20/2019 14:28	WG1314770
<i>(S) 1,2-Dichloroethane-d4</i>	98.7			70.0-130		07/20/2019 14:28	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/17/19 16:00

L1119726

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 14:10	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 14:10	WG1316734

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 12:05	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 12:05	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 12:05	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 12:05	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 12:05	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 12:05	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 12:05	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 12:05	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 12:05	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 12:05	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 12:05	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 12:05	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 12:05	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 12:05	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 12:05	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 12:05	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 12:05	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 12:05	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 12:05	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 12:05	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 12:05	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 12:05	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 12:05	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 12:05	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 12:05	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 12:05	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 12:05	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 12:05	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 12:05	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 12:05	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 12:05	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 12:05	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 12:05	WG1314770
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/20/2019 12:05	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 12:05	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 12:05	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 12:05	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 12:05	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 12:05	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 12:05	WG1314770
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/20/2019 12:05	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 12:05	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 12:05	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 12:05	WG1314770

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/17/19 16:00

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 12:05	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 12:05	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 12:05	WG1314770
Naphthalene	U	<u>JO</u>	0.174	2.50	1	07/20/2019 12:05	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 12:05	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 12:05	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 12:05	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 12:05	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 12:05	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 12:05	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 12:05	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 12:05	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 12:05	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 12:05	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 12:05	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 12:05	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 12:05	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 12:05	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 12:05	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 12:05	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 12:05	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 12:05	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 12:05	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 12:05	WG1314770
(S) Toluene-d8	98.1			80.0-120		07/20/2019 12:05	WG1314770
(S) 4-Bromofluorobenzene	94.1			77.0-126		07/20/2019 12:05	WG1314770
(S) 1,2-Dichloroethane-d4	99.4			70.0-130		07/20/2019 12:05	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3433515-1 07/23/19 18:45

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	2900	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1119486-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1119486-03 07/23/19 19:00 • (DUP) R3433515-2 07/23/19 19:08

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	86200	86300	1	0.0807		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

L1118670-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1118670-03 07/23/19 21:44 • (DUP) R3433515-4 07/23/19 21:52

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	127000	125000	1	1.43		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3433515-3 07/23/19 20:02

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	99900	99.9	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3432132-1 07/18/19 08:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	294	J	519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L119726-04 Original Sample (OS) • Duplicate (DUP)

(OS) L119726-04 07/18/19 13:51 • (DUP) R3432132-3 07/18/19 14:41

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	34900	34700	1	0.505		15
Nitrate	U	0.000	1	0.000		15
Sulfate	7660	7640	1	0.209		15

L119782-08 Original Sample (OS) • Duplicate (DUP)

(OS) L119782-08 07/18/19 21:47 • (DUP) R3432132-6 07/18/19 22:04

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	65500	65300	1	0.337		15
Nitrate	1710	1700	1	0.458		15
Sulfate	92600	92400	1	0.153		15

Laboratory Control Sample (LCS)

(LCS) R3432132-2 07/18/19 08:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39400	98.5	80.0-120	
Nitrate	8000	8140	102	80.0-120	
Sulfate	40000	39100	97.7	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L119726-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	10400	61600	61600	103	103	1	80.0-120	1	1	0.0367	15
Nitrate	5000	1940	7180	7170	105	105	1	80.0-120	1	1	0.0864	15
Sulfate	50000	59000	110000	110000	102	102	1	80.0-120	E	E	0.0289	15

L119782-08 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	65500	114000	96.6	1	80.0-120	E
Nitrate	5000	1710	6930	104	1	80.0-120	E
Sulfate	50000	92600	142000	98.9	1	80.0-120	E

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3432736-1	07/19/19 10:10	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	212	<u>1</u>	102	1000	

L119733-01 Original Sample (OS) • Duplicate (DUP)

(OS) L119733-01	07/19/19 14:46 • (DUP) R3432736-5	07/19/19 15:01	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l				%		%
TOC (Total Organic Carbon)	39300	37800	2	4.00			20	

L119747-03 Original Sample (OS) • Duplicate (DUP)

(OS) L119747-03	07/19/19 18:04 • (DUP) R3432736-8	07/19/19 18:18	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l				%		%
TOC (Total Organic Carbon)	1780	1630	1	8.62			20	

Laboratory Control Sample (LCS)

(LCS) R3432736-2	07/19/19 10:41	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l		%	%	
TOC (Total Organic Carbon)	75000	75700	101	85.0-115		

L119692-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L119692-04	07/19/19 12:05 • (MS) R3432736-3	07/19/19 12:24 • (MSD) R3432736-4	07/19/19 12:44	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l					%	%		%			%	%
TOC (Total Organic Carbon)	50000	7690	55800	56200	96.2	97.1	1	80.0-120	0.768	20					

L119743-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L119743-02	07/19/19 15:45 • (MS) R3432736-6	07/19/19 16:01 • (MSD) R3432736-7	07/19/19 16:20	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l					%	%		%			%	%
TOC (Total Organic Carbon)	50000	3980	50300	50800	92.7	93.6	1	80.0-120	0.930	20					

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Metals (ICPMS) by Method 6020B

[L1119726-02.04.05](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Iron	U	ug/l	15.0	100
Manganese	U	ug/l	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	Spike Amount	ug/l	Spike Amount	ug/l							
Iron	5000	5340	5430	107	109	80.0-120	1.68	20			
Manganese	50.0	50.2	51.3	100	103	80.0-120	2.12	20			

L1115520-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	Spike Amount	ug/l	Spike Amount	ug/l	Spike Amount	ug/l						
Iron	5000	414	5740	5760	106	107	1	75.0-125			0.470	20
Manganese	50.0	1300	1320	1330	31.7	54.3	1	75.0-125	V	V	0.854	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

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Method Blank (MB)

	(MB) R3432675-1 07/18/19 12:27										
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL							
Gasoline Range Organics-NWTPH	36.8	J	316	100							
^(S) a,a-o-Trifluorotoluene(FID)	104			78.0-120							

Laboratory Control Sample (LCS)

	(LCS) R3432675-2 07/18/19 14:44										
Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier						
Gasoline Range Organics-NWTPH	5500	5660	103	70.0-124							
^(S) a,a-o-Trifluorotoluene(FID)			106	78.0-120							

L1119004-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1119004-03 07/18/19 16:21 • (MS) R3432675-3 07/18/19 22:17 • (MSD) R3432675-4 07/18/19 23:29												
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	46.6	3100	3280	55.4	58.9	1	10.0-155			5.93	21
^(S) a,a-o-Trifluorotoluene(FID)					103	103		78.0-120				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L1119726-06](#)

Method Blank (MB)

(MB) R3433855-3 07/24/19 13:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) <i>a,a</i> -Trifluorotoluene(FID)	110			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3433855-2 07/24/19 12:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5440	99.0	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			94.7	78.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L119726-02.04.05](#)

Method Blank (MB)

(MB) R3433840-1 07/24/19 13:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1120145-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120145-01 07/24/19 13:31 • (DUP) R3433840-2 07/24/19 14:10

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier		DUP RPD Limits
	ug/l	ug/l			%	%	
Methane	U	0.000	1	0.000			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

L119775-14 Original Sample (OS) • Duplicate (DUP)

(OS) L119775-14 07/24/19 14:16 • (DUP) R3433840-3 07/24/19 14:57

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier		DUP RPD Limits
	ug/l	ug/l			%	%	
Methane	U	0.000	1	0.000			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433840-4 07/24/19 14:59 • (LCSD) R3433840-5 07/24/19 15:03

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier		LCSD Qualifier	
	ug/l	ug/l	ug/l	ug/l	%	%				%	%	RPD	RPD
Methane	67.8	70.2	74.5	104	110	85.0-115	5.94	20					
Ethane	129	116	121	90.2	93.6	85.0-115	3.72	20					
Ethene	127	116	120	91.2	94.5	85.0-115	3.58	20					

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3433853-2 07/20/19 11:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1119726-01.02.03.04.05.06](#)

Method Blank (MB)

(MB) R3433853-2 07/20/19 11:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	95.8			77.0-126
(S) 1,2-Dichloroethane-d4	101			70.0-130

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3433853-1 07/20/19 10:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	150	120	19.0-160	
Acrylonitrile	125	139	111	55.0-149	
Benzene	25.0	25.2	101	70.0-123	
Bromobenzene	25.0	21.3	85.0	73.0-121	
Bromodichloromethane	25.0	24.3	97.4	75.0-120	
Bromochloromethane	25.0	23.3	93.1	76.0-122	
Bromoform	25.0	26.4	106	68.0-132	
Bromomethane	25.0	23.5	93.9	10.0-160	
n-Butylbenzene	25.0	23.0	92.1	73.0-125	
sec-Butylbenzene	25.0	22.4	89.5	75.0-125	
tert-Butylbenzene	25.0	23.0	91.8	76.0-124	
Carbon disulfide	25.0	26.5	106	61.0-128	
Carbon tetrachloride	25.0	27.1	108	68.0-126	
Chlorobenzene	25.0	25.3	101	80.0-121	
Chlorodibromomethane	25.0	26.9	108	77.0-125	
Chloroethane	25.0	27.4	110	47.0-150	
Chloroform	25.0	25.2	101	73.0-120	
Chloromethane	25.0	20.5	81.8	41.0-142	
2-Chlorotoluene	25.0	21.8	87.1	76.0-123	
4-Chlorotoluene	25.0	21.5	85.9	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	20.6	82.3	58.0-134	
1,2-Dibromoethane	25.0	25.0	99.9	80.0-122	
Dibromomethane	25.0	25.7	103	80.0-120	
1,2-Dichlorobenzene	25.0	24.1	96.3	79.0-121	
1,3-Dichlorobenzene	25.0	23.7	94.9	79.0-120	
1,4-Dichlorobenzene	25.0	23.2	93.0	79.0-120	
Dichlorodifluoromethane	25.0	36.0	144	51.0-149	
1,1-Dichloroethane	25.0	25.5	102	70.0-126	
1,2-Dichloroethane	25.0	25.7	103	70.0-128	
1,1-Dichloroethene	25.0	25.4	102	71.0-124	
cis-1,2-Dichloroethene	25.0	25.4	102	73.0-120	
trans-1,2-Dichloroethene	25.0	27.4	110	73.0-120	
1,2-Dichloropropane	25.0	25.8	103	77.0-125	
1,1-Dichloropropene	25.0	27.7	111	74.0-126	
1,3-Dichloropropene	25.0	23.9	95.6	80.0-120	
cis-1,3-Dichloropropene	25.0	25.2	101	80.0-123	
trans-1,3-Dichloropropene	25.0	24.8	99.4	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	19.1	76.4	33.0-144	
2,2-Dichloropropane	25.0	21.1	84.5	58.0-130	
Di-isopropyl ether	25.0	25.6	103	58.0-138	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

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1413.001.05.601

SDG:

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DATE/TIME:

07/25/19 17:34

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Laboratory Control Sample (LCS)

(LCS) R3433853-1 07/20/19 10:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.6	102	79.0-123	
Hexachloro-1,3-butadiene	25.0	21.1	84.4	54.0-138	
2-Hexanone	125	122	97.6	67.0-149	
n-Hexane	25.0	24.3	97.4	57.0-133	
Iodomethane	125	92.2	73.8	33.0-147	
Isopropylbenzene	25.0	25.6	102	76.0-127	
p-Isopropyltoluene	25.0	23.8	95.2	76.0-125	
2-Butanone (MEK)	125	126	101	44.0-160	
Methylene Chloride	25.0	25.2	101	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	125	99.8	68.0-142	
Methyl tert-butyl ether	25.0	25.0	99.8	68.0-125	
Naphthalene	25.0	19.0	76.0	54.0-135	
n-Propylbenzene	25.0	23.0	92.0	77.0-124	
Styrene	25.0	26.9	108	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	25.1	100	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	22.1	88.4	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	21.9	87.8	69.0-132	
Tetrachloroethene	25.0	25.7	103	72.0-132	
Toluene	25.0	24.0	95.8	79.0-120	
1,2,3-Trichlorobenzene	25.0	22.7	90.7	50.0-138	
1,2,4-Trichlorobenzene	25.0	22.2	88.8	57.0-137	
1,1,1-Trichloroethane	25.0	26.9	107	73.0-124	
1,1,2-Trichloroethane	25.0	23.5	94.0	80.0-120	
Trichloroethene	25.0	24.0	95.9	78.0-124	
Trichlorofluoromethane	25.0	28.6	115	59.0-147	
1,2,3-Trichloropropane	25.0	23.2	92.7	73.0-130	
1,2,4-Trimethylbenzene	25.0	23.1	92.5	76.0-121	
1,2,3-Trimethylbenzene	25.0	27.5	110	77.0-120	
1,3,5-Trimethylbenzene	25.0	23.1	92.3	76.0-122	
Vinyl acetate	125	148	118	11.0-160	
Vinyl chloride	25.0	25.4	101	67.0-131	
Xylenes, Total	75.0	76.7	102	79.0-123	
(S) Toluene-d8			95.9	80.0-120	
(S) 4-Bromofluorobenzene			96.9	77.0-126	
(S) 1,2-Dichloroethane-d4			111	70.0-130	

Public Review Draft

1 Cp
2 Tc
3 Ss
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1119726-02.03.04](#)

Method Blank (MB)

(MB) R343411-2 07/24/19 18:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	105			70.0-130

Laboratory Control Sample (LCS)

(LCS) R343411-1 07/24/19 09:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	25.1	100	73.0-120	
(S) Toluene-d8			106	80.0-120	
(S) 4-Bromofluorobenzene			105	77.0-126	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

Public Review Draft

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

ACCOUNT:

PES Environmental, Inc- WA

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1413.001.05.601

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

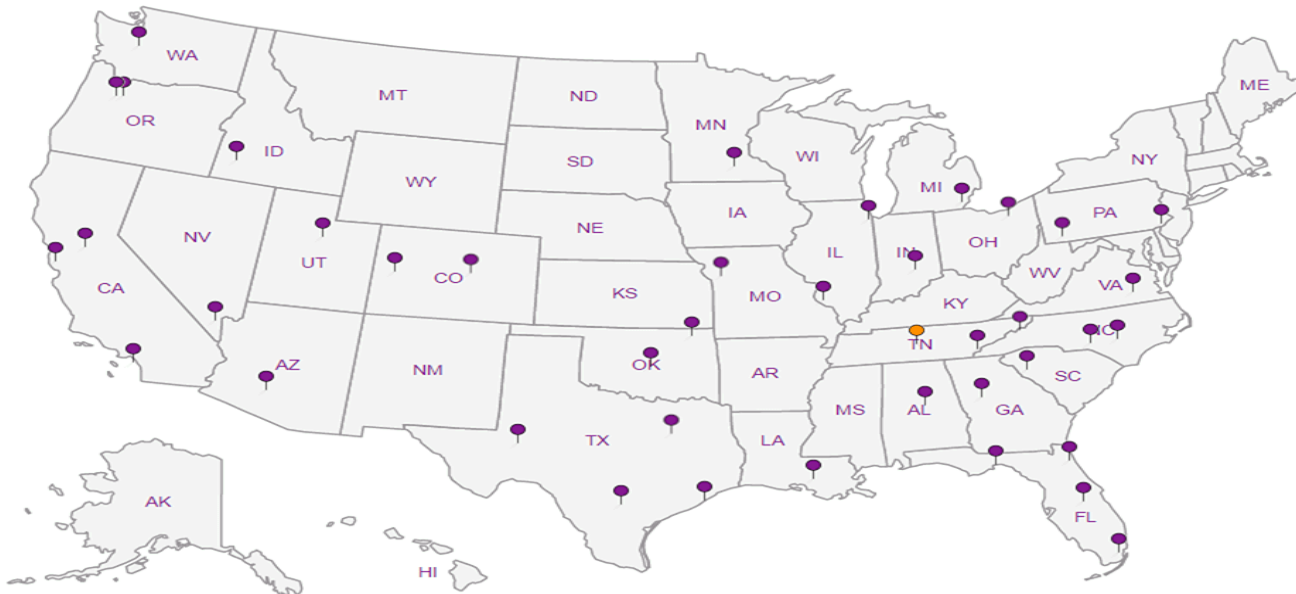
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
bhaldeman@pesenv.com;

KSPR@PES ENV.COM
KSPR@PES ENV.COM
KSPR@PES ENV.COM

277
CORNY

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Project: American Linen

City/State Collected: Seattle, WA

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
1413.001.05.601

Lab Project #
PESENVSWA-ALP

A225

L119776

Collected by (print):
Ben Hecht

Site/Facility ID #
American Linen

P.O. #

Collected by (signature):
Ben Hecht

Rush? (Lab MUST Be Notified)

Quote #

Immediately
Packed on ice N Y

Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed
Standard TAR

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

NO3,Cl, SO4 125mlHDPE-NoPres

Alkalinity 125mlHDPE-NoPres

EEM RSK175LL 40mlAmb-HCl

NWTPHGX 40mlAmb HCl

TOC 250mlAmb-HCl

Total Fe Mn 6020 250mlHDPE-HNO3

VOCs 8260LLC 40mlAmb-HCl

Actnum: PESENVSWA
Template: T152679
Prelogin: P718645
TSR: 110 - Brian Ford
PB: 7-5-19 ES
Shipped Via: FedEx Ground

Remarks Sample # (lab only)

MW116-071719

Grab

GW

40

7/17/19

1015

3

X

X

X

X

X

X

-01

MW113-071719

GW

75

1020

1135

3

X

X

X

X

X

X

-02

MW115-071719

GW

40

1135

1345

12

X

X

X

X

X

X

-04

MW105-071719

GW

135

1355

1355

12

X

X

X

X

X

X

-05

BB-8-071719

GW

35

1600

1600

1

X

X

X

X

X

X

-06

KIP B2ANK-071719

GW

-

1600

1600

1

X

X

X

X

X

X

-06

Remarks: Nitrate has a 48 hour holding time.

Tier 2 Lab QA/QC

pH Temp
Flow Other

Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS Fedex Courier

Tracking #

Received by: (Signature)

Trip Blank Received: Yes/No
HCL/MeOH
TBR

Sample Receipt Checklist
COC Seal Present/Intact: NP
COC Signed/Accurate: NY
Bottles arrive intact: NY
Correct bottles used: NY
Sufficient volume sent: NY
If Applicable
VQA zero Headspace: NY
Preservation Correct/Checked: NY

Relinquished by: (Signature)

Date: 7-17-19

Time: 1600

Received by: (Signature)

Temp: 43.0F °C
4.7-2.45
42+TBR

Received for lab by: (Signature)

Date: 7/18

Hold: Condition: NCF / QR

Relinquished by: (Signature)

Date: 7-17-19

Time: 1600

Received by: (Signature)

Temp: 43.0F °C
4.7-2.45
42+TBR

Received for lab by: (Signature)

Date: 7/18

Hold: Condition: NCF / QR

Relinquished by: (Signature)

Date: 7-17-19

Time: 1600

Received by: (Signature)

Temp: 43.0F °C
4.7-2.45
42+TBR

Received for lab by: (Signature)

Date: 7/18

Hold: Condition: NCF / QR



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.28	J JO	1.05	25.0	1	07/20/2019 13:06	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 13:06	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 13:06	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 13:06	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 13:06	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 13:06	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 13:06	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 13:06	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 13:06	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 13:06	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 13:06	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 13:06	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 13:06	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 13:06	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 13:06	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 13:06	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 13:06	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 13:06	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 13:06	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 13:06	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 13:06	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 13:06	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 13:06	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 13:06	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 13:06	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 13:06	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 13:06	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 13:06	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 13:06	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 13:06	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 13:06	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 13:06	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 13:06	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 13:06	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 13:06	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 13:06	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 13:06	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 13:06	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 13:06	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 13:06	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 13:06	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 13:06	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 13:06	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 13:06	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 13:06	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 13:06	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 13:06	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 13:06	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 13:06	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 13:06	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 13:06	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 13:06	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 13:06	WG1314770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/8/19



Collected date/time: 07/17/19 10:15

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 13:06	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 13:06	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 13:06	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 13:06	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 13:06	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 13:06	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 13:06	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 13:06	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 13:06	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 13:06	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 13:06	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 13:06	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 13:06	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 13:06	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 13:06	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 13:06	WG1314770
(S) Toluene-d8	98.9			80.0-120		07/20/2019 13:06	WG1314770
(S) 4-Bromofluorobenzene	91.0			77.0-126		07/20/2019 13:06	WG1314770
(S) 1,2-Dichloroethane-d4	97.7			70.0-130		07/20/2019 13:06	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/8/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	139000		2710	20000	1	07/23/2019 21:05	WG1315387

Sample Narrative:

L1119726-02 WG1315387: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	152000		260	5000	5	07/18/2019 13:35	WG1313370
Nitrate	992		22.7	100	1	07/18/2019 13:19	WG1313370
Sulfate	15100		77.4	5000	1	07/18/2019 13:19	WG1313370

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2380		102	1000	1	07/19/2019 12:56	WG1314078

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	786		15.0	100	1	07/18/2019 19:27	WG1313694
Manganese	79.9		0.250	5.00	1	07/18/2019 19:27	WG1313694

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2560	J+	31.6	100	1	07/18/2019 21:09	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 21:09	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1130		0.287	0.678	1	07/24/2019 13:37	WG1316403
Ethane	9.87		0.296	1.29	1	07/24/2019 13:37	WG1316403
Ethene	27.2		0.422	1.27	1	07/24/2019 13:37	WG1316403

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.54	J J0	1.05	25.0	1	07/20/2019 13:27	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 13:27	WG1314770
Benzene	0.172	J J	0.0896	0.500	1	07/20/2019 13:27	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 13:27	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 13:27	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 13:27	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 13:27	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 13:27	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 13:27	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 13:27	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 13:27	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 13:27	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 13:27	WG1314770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/17/19 10:20

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 13:27	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 13:27	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 13:27	WG1314770
Chloroform	0.226	J J	0.0860	0.500	1	07/20/2019 13:27	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 13:27	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 13:27	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 13:27	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 13:27	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 13:27	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 13:27	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 13:27	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 13:27	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 13:27	WG1314770
1,1-Dichloroethene	3.40		0.188	0.500	1	07/20/2019 13:27	WG1314770
cis-1,2-Dichloroethene	4940		9.33	50.0	100	07/24/2019 22:33	WG1316884
trans-1,2-Dichloroethene	13.1		0.152	0.500	1	07/20/2019 13:27	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 13:27	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 13:27	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 13:27	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 13:27	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 13:27	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 13:27	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 13:27	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 13:27	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 13:27	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 13:27	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 13:27	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 13:27	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 13:27	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 13:27	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 13:27	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 13:27	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 13:27	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 13:27	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 13:27	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 13:27	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 13:27	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 13:27	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 13:27	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 13:27	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 13:27	WG1314770
Tetrachloroethene	3.14		0.199	0.500	1	07/20/2019 13:27	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 13:27	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 13:27	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 13:27	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 13:27	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 13:27	WG1314770
Trichloroethene	20.4		0.153	0.500	1	07/20/2019 13:27	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 13:27	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 13:27	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 13:27	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 13:27	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 13:27	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/8/19



Collected date/time: 07/17/19 10:20

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	07/20/2019 13:27	WG1314770
Vinyl chloride	103		0.118	0.500	1	07/20/2019 13:27	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 13:27	WG1314770
(S) Toluene-d8	99.7			80.0-120		07/20/2019 13:27	WG1314770
(S) Toluene-d8	106			80.0-120		07/24/2019 22:33	WG1316884
(S) 4-Bromofluorobenzene	92.4			77.0-126		07/20/2019 13:27	WG1314770
(S) 4-Bromofluorobenzene	100			77.0-126		07/24/2019 22:33	WG1316884
(S) 1,2-Dichloroethane-d4	93.1			70.0-130		07/20/2019 13:27	WG1314770
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/24/2019 22:33	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/8/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.55	J JO	1.05	25.0	1	07/20/2019 13:47	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 13:47	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 13:47	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 13:47	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 13:47	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 13:47	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 13:47	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 13:47	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 13:47	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 13:47	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 13:47	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 13:47	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 13:47	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 13:47	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 13:47	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 13:47	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 13:47	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 13:47	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 13:47	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 13:47	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 13:47	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 13:47	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 13:47	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 13:47	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 13:47	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 13:47	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 13:47	WG1314770
cis-1,2-Dichloroethene	0.787		0.0933	0.500	1	07/24/2019 19:53	WG1316884
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 13:47	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 13:47	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 13:47	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 13:47	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 13:47	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 13:47	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 13:47	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 13:47	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 13:47	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 13:47	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 13:47	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 13:47	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 13:47	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 13:47	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 13:47	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 13:47	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 13:47	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 13:47	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 13:47	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 13:47	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 13:47	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 13:47	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 13:47	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 13:47	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 13:47	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/8/19



Collected date/time: 07/17/19 11:35

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 13:47	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 13:47	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 13:47	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 13:47	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 13:47	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 13:47	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 13:47	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 13:47	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 13:47	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 13:47	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 13:47	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 13:47	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 13:47	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 13:47	WG1314770
Vinyl chloride	24.3		0.118	0.500	1	07/20/2019 13:47	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 13:47	WG1314770
(S) Toluene-d8	99.6			80.0-120		07/20/2019 13:47	WG1314770
(S) Toluene-d8	107			80.0-120		07/24/2019 19:53	WG1316884
(S) 4-Bromofluorobenzene	89.4			77.0-126		07/20/2019 13:47	WG1314770
(S) 4-Bromofluorobenzene	100			77.0-126		07/24/2019 19:53	WG1316884
(S) 1,2-Dichloroethane-d4	100			70.0-130		07/20/2019 13:47	WG1314770
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/24/2019 19:53	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/8/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	314000		2710	20000	1	07/23/2019 21:12	WG1315387

Sample Narrative:

L1119726-04 WG1315387: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	34900		51.9	1000	1	07/18/2019 13:51	WG1313370
Nitrate	U		22.7	100	1	07/18/2019 13:51	WG1313370
Sulfate	7660		77.4	5000	1	07/18/2019 13:51	WG1313370

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3380		102	1000	1	07/19/2019 14:15	WG1314078

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2290		30.0	200	2	07/18/2019 20:05	WG1313694
Manganese	945		1.25	25.0	5	07/18/2019 20:09	WG1313694

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	37.8	U B J	31.6	100	1	07/18/2019 21:32	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 21:32	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1830		0.287	0.678	1	07/24/2019 13:43	WG1316403
Ethane	U		0.296	1.29	1	07/24/2019 13:43	WG1316403
Ethene	U		0.422	1.27	1	07/24/2019 13:43	WG1316403

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.18	J J J O	1.05	25.0	1	07/20/2019 14:08	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 14:08	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 14:08	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 14:08	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 14:08	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 14:08	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 14:08	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 14:08	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 14:08	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 14:08	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 14:08	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 14:08	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 14:08	WG1314770

JC 8/8/19

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/17/19 13:45

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch	
Chlorobenzene	U		0.140	0.500	1	07/20/2019 14:08	WG1314770	
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 14:08	WG1314770	
Chloroethane	U		0.141	2.50	1	07/20/2019 14:08	WG1314770	
Chloroform	U		0.0860	0.500	1	07/20/2019 14:08	WG1314770	
Chloromethane	U		0.153	1.25	1	07/20/2019 14:08	WG1314770	
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 14:08	WG1314770	
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 14:08	WG1314770	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 14:08	WG1314770	
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 14:08	WG1314770	
Dibromomethane	U		0.117	0.500	1	07/20/2019 14:08	WG1314770	
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 14:08	WG1314770	
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 14:08	WG1314770	
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 14:08	WG1314770	
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 14:08	WG1314770	
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 14:08	WG1314770	
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 14:08	WG1314770	
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 14:08	WG1314770	
cis-1,2-Dichloroethene	0.891		0.0933	0.500	1	07/24/2019 20:14	WG1316884	
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 14:08	WG1314770	
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 14:08	WG1314770	
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 14:08	WG1314770	
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 14:08	WG1314770	
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 14:08	WG1314770	
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 14:08	WG1314770	
trans-1,4-Dichloro-2-butene	U	UJ	JO	0.257	5.00	1	07/20/2019 14:08	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 14:08	WG1314770	
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 14:08	WG1314770	
Ethylbenzene	U		0.158	0.500	1	07/20/2019 14:08	WG1314770	
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 14:08	WG1314770	
2-Hexanone	U		0.757	5.00	1	07/20/2019 14:08	WG1314770	
n-Hexane	U		0.305	5.00	1	07/20/2019 14:08	WG1314770	
Iodomethane	U	UJ	JO	0.377	10.0	1	07/20/2019 14:08	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 14:08	WG1314770	
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 14:08	WG1314770	
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 14:08	WG1314770	
Methylene Chloride	U		1.07	2.50	1	07/20/2019 14:08	WG1314770	
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 14:08	WG1314770	
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 14:08	WG1314770	
Naphthalene	U	UJ	JO	0.174	2.50	1	07/20/2019 14:08	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 14:08	WG1314770	
Styrene	U		0.117	0.500	1	07/20/2019 14:08	WG1314770	
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 14:08	WG1314770	
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 14:08	WG1314770	
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 14:08	WG1314770	
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 14:08	WG1314770	
Toluene	U		0.412	0.500	1	07/20/2019 14:08	WG1314770	
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 14:08	WG1314770	
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 14:08	WG1314770	
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 14:08	WG1314770	
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 14:08	WG1314770	
Trichloroethene	U		0.153	0.500	1	07/20/2019 14:08	WG1314770	
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 14:08	WG1314770	
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 14:08	WG1314770	
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 14:08	WG1314770	
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 14:08	WG1314770	
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 14:08	WG1314770	

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/8/19



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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 14:08	WG1314770
Vinyl chloride	0.265	J ↓	0.118	0.500	1	07/20/2019 14:08	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 14:08	WG1314770
(S) Toluene-d8	96.8			80.0-120		07/20/2019 14:08	WG1314770
(S) Toluene-d8	108			80.0-120		07/24/2019 20:14	WG1316884
(S) 4-Bromofluorobenzene	90.7			77.0-126		07/20/2019 14:08	WG1314770
(S) 4-Bromofluorobenzene	102			77.0-126		07/24/2019 20:14	WG1316884
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/20/2019 14:08	WG1314770
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/24/2019 20:14	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
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- 9 Sc

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Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	240000		2710	20000	1	07/23/2019 21:19	WG1315387

Sample Narrative:

L1119726-05 WG1315387: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10400		51.9	1000	1	07/18/2019 14:57	WG1313370
Nitrate	1940		22.7	100	1	07/18/2019 14:57	WG1313370
Sulfate	59000		77.4	5000	1	07/18/2019 14:57	WG1313370

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4360		102	1000	1	07/19/2019 14:30	WG1314078

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	691		15.0	100	1	07/18/2019 19:36	WG1313694
Manganese	97.9		0.250	5.00	1	07/18/2019 19:36	WG1313694

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	112	J+	B	31.6	100	07/18/2019 21:54	WG1313748
(S) a,a,a-Trifluorotoluene(FID)	104			78.0-120		07/18/2019 21:54	WG1313748

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	62.2		0.287	0.678	1	07/24/2019 13:45	WG1316403
Ethane	U		0.296	1.29	1	07/24/2019 13:45	WG1316403
Ethene	U		0.422	1.27	1	07/24/2019 13:45	WG1316403

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.06	J	J J0	1.05	25.0	07/20/2019 14:28	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 14:28	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 14:28	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 14:28	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 14:28	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 14:28	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 14:28	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 14:28	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 14:28	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 14:28	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 14:28	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 14:28	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 14:28	WG1314770

JC 8/8/19

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/17/19 13:55

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 14:28	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 14:28	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 14:28	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 14:28	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 14:28	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 14:28	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 14:28	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 14:28	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 14:28	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 14:28	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 14:28	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 14:28	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 14:28	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 14:28	WG1314770
cis-1,2-Dichloroethene	19.3		0.0933	0.500	1	07/20/2019 14:28	WG1314770
trans-1,2-Dichloroethene	0.262	J U	0.152	0.500	1	07/20/2019 14:28	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 14:28	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 14:28	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 14:28	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 14:28	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 14:28	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 14:28	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 14:28	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 14:28	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 14:28	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 14:28	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 14:28	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 14:28	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 14:28	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 14:28	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 14:28	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 14:28	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 14:28	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 14:28	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 14:28	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 14:28	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 14:28	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 14:28	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 14:28	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 14:28	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 14:28	WG1314770
Tetrachloroethene	169		0.199	0.500	1	07/20/2019 14:28	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 14:28	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 14:28	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 14:28	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 14:28	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 14:28	WG1314770
Trichloroethene	28.9		0.153	0.500	1	07/20/2019 14:28	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 14:28	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 14:28	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 14:28	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 14:28	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 14:28	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/8/19



Collected date/time: 07/17/19 13:55

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 14:28	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 14:28	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 14:28	WG1314770
<i>(S) Toluene-d8</i>	101			80.0-120		07/20/2019 14:28	WG1314770
<i>(S) 4-Bromofluorobenzene</i>	92.8			77.0-126		07/20/2019 14:28	WG1314770
<i>(S) 1,2-Dichloroethane-d4</i>	98.7			70.0-130		07/20/2019 14:28	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

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Collected date/time: 07/17/19 16:00

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Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 14:10	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 14:10	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 12:05	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 12:05	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 12:05	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 12:05	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 12:05	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 12:05	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 12:05	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 12:05	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 12:05	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 12:05	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 12:05	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 12:05	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 12:05	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 12:05	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 12:05	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 12:05	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 12:05	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 12:05	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 12:05	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 12:05	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 12:05	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 12:05	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 12:05	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 12:05	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 12:05	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 12:05	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 12:05	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 12:05	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 12:05	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 12:05	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 12:05	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 12:05	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 12:05	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 12:05	WG1314770
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/20/2019 12:05	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 12:05	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 12:05	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 12:05	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 12:05	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 12:05	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 12:05	WG1314770
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/20/2019 12:05	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 12:05	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 12:05	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 12:05	WG1314770

JC 8/8/19



Collected date/time: 07/17/19 16:00

L1119726

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 12:05	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 12:05	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 12:05	WG1314770
Naphthalene	U	<u>JO</u>	0.174	2.50	1	07/20/2019 12:05	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 12:05	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 12:05	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 12:05	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 12:05	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 12:05	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 12:05	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 12:05	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 12:05	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 12:05	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 12:05	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 12:05	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 12:05	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 12:05	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 12:05	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 12:05	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 12:05	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 12:05	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 12:05	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 12:05	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 12:05	WG1314770
(S) Toluene-d8	98.1			80.0-120		07/20/2019 12:05	WG1314770
(S) 4-Bromofluorobenzene	94.1			77.0-126		07/20/2019 12:05	WG1314770
(S) 1,2-Dichloroethane-d4	99.4			70.0-130		07/20/2019 12:05	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
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- 7 Gl
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- 9 Sc

JC 8/8/19



ANALYTICAL REPORT

July 26, 2019

- 1 Cp
- 2 Tc
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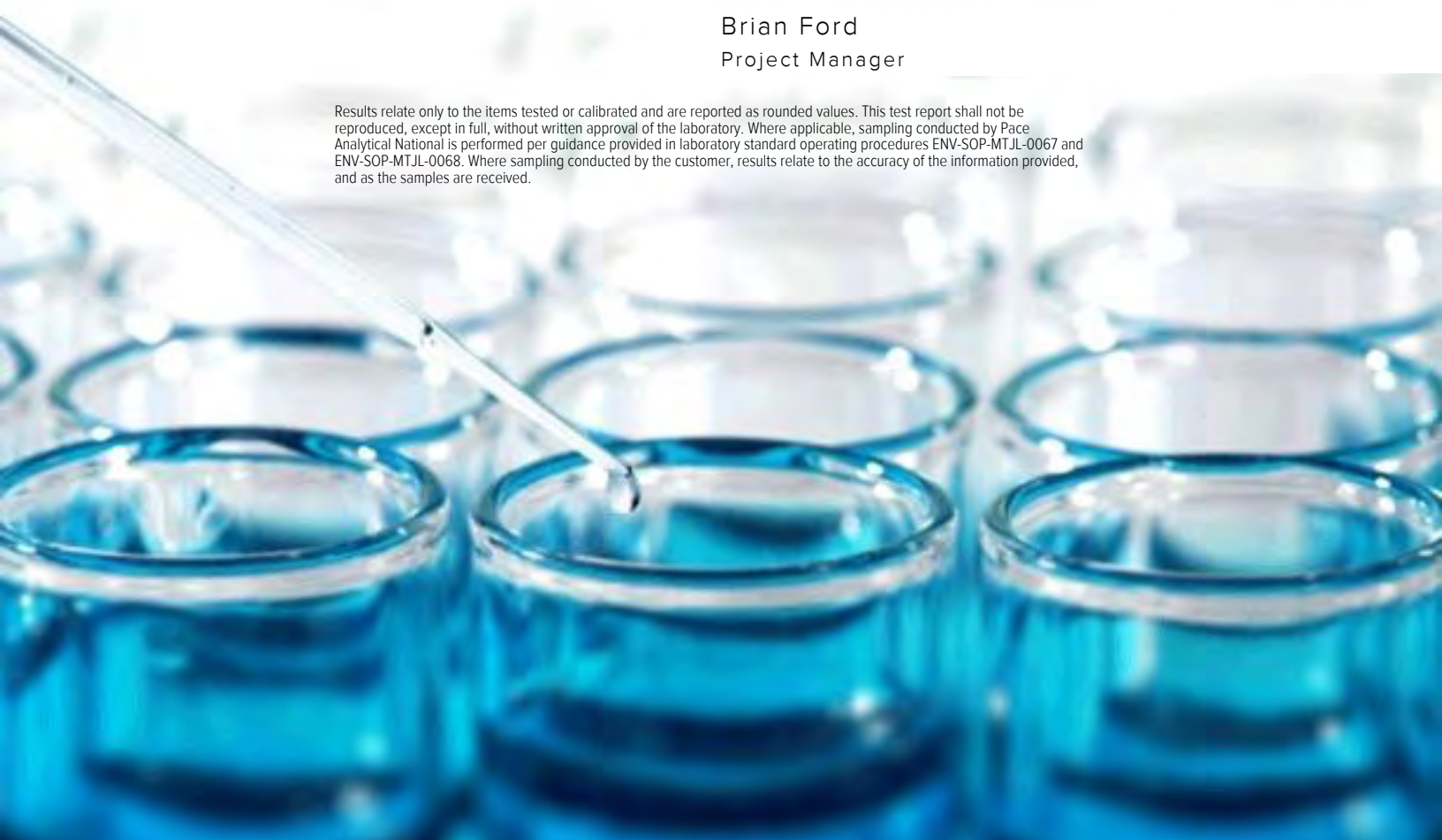
PES Environmental, Inc.- WA

Sample Delivery Group: L1120206
 Samples Received: 07/19/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-126-071819 L1120206-01 GW

Collected by Ben Hecht
Collected date/time 07/18/19 07:15
Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 15:50	07/20/19 15:50	BMB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-8-071819 L1120206-02 GW

Collected by Ben Hecht
Collected date/time 07/18/19 09:35
Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316070	1	07/23/19 16:47	07/23/19 16:47	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 16:10	07/20/19 16:10	BMB	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

MW-912-071819 L1120206-03 GW

Collected by Ben Hecht
Collected date/time 07/18/19 08:00
Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315391	1	07/23/19 13:14	07/23/19 13:14	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314262	1	07/19/19 21:56	07/19/19 21:56	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315213	1	07/22/19 15:59	07/22/19 15:59	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1314861	1	07/20/19 15:39	07/21/19 16:55	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316070	1	07/23/19 17:07	07/23/19 17:07	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316411	1	07/24/19 16:28	07/24/19 16:28	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 16:31	07/20/19 16:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	20	07/24/19 23:00	07/24/19 23:00	ACG	Mt. Juliet, TN

7 Gl

8 Al

9 Sc

MW-914-071819 L1120206-04 GW

Collected by Ben Hecht
Collected date/time 07/18/19 08:20
Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316070	1	07/23/19 17:28	07/23/19 17:28	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 16:51	07/20/19 16:51	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	1	07/24/19 20:36	07/24/19 20:36	ACG	Mt. Juliet, TN

SCS-2-071819 L1120206-05 GW

Collected by Ben Hecht
Collected date/time 07/18/19 10:35
Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316070	1	07/23/19 17:48	07/23/19 17:48	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 17:12	07/20/19 17:12	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	10	07/24/19 23:22	07/24/19 23:22	ACG	Mt. Juliet, TN

MW-147-071819 L1120206-06 GW

Collected by Ben Hecht
Collected date/time 07/18/19 10:45
Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315970	1	07/24/19 16:46	07/24/19 16:46	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314262	1	07/19/19 22:13	07/19/19 22:13	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315213	1	07/22/19 16:13	07/22/19 16:13	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1314861	1	07/20/19 15:39	07/21/19 16:58	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316070	1	07/23/19 18:09	07/23/19 18:09	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316410	1	07/24/19 12:36	07/24/19 12:36	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 17:32	07/20/19 17:32	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	20	07/24/19 23:44	07/24/19 23:44	ACG	Mt. Juliet, TN



MW-102-071819 L1120206-07 GW

Collected by Ben Hecht
 Collected date/time 07/18/19 12:15
 Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315970	1	07/24/19 16:56	07/24/19 16:56	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314262	1	07/19/19 22:31	07/19/19 22:31	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315213	1	07/22/19 16:25	07/22/19 16:25	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1314861	1	07/20/19 15:39	07/21/19 17:01	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316070	1	07/23/19 18:29	07/23/19 18:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316410	1	07/24/19 12:40	07/24/19 12:40	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 17:53	07/20/19 17:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	1	07/24/19 20:58	07/24/19 20:58	ACG	Mt. Juliet, TN

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr

MW-161-071819 L1120206-08 GW

Collected by Ben Hecht
 Collected date/time 07/18/19 14:15
 Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315970	1	07/24/19 17:04	07/24/19 17:04	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314262	1	07/19/19 23:24	07/19/19 23:24	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315213	1	07/22/19 16:38	07/22/19 16:38	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1314861	1	07/20/19 15:39	07/21/19 17:21	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316070	1	07/23/19 18:50	07/23/19 18:50	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316410	1	07/24/19 12:58	07/24/19 12:58	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 18:13	07/20/19 18:13	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1316884	1	07/24/19 21:46	07/24/19 21:46	ACG	Mt. Juliet, TN

6 Qc
 7 Gl
 8 Al
 9 Sc

MW-128-071819 L1120206-09 GW

Collected by Ben Hecht
 Collected date/time 07/18/19 14:15
 Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1315970	1	07/24/19 20:29	07/24/19 20:29	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314262	1	07/19/19 23:41	07/19/19 23:41	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315213	1	07/22/19 17:30	07/22/19 17:30	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1314861	1	07/20/19 15:39	07/21/19 17:24	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1316410	1	07/24/19 13:08	07/24/19 13:08	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317135	10	07/25/19 11:17	07/25/19 11:17	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 18:33	07/20/19 18:33	BMB	Mt. Juliet, TN

TRIP-071819 L1120206-10 GW

Collected by Ben Hecht
 Collected date/time 07/18/19 16:30
 Received date/time 07/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 14:34	07/24/19 14:34	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1314770	1	07/20/19 12:25	07/20/19 12:25	BMB	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.96	J JO	1.05	25.0	1	07/20/2019 15:50	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 15:50	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 15:50	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 15:50	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 15:50	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 15:50	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 15:50	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 15:50	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 15:50	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 15:50	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 15:50	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 15:50	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 15:50	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 15:50	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 15:50	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 15:50	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 15:50	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 15:50	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 15:50	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 15:50	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 15:50	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 15:50	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 15:50	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 15:50	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 15:50	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 15:50	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 15:50	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 15:50	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 15:50	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 15:50	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 15:50	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 15:50	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 15:50	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 15:50	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 15:50	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 15:50	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 15:50	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 15:50	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 15:50	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 15:50	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 15:50	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 15:50	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 15:50	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 15:50	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 15:50	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 15:50	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 15:50	WG1314770
Naphthalene	U	JO	0.174	2.50	1	07/20/2019 15:50	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 15:50	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 15:50	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 15:50	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 15:50	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/18/19 07:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 15:50	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 15:50	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 15:50	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 15:50	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 15:50	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 15:50	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 15:50	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 15:50	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 15:50	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 15:50	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 15:50	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 15:50	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 15:50	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 15:50	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 15:50	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 15:50	WG1314770
(S) Toluene-d8	101			80.0-120		07/20/2019 15:50	WG1314770
(S) 4-Bromofluorobenzene	93.0			77.0-126		07/20/2019 15:50	WG1314770
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		07/20/2019 15:50	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/18/19 09:35

L1120206

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/23/2019 16:47	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		07/23/2019 16:47	WG1316070

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.98	J JO	1.05	25.0	1	07/20/2019 16:10	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 16:10	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 16:10	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 16:10	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 16:10	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 16:10	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 16:10	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 16:10	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 16:10	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 16:10	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 16:10	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 16:10	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 16:10	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 16:10	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 16:10	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 16:10	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 16:10	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 16:10	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 16:10	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 16:10	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 16:10	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 16:10	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 16:10	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 16:10	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 16:10	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 16:10	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 16:10	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 16:10	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 16:10	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 16:10	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 16:10	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 16:10	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 16:10	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 16:10	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 16:10	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 16:10	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 16:10	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 16:10	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 16:10	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 16:10	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 16:10	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 16:10	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 16:10	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 16:10	WG1314770



Collected date/time: 07/18/19 09:35

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 16:10	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 16:10	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 16:10	WG1314770
Naphthalene	U	<u>JO</u>	0.174	2.50	1	07/20/2019 16:10	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 16:10	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 16:10	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 16:10	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 16:10	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 16:10	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 16:10	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 16:10	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 16:10	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 16:10	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 16:10	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 16:10	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 16:10	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 16:10	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 16:10	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 16:10	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 16:10	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 16:10	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 16:10	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 16:10	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 16:10	WG1314770
(S) Toluene-d8	99.9			80.0-120		07/20/2019 16:10	WG1314770
(S) 4-Bromofluorobenzene	93.9			77.0-126		07/20/2019 16:10	WG1314770
(S) 1,2-Dichloroethane-d4	101			70.0-130		07/20/2019 16:10	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	310000		2710	20000	1	07/23/2019 13:14	WG1315391

Sample Narrative:

L1120206-03 WG1315391: Endpoint pH 4.5 HEADSPACE

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	18800		51.9	1000	1	07/19/2019 21:56	WG1314262
Nitrate	89.0	J	22.7	100	1	07/19/2019 21:56	WG1314262
Sulfate	29400		77.4	5000	1	07/19/2019 21:56	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	11700		102	1000	1	07/22/2019 15:59	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2400		15.0	100	1	07/21/2019 16:55	WG1314861
Manganese	724		0.250	5.00	1	07/21/2019 16:55	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	170		31.6	100	1	07/23/2019 17:07	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		07/23/2019 17:07	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5830		0.287	0.678	1	07/24/2019 16:28	WG1316411
Ethane	U		0.296	1.29	1	07/24/2019 16:28	WG1316411
Ethene	202		0.422	1.27	1	07/24/2019 16:28	WG1316411

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.34	J JO	1.05	25.0	1	07/20/2019 16:31	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 16:31	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 16:31	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 16:31	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 16:31	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 16:31	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 16:31	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 16:31	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 16:31	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 16:31	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 16:31	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 16:31	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 16:31	WG1314770

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 07/18/19 08:00

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 16:31	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 16:31	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 16:31	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 16:31	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 16:31	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 16:31	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 16:31	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 16:31	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 16:31	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 16:31	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 16:31	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 16:31	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 16:31	WG1314770
1,1-Dichloroethene	1.30		0.188	0.500	1	07/20/2019 16:31	WG1314770
cis-1,2-Dichloroethene	286		1.87	10.0	20	07/24/2019 23:00	WG1316884
trans-1,2-Dichloroethene	2.12		0.152	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 16:31	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 16:31	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 16:31	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 16:31	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 16:31	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 16:31	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 16:31	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 16:31	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 16:31	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 16:31	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 16:31	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 16:31	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 16:31	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 16:31	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 16:31	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 16:31	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 16:31	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 16:31	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 16:31	WG1314770
Naphthalene	U	JO	0.174	2.50	1	07/20/2019 16:31	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 16:31	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 16:31	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 16:31	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 16:31	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 16:31	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 16:31	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 16:31	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 16:31	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 16:31	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 16:31	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 16:31	WG1314770
Trichloroethene	4.72		0.153	0.500	1	07/20/2019 16:31	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 16:31	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 16:31	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 16:31	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 16:31	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 16:31	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/18/19 08:00

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 16:31	WG1314770
Vinyl chloride	425		2.36	10.0	20	07/24/2019 23:00	WG1316884
Xylenes, Total	U		0.316	1.50	1	07/20/2019 16:31	WG1314770
(S) Toluene-d8	97.0			80.0-120		07/20/2019 16:31	WG1314770
(S) Toluene-d8	105			80.0-120		07/24/2019 23:00	WG1316884
(S) 4-Bromofluorobenzene	94.8			77.0-126		07/20/2019 16:31	WG1314770
(S) 4-Bromofluorobenzene	99.4			77.0-126		07/24/2019 23:00	WG1316884
(S) 1,2-Dichloroethane-d4	98.8			70.0-130		07/20/2019 16:31	WG1314770
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/24/2019 23:00	WG1316884

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/18/19 08:20

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2320		31.6	100	1	07/23/2019 17:28	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	100			78.0-120		07/23/2019 17:28	WG1316070

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 16:51	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 16:51	WG1314770
Benzene	15.0		0.0896	0.500	1	07/20/2019 16:51	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 16:51	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 16:51	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 16:51	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 16:51	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 16:51	WG1314770
n-Butylbenzene	3.05		0.143	0.500	1	07/20/2019 16:51	WG1314770
sec-Butylbenzene	2.44		0.134	0.500	1	07/20/2019 16:51	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 16:51	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 16:51	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 16:51	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 16:51	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 16:51	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 16:51	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 16:51	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 16:51	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 16:51	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 16:51	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 16:51	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 16:51	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 16:51	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 16:51	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 16:51	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 16:51	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 16:51	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/24/2019 20:36	WG1316884
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 16:51	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 16:51	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 16:51	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 16:51	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 16:51	WG1314770
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/20/2019 16:51	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 16:51	WG1314770
Di-isopropyl ether	0.854		0.0924	0.500	1	07/20/2019 16:51	WG1314770
Ethylbenzene	187		0.158	0.500	1	07/20/2019 16:51	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 16:51	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 16:51	WG1314770
n-Hexane	12.2		0.305	5.00	1	07/20/2019 16:51	WG1314770
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/20/2019 16:51	WG1314770
Isopropylbenzene	17.5		0.126	0.500	1	07/20/2019 16:51	WG1314770
p-Isopropyltoluene	0.698		0.138	0.500	1	07/20/2019 16:51	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 16:51	WG1314770

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/18/19 08:20

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 16:51	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 16:51	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 16:51	WG1314770
Naphthalene	104	<u>JO</u>	0.174	2.50	1	07/20/2019 16:51	WG1314770
n-Propylbenzene	43.2		0.162	0.500	1	07/20/2019 16:51	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 16:51	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 16:51	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 16:51	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 16:51	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 16:51	WG1314770
Toluene	3.37		0.412	0.500	1	07/20/2019 16:51	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 16:51	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 16:51	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 16:51	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 16:51	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 16:51	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 16:51	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 16:51	WG1314770
1,2,4-Trimethylbenzene	145		0.123	0.500	1	07/20/2019 16:51	WG1314770
1,2,3-Trimethylbenzene	82.3		0.0739	0.500	1	07/20/2019 16:51	WG1314770
1,3,5-Trimethylbenzene	11.6		0.124	0.500	1	07/20/2019 16:51	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 16:51	WG1314770
Vinyl chloride	0.242	<u>U</u>	0.118	0.500	1	07/20/2019 16:51	WG1314770
Xylenes, Total	131		0.316	1.50	1	07/20/2019 16:51	WG1314770
(S) Toluene-d8	84.4			80.0-120		07/20/2019 16:51	WG1314770
(S) Toluene-d8	103			80.0-120		07/24/2019 20:36	WG1316884
(S) 4-Bromofluorobenzene	87.4			77.0-126		07/20/2019 16:51	WG1314770
(S) 4-Bromofluorobenzene	101			77.0-126		07/24/2019 20:36	WG1316884
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 16:51	WG1314770
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/24/2019 20:36	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2190		31.6	100	1	07/23/2019 17:48	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	99.8			78.0-120		07/23/2019 17:48	WG1316070

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 17:12	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 17:12	WG1314770
Benzene	15.5		0.0896	0.500	1	07/20/2019 17:12	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 17:12	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 17:12	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 17:12	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 17:12	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 17:12	WG1314770
n-Butylbenzene	3.10		0.143	0.500	1	07/20/2019 17:12	WG1314770
sec-Butylbenzene	2.39		0.134	0.500	1	07/20/2019 17:12	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 17:12	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 17:12	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 17:12	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 17:12	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 17:12	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 17:12	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 17:12	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 17:12	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 17:12	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 17:12	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 17:12	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 17:12	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 17:12	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 17:12	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 17:12	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 17:12	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 17:12	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 17:12	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 17:12	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 17:12	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 17:12	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 17:12	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 17:12	WG1314770
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/20/2019 17:12	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 17:12	WG1314770
Di-isopropyl ether	0.893		0.0924	0.500	1	07/20/2019 17:12	WG1314770
Ethylbenzene	141		1.58	5.00	10	07/24/2019 23:22	WG1316884
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 17:12	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 17:12	WG1314770
n-Hexane	12.6		0.305	5.00	1	07/20/2019 17:12	WG1314770
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/20/2019 17:12	WG1314770
Isopropylbenzene	18.7		0.126	0.500	1	07/20/2019 17:12	WG1314770
p-Isopropyltoluene	0.760		0.138	0.500	1	07/20/2019 17:12	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 17:12	WG1314770

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 17:12	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 17:12	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 17:12	WG1314770
Naphthalene	115	<u>JO</u>	0.174	2.50	1	07/20/2019 17:12	WG1314770
n-Propylbenzene	46.2		0.162	0.500	1	07/20/2019 17:12	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 17:12	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 17:12	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 17:12	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 17:12	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 17:12	WG1314770
Toluene	3.71		0.412	0.500	1	07/20/2019 17:12	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 17:12	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 17:12	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 17:12	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 17:12	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 17:12	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 17:12	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 17:12	WG1314770
1,2,4-Trimethylbenzene	157		0.123	0.500	1	07/20/2019 17:12	WG1314770
1,2,3-Trimethylbenzene	88.3		0.0739	0.500	1	07/20/2019 17:12	WG1314770
1,3,5-Trimethylbenzene	12.8		0.124	0.500	1	07/20/2019 17:12	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 17:12	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 17:12	WG1314770
Xylenes, Total	149		0.316	1.50	1	07/20/2019 17:12	WG1314770
(S) Toluene-d8	85.1			80.0-120		07/20/2019 17:12	WG1314770
(S) Toluene-d8	106			80.0-120		07/24/2019 23:22	WG1316884
(S) 4-Bromofluorobenzene	87.7			77.0-126		07/20/2019 17:12	WG1314770
(S) 4-Bromofluorobenzene	104			77.0-126		07/24/2019 23:22	WG1316884
(S) 1,2-Dichloroethane-d4	100			70.0-130		07/20/2019 17:12	WG1314770
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/24/2019 23:22	WG1316884

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	307000		2710	20000	1	07/24/2019 16:46	WG1315970

Sample Narrative:

L1120206-06 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	19300		51.9	1000	1	07/19/2019 22:13	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 22:13	WG1314262
Sulfate	30000		77.4	5000	1	07/19/2019 22:13	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	9560		102	1000	1	07/22/2019 16:13	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3800		15.0	100	1	07/21/2019 16:58	WG1314861
Manganese	750		0.250	5.00	1	07/21/2019 16:58	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	175		31.6	100	1	07/23/2019 18:09	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		07/23/2019 18:09	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5450		0.287	0.678	1	07/24/2019 12:36	WG1316410
Ethane	U		0.296	1.29	1	07/24/2019 12:36	WG1316410
Ethene	191		0.422	1.27	1	07/24/2019 12:36	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.11	J JO	1.05	25.0	1	07/20/2019 17:32	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 17:32	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 17:32	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 17:32	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 17:32	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 17:32	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 17:32	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 17:32	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 17:32	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 17:32	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 17:32	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 17:32	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 17:32	WG1314770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/18/19 10:45

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 17:32	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 17:32	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 17:32	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 17:32	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 17:32	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 17:32	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 17:32	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 17:32	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 17:32	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 17:32	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 17:32	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 17:32	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 17:32	WG1314770
1,1-Dichloroethene	1.33		0.188	0.500	1	07/20/2019 17:32	WG1314770
cis-1,2-Dichloroethene	219		1.87	10.0	20	07/24/2019 23:44	WG1316884
trans-1,2-Dichloroethene	2.49		0.152	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 17:32	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 17:32	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 17:32	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 17:32	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 17:32	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 17:32	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 17:32	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 17:32	WG1314770
Ethylbenzene	U		3.16	10.0	20	07/24/2019 23:44	WG1316884
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 17:32	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 17:32	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 17:32	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 17:32	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 17:32	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 17:32	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 17:32	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 17:32	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 17:32	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 17:32	WG1314770
Naphthalene	5.94	J	3.48	50.0	20	07/24/2019 23:44	WG1316884
n-Propylbenzene	U		3.24	10.0	20	07/24/2019 23:44	WG1316884
Styrene	U		0.117	0.500	1	07/20/2019 17:32	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 17:32	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 17:32	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 17:32	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 17:32	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 17:32	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 17:32	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 17:32	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 17:32	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 17:32	WG1314770
Trichloroethene	4.79		0.153	0.500	1	07/20/2019 17:32	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 17:32	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 17:32	WG1314770
1,2,4-Trimethylbenzene	U		2.46	10.0	20	07/24/2019 23:44	WG1316884
1,2,3-Trimethylbenzene	U		1.48	10.0	20	07/24/2019 23:44	WG1316884
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 17:32	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/18/19 10:45

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 17:32	WG1314770
Vinyl chloride	446		2.36	10.0	20	07/24/2019 23:44	WG1316884
Xylenes, Total	U		6.32	30.0	20	07/24/2019 23:44	WG1316884
(S) Toluene-d8	99.8			80.0-120		07/20/2019 17:32	WG1314770
(S) Toluene-d8	109			80.0-120		07/24/2019 23:44	WG1316884
(S) 4-Bromofluorobenzene	92.1			77.0-126		07/20/2019 17:32	WG1314770
(S) 4-Bromofluorobenzene	105			77.0-126		07/24/2019 23:44	WG1316884
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/20/2019 17:32	WG1314770
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/24/2019 23:44	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1120206-06 WG1314770, WG1316884: Not all compounds reportable at lower dilution.
 L1120206-06 WG1314770, WG1316884: Cannot be reanalyzed at lower dilution due to high levels of target analytes.



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	167000		2710	20000	1	07/24/2019 16:56	WG1315970

Sample Narrative:

L1120206-07 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	5580		51.9	1000	1	07/19/2019 22:31	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 22:31	WG1314262
Sulfate	1830	J	77.4	5000	1	07/19/2019 22:31	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4760		102	1000	1	07/22/2019 16:25	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	7160		15.0	100	1	07/21/2019 17:01	WG1314861
Manganese	353		0.250	5.00	1	07/21/2019 17:01	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/23/2019 18:29	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		07/23/2019 18:29	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	290		0.287	0.678	1	07/24/2019 12:40	WG1316410
Ethane	U		0.296	1.29	1	07/24/2019 12:40	WG1316410
Ethene	U		0.422	1.27	1	07/24/2019 12:40	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.74	J JO	1.05	25.0	1	07/20/2019 17:53	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 17:53	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 17:53	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 17:53	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 17:53	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 17:53	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 17:53	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 17:53	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 17:53	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 17:53	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 17:53	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 17:53	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 17:53	WG1314770

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 07/18/19 12:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 17:53	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 17:53	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 17:53	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 17:53	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 17:53	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 17:53	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 17:53	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 17:53	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 17:53	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 17:53	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 17:53	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 17:53	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 17:53	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 17:53	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/24/2019 20:58	WG1316884
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 17:53	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 17:53	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 17:53	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 17:53	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 17:53	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 17:53	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 17:53	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 17:53	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 17:53	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 17:53	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 17:53	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 17:53	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 17:53	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 17:53	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 17:53	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 17:53	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 17:53	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 17:53	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 17:53	WG1314770
Naphthalene	2.11	J	0.174	2.50	1	07/24/2019 20:58	WG1316884
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 17:53	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 17:53	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 17:53	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 17:53	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 17:53	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 17:53	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 17:53	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 17:53	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 17:53	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 17:53	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 17:53	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 17:53	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 17:53	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 17:53	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 17:53	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 17:53	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 17:53	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/18/19 12:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 17:53	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/24/2019 20:58	WG1316884
Xylenes, Total	U		0.316	1.50	1	07/20/2019 17:53	WG1314770
(S) Toluene-d8	97.8			80.0-120		07/20/2019 17:53	WG1314770
(S) Toluene-d8	110			80.0-120		07/24/2019 20:58	WG1316884
(S) 4-Bromofluorobenzene	97.3			77.0-126		07/20/2019 17:53	WG1314770
(S) 4-Bromofluorobenzene	105			77.0-126		07/24/2019 20:58	WG1316884
(S) 1,2-Dichloroethane-d4	101			70.0-130		07/20/2019 17:53	WG1314770
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/24/2019 20:58	WG1316884

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	284000		2710	20000	1	07/24/2019 17:04	WG1315970

Sample Narrative:

L1120206-08 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	26500		51.9	1000	1	07/19/2019 23:24	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 23:24	WG1314262
Sulfate	14100		77.4	5000	1	07/19/2019 23:24	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1610	<u>B</u>	102	1000	1	07/22/2019 16:38	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1300		15.0	100	1	07/21/2019 17:21	WG1314861
Manganese	694		0.250	5.00	1	07/21/2019 17:21	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/23/2019 18:50	WG1316070
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	106			78.0-120		07/23/2019 18:50	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	139		0.287	0.678	1	07/24/2019 12:58	WG1316410
Ethane	U		0.296	1.29	1	07/24/2019 12:58	WG1316410
Ethene	U		0.422	1.27	1	07/24/2019 12:58	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.22	<u>J JO</u>	1.05	25.0	1	07/20/2019 18:13	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 18:13	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 18:13	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 18:13	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 18:13	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 18:13	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 18:13	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 18:13	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 18:13	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 18:13	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 18:13	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 18:13	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 18:13	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/18/19 14:15

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 18:13	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 18:13	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 18:13	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 18:13	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 18:13	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 18:13	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 18:13	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 18:13	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 18:13	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 18:13	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 18:13	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 18:13	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 18:13	WG1314770
1,1-Dichloroethene	0.609		0.188	0.500	1	07/20/2019 18:13	WG1314770
cis-1,2-Dichloroethene	1.58		0.0933	0.500	1	07/20/2019 18:13	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 18:13	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 18:13	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 18:13	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 18:13	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 18:13	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 18:13	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 18:13	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 18:13	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 18:13	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 18:13	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 18:13	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 18:13	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 18:13	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 18:13	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 18:13	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 18:13	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 18:13	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 18:13	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 18:13	WG1314770
Naphthalene	0.353	U	0.174	2.50	1	07/24/2019 21:46	WG1316884
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 18:13	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 18:13	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 18:13	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 18:13	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 18:13	WG1314770
Tetrachloroethene	0.264	U	0.199	0.500	1	07/20/2019 18:13	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 18:13	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 18:13	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 18:13	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 18:13	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 18:13	WG1314770
Trichloroethene	1.53		0.153	0.500	1	07/20/2019 18:13	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 18:13	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 18:13	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 18:13	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 18:13	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 18:13	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/18/19 14:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 18:13	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 18:13	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 18:13	WG1314770
(S) Toluene-d8	99.6			80.0-120		07/20/2019 18:13	WG1314770
(S) Toluene-d8	105			80.0-120		07/24/2019 21:46	WG1316884
(S) 4-Bromofluorobenzene	91.4			77.0-126		07/20/2019 18:13	WG1314770
(S) 4-Bromofluorobenzene	101			77.0-126		07/24/2019 21:46	WG1316884
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/20/2019 18:13	WG1314770
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/24/2019 21:46	WG1316884

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	601000		2710	20000	1	07/24/2019 20:29	WG1315970

Sample Narrative:

L1120206-09 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	22300		51.9	1000	1	07/19/2019 23:41	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 23:41	WG1314262
Sulfate	4340	J	77.4	5000	1	07/19/2019 23:41	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6940		102	1000	1	07/22/2019 17:30	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	12400		15.0	100	1	07/21/2019 17:24	WG1314861
Manganese	409		0.250	5.00	1	07/21/2019 17:24	WG1314861

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	15500		2.87	6.78	10	07/25/2019 11:17	WG1317135
Ethane	16.4		0.296	1.29	1	07/24/2019 13:08	WG1316410
Ethene	68.3		0.422	1.27	1	07/24/2019 13:08	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.24	J JO	1.05	25.0	1	07/20/2019 18:33	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 18:33	WG1314770
Benzene	12.2		0.0896	0.500	1	07/20/2019 18:33	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 18:33	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 18:33	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 18:33	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 18:33	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 18:33	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 18:33	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 18:33	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 18:33	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 18:33	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 18:33	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 18:33	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 18:33	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 18:33	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 18:33	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 18:33	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 18:33	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 18:33	WG1314770

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/18/19 14:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 18:33	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 18:33	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 18:33	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 18:33	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 18:33	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 18:33	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 18:33	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 18:33	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 18:33	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 18:33	WG1314770
cis-1,2-Dichloroethene	1.88		0.0933	0.500	1	07/20/2019 18:33	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 18:33	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 18:33	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 18:33	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 18:33	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 18:33	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 18:33	WG1314770
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/20/2019 18:33	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 18:33	WG1314770
Di-isopropyl ether	0.161	J	0.0924	0.500	1	07/20/2019 18:33	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 18:33	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 18:33	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 18:33	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 18:33	WG1314770
Iodomethane	U	JO	0.377	10.0	1	07/20/2019 18:33	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 18:33	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 18:33	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 18:33	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 18:33	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 18:33	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 18:33	WG1314770
Naphthalene	U	JO	0.174	2.50	1	07/20/2019 18:33	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 18:33	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 18:33	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 18:33	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 18:33	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 18:33	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 18:33	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 18:33	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 18:33	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 18:33	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 18:33	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 18:33	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 18:33	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 18:33	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 18:33	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 18:33	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 18:33	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 18:33	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 18:33	WG1314770
Vinyl chloride	108		0.118	0.500	1	07/20/2019 18:33	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 18:33	WG1314770
(S) Toluene-d8	99.6			80.0-120		07/20/2019 18:33	WG1314770
(S) 4-Bromofluorobenzene	94.9			77.0-126		07/20/2019 18:33	WG1314770
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 18:33	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/18/19 16:30

L1120206

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 14:34	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 14:34	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 12:25	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 12:25	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 12:25	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 12:25	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 12:25	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 12:25	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 12:25	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 12:25	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 12:25	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 12:25	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 12:25	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 12:25	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 12:25	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 12:25	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 12:25	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 12:25	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 12:25	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 12:25	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 12:25	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 12:25	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 12:25	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 12:25	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 12:25	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 12:25	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 12:25	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 12:25	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 12:25	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 12:25	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 12:25	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 12:25	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 12:25	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 12:25	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 12:25	WG1314770
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/20/2019 12:25	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 12:25	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 12:25	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 12:25	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 12:25	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 12:25	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 12:25	WG1314770
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/20/2019 12:25	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 12:25	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 12:25	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 12:25	WG1314770



Collected date/time: 07/18/19 16:30

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 12:25	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 12:25	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 12:25	WG1314770
Naphthalene	U	<u>JO</u>	0.174	2.50	1	07/20/2019 12:25	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 12:25	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 12:25	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 12:25	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 12:25	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 12:25	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 12:25	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 12:25	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 12:25	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 12:25	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 12:25	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 12:25	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 12:25	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 12:25	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 12:25	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 12:25	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 12:25	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 12:25	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 12:25	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 12:25	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 12:25	WG1314770
(S) Toluene-d8	101			80.0-120		07/20/2019 12:25	WG1314770
(S) 4-Bromofluorobenzene	92.9			77.0-126		07/20/2019 12:25	WG1314770
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 12:25	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3433429-1 07/23/19 10:20

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	U	ug/l	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5 HEADSPACE

L1120205-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1120205-05 07/23/19 12:44 • (DUP) R3433429-4 07/23/19 12:59

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	490000	488000	1	0.379	%	20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE
DUP: Endpoint pH 4.5 HEADSPACE

Laboratory Control Sample (LCS)

(LCS) R3433429-3 07/23/19 11:33

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	103000	103	85.0-115	%

Sample Narrative:

LCS: Endpoint pH 4.5 HEADSPACE





Method Blank (MB)

(MB) R3434039-1 07/24/19 16:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	3140	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1120245-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120245-01 07/24/19 17:46 • (DUP) R3434039-2 07/24/19 17:57

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	281000	281000	1	0.165		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

L1120245-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1120245-05 07/24/19 18:52 • (DUP) R3434039-4 07/24/19 19:03

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	423000	424000	1	0.260		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3434039-3 07/24/19 18:08

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	98200	98.2	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3432539-1 07/19/19 11:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1120147-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1120147-03 07/19/19 13:25 • (DUP) R3432539-3 07/19/19 13:42

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	59300	59200	1	0.185		15
Nitrate	6010	6050	1	0.730		15

L1120206-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1120206-09 07/19/19 23:41 • (DUP) R3432539-6 07/19/19 23:59

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	22300	22300	1	0.0291		15
Nitrate	U	0.000	1	0.000		15
Sulfate	4340	4300	1	0.914	J	15

L1120147-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1120147-03 07/19/19 14:35 • (DUP) R3432539-8 07/20/19 07:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Sulfate	134000	134000	5	0.0978		15

Laboratory Control Sample (LCS)

(LCS) R3432539-2 07/19/19 11:50

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39900	99.8	80.0-120	
Nitrate	8000	8180	102	80.0-120	
Sulfate	40000	40400	101	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1120147-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120147-03 07/19/19 13:25 • (MS) R3432539-4 07/19/19 14:00 • (MSD) R3432539-5 07/19/19 14:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	59300	107000	107000	96.1	96.0	1	80.0-120	E	E	0.0541	15
Nitrate	5000	6010	10900	10800	97.5	96.7	1	80.0-120	E	E	0.351	15

L1120206-09 Original Sample (OS) • Matrix Spike (MS)

(OS) L1120206-09 07/19/19 23:41 • (MS) R3432539-7 07/20/19 00:17

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	22300	72200	99.8	1	80.0-120	
Nitrate	5000	U	5010	100	1	80.0-120	
Sulfate	50000	4340	52300	95.9	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3433105-1 07/22/19 11:41	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	231	<u>1</u>	102	1000

L1120475-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1120475-03 07/22/19 20:40 • (DUP) R3433105-8 07/22/19 20:56	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	9040	9000	1	0.510	20	20

Laboratory Control Sample (LCS)

(LCS) R3433105-2 07/22/19 12:12	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	74200	98.9	85.0-115	

L1120206-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120206-08 07/22/19 16:38 • (MS) R3433105-4 07/22/19 16:59 • (MSD) R3433105-5 07/22/19 17:15	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
TOC (Total Organic Carbon)	50000	1610	51300	51700	99.3	100	1	80.0-120			0.797	20

L1120208-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120208-04 07/22/19 19:11 • (MS) R3433105-6 07/22/19 19:29 • (MSD) R3433105-7 07/22/19 19:46	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
TOC (Total Organic Carbon)	50000	2010	52300	52900	101	102	1	80.0-120			1.27	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Metals (ICPMS) by Method 6020B

[L1120206-03.06.07.08.09](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3432720-1 07/21/19 16:32				
Analyte	ug/l		ug/l	ug/l
Iron	25.6	J	15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3432720-2 07/21/19 16:35 • (LCSD) R3432720-3 07/21/19 16:38									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	5090	4920	102	98.5	80.0-120			3.41	20
Manganese	50.0	49.9	48.7	99.8	97.4	80.0-120			2.42	20

L1120205-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1120205-06 07/21/19 16:42 • (MS) R3432720-5 07/21/19 16:48 • (MSD) R3432720-6 07/21/19 16:52											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	223	5050	5220	96.6	100	1	75.0-125			3.30	20
Manganese	50.0	38.3	83.9	85.4	91.2	94.0	1	75.0-125			1.67	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1120206-02.03.04.05.06.07.08](#)

Method Blank (MB)

(MB) R3433944-2 07/23/19 11:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Gasoline Range Organics-NWTPH	U	ug/l	316	100

^(S) <i>a,a</i> -Trifluorotoluene(FID)	106			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3433944-1 07/23/19 10:47

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5580	101	70.0-124	

^(S) <i>a,a</i> -Trifluorotoluene(FID)			95.6	78.0-120	
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L1120206-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120206-02 07/23/19 16:47 • (MS) R3433944-3 07/23/19 19:10 • (MSD) R3433944-4 07/23/19 19:31

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Gasoline Range Organics-NWTPH	5500	U	3030	3340	55.1	60.7	1	10.0-155			9.54	21

^(S) <i>a,a</i> -Trifluorotoluene(FID)					103	103		78.0-120				
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Volatile Organic Compounds (GC) by Method NWTPHGX

Method Blank (MB)

(MB) R3433855-3 07/24/19 13:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	110			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3433855-2 07/24/19 12:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5440	99.0	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			94.7	78.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Volatile Organic Compounds (GC) by Method RSK175

[L1120206-06.07.08.09](#)

Method Blank (MB)

(MB) R3433738-1 07/24/19 10:52

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1120208-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1120208-01 07/24/19 10:57 • (DUP) R3433738-2 07/24/19 11:32

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	14.5	16.8	1	14.9			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

L1120206-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1120206-07 07/24/19 12:40 • (DUP) R3433738-3 07/24/19 13:11

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	290	289	1	0.382			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433738-4 07/24/19 13:14 • (LCSD) R3433738-5 07/24/19 13:22

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	
Methane	67.8	77.8	73.3	73.3	115	108					85.0-115			5.86		20		
Ethane	129	122	120	120	94.9	92.7					85.0-115			2.45		20		
Ethene	127	121	118	118	95.4	92.6					85.0-115			3.02		20		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

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Method Blank (MB)

(MB) R3433893-1 07/24/19 15:10

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1120245-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1120245-04 07/24/19 15:24 • (DUP) R3433893-2 07/24/19 15:53

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	661	628	1	5.11			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

L119782-03 Original Sample (OS) • Duplicate (DUP)

(OS) L119782-03 07/24/19 16:13 • (DUP) R3433893-3 07/24/19 16:31

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	1990	2020	1	1.66			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3433893-6 07/24/19 16:43 • (LCSD) R3433893-7 07/24/19 16:47

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD	
	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	
Methane	67.8	74.4	74.4	75.3	110	111					85.0-115			1.23		20		
Ethane	129	122	122	124	94.4	95.9					85.0-115			1.61		20		
Ethene	127	121	121	123	95.0	96.5					85.0-115			1.56		20		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

L1120245-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120245-01 07/24/19 15:13 • (MS) R3433893-4 07/24/19 16:35 • (MSD) R3433893-5 07/24/19 16:37

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Methane	67.8	66.5	145	125	115	86.5	1	85.0-115			14.4	20
Ethane	129	U	132	116	102	90.3	1	85.0-115			12.6	20
Ethene	127	U	131	115	103	90.4	1	85.0-115			12.8	20

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Volatile Organic Compounds (GC) by Method RSK175

[L1120206-09](#)

Method Blank (MB)

(MB) R3434214-1	07/25/19 11:11																		
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL															
	ug/l	ug/l	ug/l	ug/l															
Methane	U		0.287	0.678															

L1120270-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1120270-03	07/25/19 11:25	• (DUP) R3434214-2	07/25/19 11:54																
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
	ug/l	ug/l	%	%	%	%													
Methane	U	0.000	1	0.000		20													

L1120270-13 Original Sample (OS) • Duplicate (DUP)

(OS) L1120270-13	07/25/19 12:57	• (DUP) R3434214-3	07/25/19 13:23																
Analyte	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
	ug/l	ug/l	%	%	%	%													
Methane	58.9	56.1	1	4.93		20													

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434214-8	07/25/19 13:38	• (LCSD) R3434214-9	07/25/19 13:42																
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	<u>LCS Qualifier</u>	<u>LCSD Qualifier</u>	RPD	RPD Limits									
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%									
Methane	67.8	73.7	70.9	109	105	85.0-115			3.89	20									

L1120270-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120270-05	07/25/19 11:30	• (MS) R3434214-4	07/25/19 13:26	• (MSD) R3434214-5	07/25/19 13:28														
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits									
	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%									
Methane	67.8	9330	9490	9560	224	338			<u>E V</u>	<u>E V</u>									

L1120270-14 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120270-14	07/25/19 12:59	• (MS) R3434214-6	07/25/19 13:30	• (MSD) R3434214-7	07/25/19 13:33														
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits									
	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%									
Methane	67.8	32200	31700	32500	0.000	564			<u>E V</u>	<u>E V</u>									

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Method Blank (MB)

(MB) R3433853-2 07/20/19 11:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1120206-01.02.03.04.05.06.07.08.09.10](#)

Method Blank (MB)

(MB) R3433853-2 07/20/19 11:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	95.8			77.0-126
(S) 1,2-Dichloroethane-d4	101			70.0-130

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Laboratory Control Sample (LCS)

(LCS) R3433853-1 07/20/19 10:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	150	120	19.0-160	
Acrylonitrile	125	139	111	55.0-149	
Benzene	25.0	25.2	101	70.0-123	
Bromobenzene	25.0	21.3	85.0	73.0-121	
Bromodichloromethane	25.0	24.3	97.4	75.0-120	
Bromochloromethane	25.0	23.3	93.1	76.0-122	
Bromoform	25.0	26.4	106	68.0-132	
Bromomethane	25.0	23.5	93.9	10.0-160	
n-Butylbenzene	25.0	23.0	92.1	73.0-125	
sec-Butylbenzene	25.0	22.4	89.5	75.0-125	
tert-Butylbenzene	25.0	23.0	91.8	76.0-124	
Carbon disulfide	25.0	26.5	106	61.0-128	
Carbon tetrachloride	25.0	27.1	108	68.0-126	
Chlorobenzene	25.0	25.3	101	80.0-121	
Chlorodibromomethane	25.0	26.9	108	77.0-125	
Chloroethane	25.0	27.4	110	47.0-150	
Chloroform	25.0	25.2	101	73.0-120	
Chloromethane	25.0	20.5	81.8	41.0-142	
2-Chlorotoluene	25.0	21.8	87.1	76.0-123	
4-Chlorotoluene	25.0	21.5	85.9	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	20.6	82.3	58.0-134	
1,2-Dibromoethane	25.0	25.0	99.9	80.0-122	
Dibromomethane	25.0	25.7	103	80.0-120	
1,2-Dichlorobenzene	25.0	24.1	96.3	79.0-121	
1,3-Dichlorobenzene	25.0	23.7	94.9	79.0-120	
1,4-Dichlorobenzene	25.0	23.2	93.0	79.0-120	
Dichlorodifluoromethane	25.0	36.0	144	51.0-149	
1,1-Dichloroethane	25.0	25.5	102	70.0-126	
1,2-Dichloroethane	25.0	25.7	103	70.0-128	
1,1-Dichloroethene	25.0	25.4	102	71.0-124	
cis-1,2-Dichloroethene	25.0	25.4	102	73.0-120	
trans-1,2-Dichloroethene	25.0	27.4	110	73.0-120	
1,2-Dichloropropane	25.0	25.8	103	77.0-125	
1,1-Dichloropropene	25.0	27.7	111	74.0-126	
1,3-Dichloropropene	25.0	23.9	95.6	80.0-120	
cis-1,3-Dichloropropene	25.0	25.2	101	80.0-123	
trans-1,3-Dichloropropene	25.0	24.8	99.4	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	19.1	76.4	33.0-144	
2,2-Dichloropropane	25.0	21.1	84.5	58.0-130	
Di-isopropyl ether	25.0	25.6	103	58.0-138	

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Laboratory Control Sample (LCS)

(LCS) R3433853-1 07/20/19 10:28

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.6	102	79.0-123	
Hexachloro-1,3-butadiene	25.0	21.1	84.4	54.0-138	
2-Hexanone	125	122	97.6	67.0-149	
n-Hexane	25.0	24.3	97.4	57.0-133	
Iodomethane	125	92.2	73.8	33.0-147	
Isopropylbenzene	25.0	25.6	102	76.0-127	
p-Isopropyltoluene	25.0	23.8	95.2	76.0-125	
2-Butanone (MEK)	125	126	101	44.0-160	
Methylene Chloride	25.0	25.2	101	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	125	99.8	68.0-142	
Methyl tert-butyl ether	25.0	25.0	99.8	68.0-125	
Naphthalene	25.0	19.0	76.0	54.0-135	
n-Propylbenzene	25.0	23.0	92.0	77.0-124	
Styrene	25.0	26.9	108	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	25.1	100	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	22.1	88.4	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	21.9	87.8	69.0-132	
Tetrachloroethene	25.0	25.7	103	72.0-132	
Toluene	25.0	24.0	95.8	79.0-120	
1,2,3-Trichlorobenzene	25.0	22.7	90.7	50.0-138	
1,2,4-Trichlorobenzene	25.0	22.2	88.8	57.0-137	
1,1,1-Trichloroethane	25.0	26.9	107	73.0-124	
1,1,2-Trichloroethane	25.0	23.5	94.0	80.0-120	
Trichloroethene	25.0	24.0	95.9	78.0-124	
Trichlorofluoromethane	25.0	28.6	115	59.0-147	
1,2,3-Trichloropropane	25.0	23.2	92.7	73.0-130	
1,2,4-Trimethylbenzene	25.0	23.1	92.5	76.0-121	
1,2,3-Trimethylbenzene	25.0	27.5	110	77.0-120	
1,3,5-Trimethylbenzene	25.0	23.1	92.3	76.0-122	
Vinyl acetate	125	148	118	11.0-160	
Vinyl chloride	25.0	25.4	101	67.0-131	
Xylenes, Total	75.0	76.7	102	79.0-123	
(S) Toluene-d8			95.9	80.0-120	
(S) 4-Bromofluorobenzene			96.9	77.0-126	
(S) 1,2-Dichloroethane-d4			111	70.0-130	

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1 Cp
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1120206-03.04.05.06.07.08](#)

Method Blank (MB)

(MB) R343411-2 07/24/19 18:49

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Ethylbenzene	U		0.158	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	105			70.0-130

Laboratory Control Sample (LCS)

(LCS) R343411-1 07/24/19 09:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	25.1	100	73.0-120	
Ethylbenzene	25.0	25.1	101	79.0-123	
Naphthalene	25.0	25.1	100	54.0-135	
n-Propylbenzene	25.0	25.8	103	77.0-124	
1,2,4-Trimethylbenzene	25.0	25.5	102	76.0-121	
1,2,3-Trimethylbenzene	25.0	25.3	101	77.0-120	
Vinyl chloride	25.0	26.9	108	67.0-131	
Xylenes, Total	75.0	75.9	101	79.0-123	
(S) Toluene-d8			106	80.0-120	
(S) 4-Bromofluorobenzene			105	77.0-126	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.





Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

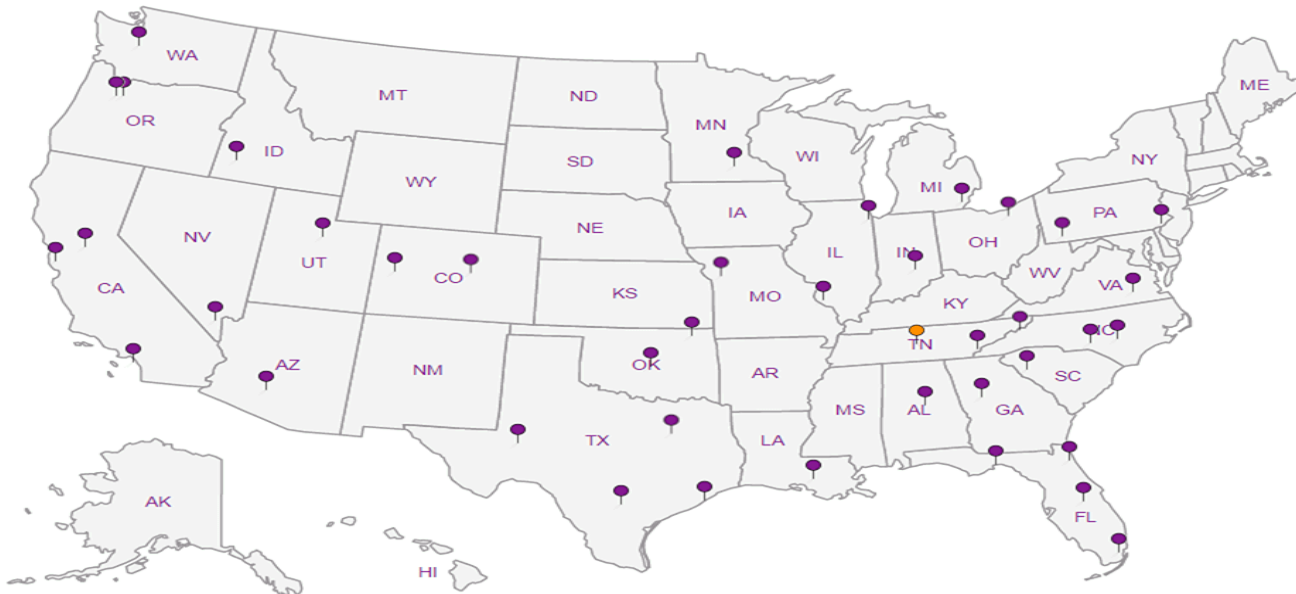
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: bhoneal@pesenv.com;
bhaldeman@pesenv.com;

Project Description: *American Lvs*

City/State Collected: *Seattle, WA*

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #
American Lvs

Lab Project #
PESENVSWA-ALP

Collected by (print):
Brian Hecht

Site/Facility ID #
1413.001.05.601

P.O. #

Collected by (signature):
[Signature]

Rush? (Lab MUST Be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Quote #

Date Results Needed
STAT

Immediately Packed on Ice N ___ Y ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW 126-071819	Grab	GW	90	7-18-19	0715	3
MW-8-071819		GW	135		0935	6
MW-912-071819		GW	75		0800	12
MW-914-071819		GW	19		0820	6
SCS-2-071819		GW	20		1035	6
MW-147-071819		GW	75		1045	12
MW 102-071819		GW	120		1215	12
MW-161-071819		GW	125		1415	12
MW 128-071819		GW	65		1415	12
TRIP - 071819					1630	1

Analysis / Container / Preservative	Pres Chk
NO3,Cl, SO4 125mlHDPE-NoPres	
Alkalinity 125mlHDPE-NoPres	
EEM RSK175LL 40mlAmb-HCl	
NWTPHGX 40mlAmb HCl	
TOC 250mlAmb-HCl	
Total Fe Mn 6020 250mlHDPE-HNO3	
VOCs 8260LLC 40mlAmb-HCl	

Remarks: *Nitrate has a 48 hour holding time.

SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS ___ FedEx ___ Courier ___

Tracking #
Fedex 108254885594

Trip Blank Received: Yes/No
 Yes No

Sample Receipt Checklist
COC Seal Present/Intact: ___ NP ___ Y ___ N ___
COC Signed/Accurate: ___ NP ___ Y ___ N ___
Bottles arrive intact: ___ NP ___ Y ___ N ___
Correct bottles used: ___ NP ___ Y ___ N ___
Sufficient volume sent: ___ NP ___ Y ___ N ___
IF Applicable
VOA Zero Headspace: ___ NP ___ Y ___ N ___
Preservation Correct/Checked: ___ NP ___ Y ___ N ___

Relinquished by: (Signature)
[Signature]

Date: *7/18/19* Time: *1630*

Received by: (Signature)
[Signature]

Temp: *5.14/5.25* °C Bottles Received: *81*

Relinquished by: (Signature)
[Signature]

Date: *7/18/19* Time: *1630*

Received for lab by: (Signature)
[Signature]

Date: *7/19/19* Time: *8:45*

Relinquished by: (Signature)

Date: Time:

Received by: (Signature)

Condition: NCF / *OK*

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Pace Analytical
National Center for Testing & Innovation

L# *41120106*
C222

Actnum: PESENVSWA
Template: T152679
Prelogin: P7186645
TSR: 110 - Brian Ford
PB: 7-5-19 CS
Shipped Via: **FedEx Ground**



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.96	UJ JJO	1.05	25.0	1	07/20/2019 15:50	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 15:50	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 15:50	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 15:50	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 15:50	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 15:50	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 15:50	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 15:50	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 15:50	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 15:50	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 15:50	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 15:50	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 15:50	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 15:50	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 15:50	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 15:50	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 15:50	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 15:50	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 15:50	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 15:50	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 15:50	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 15:50	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 15:50	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 15:50	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 15:50	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 15:50	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 15:50	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 15:50	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 15:50	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 15:50	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 15:50	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 15:50	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 15:50	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 15:50	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 15:50	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 15:50	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 15:50	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 15:50	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 15:50	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 15:50	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 15:50	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 15:50	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 15:50	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 15:50	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 15:50	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 15:50	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 15:50	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 15:50	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 15:50	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 15:50	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 15:50	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 15:50	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 15:50	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 07:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 15:50	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 15:50	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 15:50	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 15:50	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 15:50	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 15:50	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 15:50	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 15:50	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 15:50	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 15:50	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 15:50	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 15:50	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 15:50	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 15:50	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 15:50	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 15:50	WG1314770
(S) Toluene-d8	101			80.0-120		07/20/2019 15:50	WG1314770
(S) 4-Bromofluorobenzene	93.0			77.0-126		07/20/2019 15:50	WG1314770
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		07/20/2019 15:50	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 09:35

L1120206

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/23/2019 16:47	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		07/23/2019 16:47	WG1316070

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.98	UJ JJO	1.05	25.0	1	07/20/2019 16:10	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 16:10	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 16:10	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 16:10	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 16:10	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 16:10	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 16:10	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 16:10	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 16:10	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 16:10	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 16:10	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 16:10	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 16:10	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 16:10	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 16:10	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 16:10	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 16:10	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 16:10	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 16:10	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 16:10	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 16:10	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 16:10	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 16:10	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 16:10	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 16:10	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 16:10	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 16:10	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 16:10	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 16:10	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 16:10	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 16:10	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 16:10	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 16:10	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 16:10	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 16:10	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 16:10	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 16:10	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 16:10	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 16:10	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 16:10	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 16:10	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 16:10	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 16:10	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 16:10	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 16:10	WG1314770

JC 8/6/19



Collected date/time: 07/18/19 09:35

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 16:10	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 16:10	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 16:10	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 16:10	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 16:10	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 16:10	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 16:10	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 16:10	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 16:10	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 16:10	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 16:10	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 16:10	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 16:10	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 16:10	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 16:10	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 16:10	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 16:10	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 16:10	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 16:10	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 16:10	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 16:10	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 16:10	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 16:10	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 16:10	WG1314770
(S) Toluene-d8	99.9			80.0-120		07/20/2019 16:10	WG1314770
(S) 4-Bromofluorobenzene	93.9			77.0-126		07/20/2019 16:10	WG1314770
(S) 1,2-Dichloroethane-d4	101			70.0-130		07/20/2019 16:10	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
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- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	310000		2710	20000	1	07/23/2019 13:14	WG1315391

Sample Narrative:

L1120206-03 WG1315391: Endpoint pH 4.5 HEADSPACE

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	18800		51.9	1000	1	07/19/2019 21:56	WG1314262
Nitrate	89.0	J J	22.7	100	1	07/19/2019 21:56	WG1314262
Sulfate	29400		77.4	5000	1	07/19/2019 21:56	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	11700		102	1000	1	07/22/2019 15:59	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2400	J	15.0	100	1	07/21/2019 16:55	WG1314861
Manganese	724		0.250	5.00	1	07/21/2019 16:55	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	170	J+	31.6	100	1	07/23/2019 17:07	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	105			78.0-120		07/23/2019 17:07	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5830		0.287	0.678	1	07/24/2019 16:28	WG1316411
Ethane	U		0.296	1.29	1	07/24/2019 16:28	WG1316411
Ethene	202		0.422	1.27	1	07/24/2019 16:28	WG1316411

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.34	J J0	1.05	25.0	1	07/20/2019 16:31	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 16:31	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 16:31	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 16:31	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 16:31	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 16:31	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 16:31	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 16:31	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 16:31	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 16:31	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 16:31	WG1314770 JC 8/6/19
Carbon disulfide	U		0.101	0.500	1	07/20/2019 16:31	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 16:31	WG1314770

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/18/19 08:00

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 16:31	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 16:31	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 16:31	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 16:31	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 16:31	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 16:31	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 16:31	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 16:31	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 16:31	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 16:31	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 16:31	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 16:31	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 16:31	WG1314770
1,1-Dichloroethene	1.30		0.188	0.500	1	07/20/2019 16:31	WG1314770
cis-1,2-Dichloroethene	286		1.87	10.0	20	07/24/2019 23:00	WG1316884
trans-1,2-Dichloroethene	2.12		0.152	0.500	1	07/20/2019 16:31	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 16:31	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 16:31	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 16:31	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 16:31	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 16:31	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 16:31	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 16:31	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 16:31	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 16:31	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 16:31	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 16:31	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 16:31	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 16:31	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 16:31	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 16:31	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 16:31	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 16:31	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 16:31	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 16:31	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 16:31	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 16:31	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 16:31	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 16:31	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 16:31	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 16:31	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 16:31	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 16:31	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 16:31	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 16:31	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 16:31	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 16:31	WG1314770
Trichloroethene	4.72		0.153	0.500	1	07/20/2019 16:31	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 16:31	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 16:31	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 16:31	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 16:31	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 16:31	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 08:00

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 16:31	WG1314770
Vinyl chloride	425		2.36	10.0	20	07/24/2019 23:00	WG1316884
Xylenes, Total	U		0.316	1.50	1	07/20/2019 16:31	WG1314770
(S) Toluene-d8	97.0			80.0-120		07/20/2019 16:31	WG1314770
(S) Toluene-d8	105			80.0-120		07/24/2019 23:00	WG1316884
(S) 4-Bromofluorobenzene	94.8			77.0-126		07/20/2019 16:31	WG1314770
(S) 4-Bromofluorobenzene	99.4			77.0-126		07/24/2019 23:00	WG1316884
(S) 1,2-Dichloroethane-d4	98.8			70.0-130		07/20/2019 16:31	WG1314770
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/24/2019 23:00	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 08:20

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2320		31.6	100	1	07/23/2019 17:28	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	100			78.0-120		07/23/2019 17:28	WG1316070

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 16:51	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 16:51	WG1314770
Benzene	15.0		0.0896	0.500	1	07/20/2019 16:51	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 16:51	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 16:51	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 16:51	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 16:51	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 16:51	WG1314770
n-Butylbenzene	3.05		0.143	0.500	1	07/20/2019 16:51	WG1314770
sec-Butylbenzene	2.44		0.134	0.500	1	07/20/2019 16:51	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 16:51	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 16:51	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 16:51	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 16:51	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 16:51	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 16:51	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 16:51	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 16:51	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 16:51	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 16:51	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 16:51	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 16:51	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 16:51	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 16:51	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 16:51	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 16:51	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 16:51	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/24/2019 20:36	WG1316884
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 16:51	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 16:51	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 16:51	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 16:51	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 16:51	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 16:51	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 16:51	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 16:51	WG1314770
Di-isopropyl ether	0.854		0.0924	0.500	1	07/20/2019 16:51	WG1314770
Ethylbenzene	187		0.158	0.500	1	07/20/2019 16:51	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 16:51	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 16:51	WG1314770
n-Hexane	12.2		0.305	5.00	1	07/20/2019 16:51	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 16:51	WG1314770
Isopropylbenzene	17.5		0.126	0.500	1	07/20/2019 16:51	WG1314770
p-Isopropyltoluene	0.698		0.138	0.500	1	07/20/2019 16:51	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 16:51	WG1314770

JC 8/6/19



Collected date/time: 07/18/19 08:20

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 16:51	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 16:51	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 16:51	WG1314770
Naphthalene	104	J JO	0.174	2.50	1	07/20/2019 16:51	WG1314770
n-Propylbenzene	43.2		0.162	0.500	1	07/20/2019 16:51	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 16:51	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 16:51	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 16:51	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 16:51	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 16:51	WG1314770
Toluene	3.37		0.412	0.500	1	07/20/2019 16:51	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 16:51	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 16:51	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 16:51	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 16:51	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 16:51	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 16:51	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 16:51	WG1314770
1,2,4-Trimethylbenzene	145		0.123	0.500	1	07/20/2019 16:51	WG1314770
1,2,3-Trimethylbenzene	82.3		0.0739	0.500	1	07/20/2019 16:51	WG1314770
1,3,5-Trimethylbenzene	11.6		0.124	0.500	1	07/20/2019 16:51	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 16:51	WG1314770
Vinyl chloride	0.242	J U	0.118	0.500	1	07/20/2019 16:51	WG1314770
Xylenes, Total	131		0.316	1.50	1	07/20/2019 16:51	WG1314770
(S) Toluene-d8	84.4			80.0-120		07/20/2019 16:51	WG1314770
(S) Toluene-d8	103			80.0-120		07/24/2019 20:36	WG1316884
(S) 4-Bromofluorobenzene	87.4			77.0-126		07/20/2019 16:51	WG1314770
(S) 4-Bromofluorobenzene	101			77.0-126		07/24/2019 20:36	WG1316884
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 16:51	WG1314770
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/24/2019 20:36	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 10:35

L1120206

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2190		31.6	100	1	07/23/2019 17:48	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	99.8			78.0-120		07/23/2019 17:48	WG1316070

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 17:12	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 17:12	WG1314770
Benzene	15.5		0.0896	0.500	1	07/20/2019 17:12	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 17:12	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 17:12	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 17:12	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 17:12	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 17:12	WG1314770
n-Butylbenzene	3.10		0.143	0.500	1	07/20/2019 17:12	WG1314770
sec-Butylbenzene	2.39		0.134	0.500	1	07/20/2019 17:12	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 17:12	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 17:12	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 17:12	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 17:12	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 17:12	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 17:12	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 17:12	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 17:12	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 17:12	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 17:12	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 17:12	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 17:12	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 17:12	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 17:12	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 17:12	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 17:12	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 17:12	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 17:12	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 17:12	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 17:12	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 17:12	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 17:12	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 17:12	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 17:12	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 17:12	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 17:12	WG1314770
Di-isopropyl ether	0.893		0.0924	0.500	1	07/20/2019 17:12	WG1314770
Ethylbenzene	141		1.58	5.00	10	07/24/2019 23:22	WG1316884
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 17:12	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 17:12	WG1314770
n-Hexane	12.6		0.305	5.00	1	07/20/2019 17:12	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 17:12	WG1314770
Isopropylbenzene	18.7		0.126	0.500	1	07/20/2019 17:12	WG1314770
p-Isopropyltoluene	0.760		0.138	0.500	1	07/20/2019 17:12	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 17:12	WG1314770

JC 8/6/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 17:12	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 17:12	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 17:12	WG1314770
Naphthalene	115	J JO	0.174	2.50	1	07/20/2019 17:12	WG1314770
n-Propylbenzene	46.2		0.162	0.500	1	07/20/2019 17:12	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 17:12	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 17:12	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 17:12	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 17:12	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 17:12	WG1314770
Toluene	3.71		0.412	0.500	1	07/20/2019 17:12	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 17:12	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 17:12	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 17:12	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 17:12	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 17:12	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 17:12	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 17:12	WG1314770
1,2,4-Trimethylbenzene	157		0.123	0.500	1	07/20/2019 17:12	WG1314770
1,2,3-Trimethylbenzene	88.3		0.0739	0.500	1	07/20/2019 17:12	WG1314770
1,3,5-Trimethylbenzene	12.8		0.124	0.500	1	07/20/2019 17:12	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 17:12	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 17:12	WG1314770
Xylenes, Total	149		0.316	1.50	1	07/20/2019 17:12	WG1314770
(S) Toluene-d8	85.1			80.0-120		07/20/2019 17:12	WG1314770
(S) Toluene-d8	106			80.0-120		07/24/2019 23:22	WG1316884
(S) 4-Bromofluorobenzene	87.7			77.0-126		07/20/2019 17:12	WG1314770
(S) 4-Bromofluorobenzene	104			77.0-126		07/24/2019 23:22	WG1316884
(S) 1,2-Dichloroethane-d4	100			70.0-130		07/20/2019 17:12	WG1314770
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/24/2019 23:22	WG1316884

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/6/19



Collected date/time: 07/18/19 10:45

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	307000		2710	20000	1	07/24/2019 16:46	WG1315970

Sample Narrative:

L1120206-06 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	19300		51.9	1000	1	07/19/2019 22:13	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 22:13	WG1314262
Sulfate	30000		77.4	5000	1	07/19/2019 22:13	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	9560		102	1000	1	07/22/2019 16:13	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3800	J	15.0	100	1	07/21/2019 16:58	WG1314861
Manganese	750		0.250	5.00	1	07/21/2019 16:58	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	175	J+	31.6	100	1	07/23/2019 18:09	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		07/23/2019 18:09	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	5450		0.287	0.678	1	07/24/2019 12:36	WG1316410
Ethane	U		0.296	1.29	1	07/24/2019 12:36	WG1316410
Ethene	191		0.422	1.27	1	07/24/2019 12:36	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch	
	ug/l		ug/l	ug/l		date / time		
Acetone	2.11	J	J JO	1.05	25.0	1	07/20/2019 17:32	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 17:32	WG1314770	
Benzene	U		0.0896	0.500	1	07/20/2019 17:32	WG1314770	
Bromobenzene	U		0.133	0.500	1	07/20/2019 17:32	WG1314770	
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 17:32	WG1314770	
Bromochloromethane	U		0.145	0.500	1	07/20/2019 17:32	WG1314770	
Bromoform	U		0.186	0.500	1	07/20/2019 17:32	WG1314770	
Bromomethane	U		0.157	2.50	1	07/20/2019 17:32	WG1314770	
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 17:32	WG1314770	
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 17:32	WG1314770	
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 17:32	WG1314770	
Carbon disulfide	U		0.101	0.500	1	07/20/2019 17:32	WG1314770	
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 17:32	WG1314770	

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 10:45

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 17:32	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 17:32	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 17:32	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 17:32	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 17:32	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 17:32	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 17:32	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 17:32	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 17:32	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 17:32	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 17:32	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 17:32	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 17:32	WG1314770
1,1-Dichloroethene	1.33		0.188	0.500	1	07/20/2019 17:32	WG1314770
cis-1,2-Dichloroethene	219		1.87	10.0	20	07/24/2019 23:44	WG1316884
trans-1,2-Dichloroethene	2.49		0.152	0.500	1	07/20/2019 17:32	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 17:32	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 17:32	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 17:32	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 17:32	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 17:32	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 17:32	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 17:32	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 17:32	WG1314770
Ethylbenzene	U		3.16	10.0	20	07/24/2019 23:44	WG1316884
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 17:32	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 17:32	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 17:32	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 17:32	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 17:32	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 17:32	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 17:32	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 17:32	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 17:32	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 17:32	WG1314770
Naphthalene	5.94	J U	3.48	50.0	20	07/24/2019 23:44	WG1316884
n-Propylbenzene	U		3.24	10.0	20	07/24/2019 23:44	WG1316884
Styrene	U		0.117	0.500	1	07/20/2019 17:32	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 17:32	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 17:32	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 17:32	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 17:32	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 17:32	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 17:32	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 17:32	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 17:32	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 17:32	WG1314770
Trichloroethene	4.79		0.153	0.500	1	07/20/2019 17:32	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 17:32	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 17:32	WG1314770
1,2,4-Trimethylbenzene	U		2.46	10.0	20	07/24/2019 23:44	WG1316884
1,2,3-Trimethylbenzene	U		1.48	10.0	20	07/24/2019 23:44	WG1316884
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 17:32	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 10:45

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 17:32	WG1314770
Vinyl chloride	446		2.36	10.0	20	07/24/2019 23:44	WG1316884
Xylenes, Total	U		6.32	30.0	20	07/24/2019 23:44	WG1316884
(S) Toluene-d8	99.8			80.0-120		07/20/2019 17:32	WG1314770
(S) Toluene-d8	109			80.0-120		07/24/2019 23:44	WG1316884
(S) 4-Bromofluorobenzene	92.1			77.0-126		07/20/2019 17:32	WG1314770
(S) 4-Bromofluorobenzene	105			77.0-126		07/24/2019 23:44	WG1316884
(S) 1,2-Dichloroethane-d4	103			70.0-130		07/20/2019 17:32	WG1314770
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/24/2019 23:44	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1120206-06 WG1314770, WG1316884: Not all compounds reportable at lower dilution.
 L1120206-06 WG1314770, WG1316884: Cannot be reanalyzed at lower dilution due to high levels of target analytes.

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	167000		2710	20000	1	07/24/2019 16:56	WG1315970

Sample Narrative:

L1120206-07 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	5580		51.9	1000	1	07/19/2019 22:31	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 22:31	WG1314262
Sulfate	1830	J J	77.4	5000	1	07/19/2019 22:31	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4760		102	1000	1	07/22/2019 16:25	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	7160		15.0	100	1	07/21/2019 17:01	WG1314861
Manganese	353		0.250	5.00	1	07/21/2019 17:01	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/23/2019 18:29	WG1316070
(S) a,a,a-Trifluorotoluene(FID)	106			78.0-120		07/23/2019 18:29	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	290		0.287	0.678	1	07/24/2019 12:40	WG1316410
Ethane	U		0.296	1.29	1	07/24/2019 12:40	WG1316410
Ethene	U		0.422	1.27	1	07/24/2019 12:40	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.74	J JJO	1.05	25.0	1	07/20/2019 17:53	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 17:53	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 17:53	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 17:53	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 17:53	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 17:53	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 17:53	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 17:53	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 17:53	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 17:53	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 17:53	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 17:53	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 17:53	WG1314770

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 12:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 17:53	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 17:53	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 17:53	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 17:53	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 17:53	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 17:53	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 17:53	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 17:53	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 17:53	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 17:53	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 17:53	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 17:53	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 17:53	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 17:53	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/24/2019 20:58	WG1316884
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 17:53	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 17:53	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 17:53	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 17:53	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 17:53	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 17:53	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 17:53	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 17:53	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 17:53	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 17:53	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 17:53	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 17:53	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 17:53	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 17:53	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 17:53	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 17:53	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 17:53	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 17:53	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 17:53	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 17:53	WG1314770
Naphthalene	2.11	J J	0.174	2.50	1	07/24/2019 20:58	WG1316884
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 17:53	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 17:53	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 17:53	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 17:53	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 17:53	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 17:53	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 17:53	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 17:53	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 17:53	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 17:53	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 17:53	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 17:53	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 17:53	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 17:53	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 17:53	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 17:53	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 17:53	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 12:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 17:53	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/24/2019 20:58	WG1316884
Xylenes, Total	U		0.316	1.50	1	07/20/2019 17:53	WG1314770
(S) Toluene-d8	97.8			80.0-120		07/20/2019 17:53	WG1314770
(S) Toluene-d8	110			80.0-120		07/24/2019 20:58	WG1316884
(S) 4-Bromofluorobenzene	97.3			77.0-126		07/20/2019 17:53	WG1314770
(S) 4-Bromofluorobenzene	105			77.0-126		07/24/2019 20:58	WG1316884
(S) 1,2-Dichloroethane-d4	101			70.0-130		07/20/2019 17:53	WG1314770
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/24/2019 20:58	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	284000		2710	20000	1	07/24/2019 17:04	WG1315970

Sample Narrative:

L1120206-08 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	26500		51.9	1000	1	07/19/2019 23:24	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 23:24	WG1314262
Sulfate	14100		77.4	5000	1	07/19/2019 23:24	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1610	<u>B</u>	102	1000	1	07/22/2019 16:38	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1300		15.0	100	1	07/21/2019 17:21	WG1314861
Manganese	694		0.250	5.00	1	07/21/2019 17:21	WG1314861

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/23/2019 18:50	WG1316070
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	106			78.0-120		07/23/2019 18:50	WG1316070

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	139		0.287	0.678	1	07/24/2019 12:58	WG1316410
Ethane	U		0.296	1.29	1	07/24/2019 12:58	WG1316410
Ethene	U		0.422	1.27	1	07/24/2019 12:58	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.22	<u>J</u> <u>JJO</u>	1.05	25.0	1	07/20/2019 18:13	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 18:13	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 18:13	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 18:13	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 18:13	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 18:13	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 18:13	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 18:13	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 18:13	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 18:13	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 18:13	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 18:13	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 18:13	WG1314770

JC 8/6/19

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 07/18/19 14:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/20/2019 18:13	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 18:13	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 18:13	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 18:13	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 18:13	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 18:13	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 18:13	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 18:13	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 18:13	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 18:13	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 18:13	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 18:13	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 18:13	WG1314770
1,1-Dichloroethene	0.609		0.188	0.500	1	07/20/2019 18:13	WG1314770
cis-1,2-Dichloroethene	1.58		0.0933	0.500	1	07/20/2019 18:13	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 18:13	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 18:13	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 18:13	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 18:13	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 18:13	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 18:13	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 18:13	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 18:13	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 18:13	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 18:13	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 18:13	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 18:13	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 18:13	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 18:13	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 18:13	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 18:13	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 18:13	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 18:13	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 18:13	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 18:13	WG1314770
Naphthalene	0.353	J U	0.174	2.50	1	07/24/2019 21:46	WG1316884
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 18:13	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 18:13	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 18:13	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 18:13	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 18:13	WG1314770
Tetrachloroethene	0.264	J U	0.199	0.500	1	07/20/2019 18:13	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 18:13	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 18:13	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 18:13	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 18:13	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 18:13	WG1314770
Trichloroethene	1.53		0.153	0.500	1	07/20/2019 18:13	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 18:13	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 18:13	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 18:13	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 18:13	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 18:13	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 14:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/20/2019 18:13	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 18:13	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 18:13	WG1314770
(S) Toluene-d8	99.6			80.0-120		07/20/2019 18:13	WG1314770
(S) Toluene-d8	105			80.0-120		07/24/2019 21:46	WG1316884
(S) 4-Bromofluorobenzene	91.4			77.0-126		07/20/2019 18:13	WG1314770
(S) 4-Bromofluorobenzene	101			77.0-126		07/24/2019 21:46	WG1316884
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/20/2019 18:13	WG1314770
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/24/2019 21:46	WG1316884

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 14:15

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	601000		2710	20000	1	07/24/2019 20:29	WG1315970

Sample Narrative:

L1120206-09 WG1315970: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	22300		51.9	1000	1	07/19/2019 23:41	WG1314262
Nitrate	U		22.7	100	1	07/19/2019 23:41	WG1314262
Sulfate	4340	J J	77.4	5000	1	07/19/2019 23:41	WG1314262

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	6940		102	1000	1	07/22/2019 17:30	WG1315213

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	12400		15.0	100	1	07/21/2019 17:24	WG1314861
Manganese	409		0.250	5.00	1	07/21/2019 17:24	WG1314861

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	15500		2.87	6.78	10	07/25/2019 11:17	WG1317135
Ethane	16.4		0.296	1.29	1	07/24/2019 13:08	WG1316410
Ethene	68.3		0.422	1.27	1	07/24/2019 13:08	WG1316410

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.24	J JJO	1.05	25.0	1	07/20/2019 18:33	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 18:33	WG1314770
Benzene	12.2		0.0896	0.500	1	07/20/2019 18:33	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 18:33	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 18:33	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 18:33	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 18:33	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 18:33	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 18:33	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 18:33	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 18:33	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 18:33	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 18:33	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 18:33	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 18:33	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 18:33	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 18:33	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 18:33	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 18:33	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 18:33	WG1314770

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 14:15

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 18:33	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 18:33	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 18:33	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 18:33	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 18:33	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 18:33	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 18:33	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 18:33	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 18:33	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 18:33	WG1314770
cis-1,2-Dichloroethene	1.88		0.0933	0.500	1	07/20/2019 18:33	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 18:33	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 18:33	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 18:33	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 18:33	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 18:33	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 18:33	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 18:33	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 18:33	WG1314770
Di-isopropyl ether	0.161	J J	0.0924	0.500	1	07/20/2019 18:33	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 18:33	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 18:33	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 18:33	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 18:33	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 18:33	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 18:33	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 18:33	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 18:33	WG1314770
Methylene Chloride	U		1.07	2.50	1	07/20/2019 18:33	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 18:33	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 18:33	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 18:33	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 18:33	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 18:33	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 18:33	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 18:33	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 18:33	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 18:33	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 18:33	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 18:33	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 18:33	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 18:33	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 18:33	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 18:33	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 18:33	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 18:33	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 18:33	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 18:33	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 18:33	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 18:33	WG1314770
Vinyl chloride	108		0.118	0.500	1	07/20/2019 18:33	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 18:33	WG1314770
(S) Toluene-d8	99.6			80.0-120		07/20/2019 18:33	WG1314770
(S) 4-Bromofluorobenzene	94.9			77.0-126		07/20/2019 18:33	WG1314770
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 18:33	WG1314770

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/18/19 16:30

L1120206

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 14:34	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 14:34	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/20/2019 12:25	WG1314770
Acrylonitrile	U		0.873	5.00	1	07/20/2019 12:25	WG1314770
Benzene	U		0.0896	0.500	1	07/20/2019 12:25	WG1314770
Bromobenzene	U		0.133	0.500	1	07/20/2019 12:25	WG1314770
Bromodichloromethane	U		0.0800	0.500	1	07/20/2019 12:25	WG1314770
Bromochloromethane	U		0.145	0.500	1	07/20/2019 12:25	WG1314770
Bromoform	U		0.186	0.500	1	07/20/2019 12:25	WG1314770
Bromomethane	U		0.157	2.50	1	07/20/2019 12:25	WG1314770
n-Butylbenzene	U		0.143	0.500	1	07/20/2019 12:25	WG1314770
sec-Butylbenzene	U		0.134	0.500	1	07/20/2019 12:25	WG1314770
tert-Butylbenzene	U		0.183	0.500	1	07/20/2019 12:25	WG1314770
Carbon disulfide	U		0.101	0.500	1	07/20/2019 12:25	WG1314770
Carbon tetrachloride	U		0.159	0.500	1	07/20/2019 12:25	WG1314770
Chlorobenzene	U		0.140	0.500	1	07/20/2019 12:25	WG1314770
Chlorodibromomethane	U		0.128	0.500	1	07/20/2019 12:25	WG1314770
Chloroethane	U		0.141	2.50	1	07/20/2019 12:25	WG1314770
Chloroform	U		0.0860	0.500	1	07/20/2019 12:25	WG1314770
Chloromethane	U		0.153	1.25	1	07/20/2019 12:25	WG1314770
2-Chlorotoluene	U		0.111	0.500	1	07/20/2019 12:25	WG1314770
4-Chlorotoluene	U		0.0972	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/20/2019 12:25	WG1314770
1,2-Dibromoethane	U		0.193	0.500	1	07/20/2019 12:25	WG1314770
Dibromomethane	U		0.117	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dichlorobenzene	U		0.101	0.500	1	07/20/2019 12:25	WG1314770
1,3-Dichlorobenzene	U		0.130	0.500	1	07/20/2019 12:25	WG1314770
1,4-Dichlorobenzene	U		0.121	0.500	1	07/20/2019 12:25	WG1314770
Dichlorodifluoromethane	U		0.127	2.50	1	07/20/2019 12:25	WG1314770
1,1-Dichloroethane	U		0.114	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dichloroethane	U		0.108	0.500	1	07/20/2019 12:25	WG1314770
1,1-Dichloroethene	U		0.188	0.500	1	07/20/2019 12:25	WG1314770
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/20/2019 12:25	WG1314770
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/20/2019 12:25	WG1314770
1,2-Dichloropropane	U		0.190	0.500	1	07/20/2019 12:25	WG1314770
1,1-Dichloropropene	U		0.128	0.500	1	07/20/2019 12:25	WG1314770
1,3-Dichloropropane	U		0.147	1.00	1	07/20/2019 12:25	WG1314770
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/20/2019 12:25	WG1314770
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/20/2019 12:25	WG1314770
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/20/2019 12:25	WG1314770
2,2-Dichloropropane	U		0.0929	0.500	1	07/20/2019 12:25	WG1314770
Di-isopropyl ether	U		0.0924	0.500	1	07/20/2019 12:25	WG1314770
Ethylbenzene	U		0.158	0.500	1	07/20/2019 12:25	WG1314770
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/20/2019 12:25	WG1314770
2-Hexanone	U		0.757	5.00	1	07/20/2019 12:25	WG1314770
n-Hexane	U		0.305	5.00	1	07/20/2019 12:25	WG1314770
Iodomethane	U	UJ JO	0.377	10.0	1	07/20/2019 12:25	WG1314770
Isopropylbenzene	U		0.126	0.500	1	07/20/2019 12:25	WG1314770
p-Isopropyltoluene	U		0.138	0.500	1	07/20/2019 12:25	WG1314770
2-Butanone (MEK)	U		1.28	5.00	1	07/20/2019 12:25	WG1314770

JC 8/6/19



Collected date/time: 07/18/19 16:30

L1120206

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/20/2019 12:25	WG1314770
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/20/2019 12:25	WG1314770
Methyl tert-butyl ether	U		0.102	0.500	1	07/20/2019 12:25	WG1314770
Naphthalene	U	UJ JO	0.174	2.50	1	07/20/2019 12:25	WG1314770
n-Propylbenzene	U		0.162	0.500	1	07/20/2019 12:25	WG1314770
Styrene	U		0.117	0.500	1	07/20/2019 12:25	WG1314770
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/20/2019 12:25	WG1314770
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/20/2019 12:25	WG1314770
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/20/2019 12:25	WG1314770
Tetrachloroethene	U		0.199	0.500	1	07/20/2019 12:25	WG1314770
Toluene	U		0.412	0.500	1	07/20/2019 12:25	WG1314770
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/20/2019 12:25	WG1314770
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/20/2019 12:25	WG1314770
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/20/2019 12:25	WG1314770
1,1,2-Trichloroethane	U		0.186	0.500	1	07/20/2019 12:25	WG1314770
Trichloroethene	U		0.153	0.500	1	07/20/2019 12:25	WG1314770
Trichlorofluoromethane	U		0.130	2.50	1	07/20/2019 12:25	WG1314770
1,2,3-Trichloropropane	U		0.247	2.50	1	07/20/2019 12:25	WG1314770
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/20/2019 12:25	WG1314770
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/20/2019 12:25	WG1314770
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/20/2019 12:25	WG1314770
Vinyl acetate	U		0.645	5.00	1	07/20/2019 12:25	WG1314770
Vinyl chloride	U		0.118	0.500	1	07/20/2019 12:25	WG1314770
Xylenes, Total	U		0.316	1.50	1	07/20/2019 12:25	WG1314770
(S) Toluene-d8	101			80.0-120		07/20/2019 12:25	WG1314770
(S) 4-Bromofluorobenzene	92.9			77.0-126		07/20/2019 12:25	WG1314770
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/20/2019 12:25	WG1314770

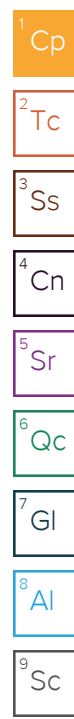
- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



ANALYTICAL REPORT

July 30, 2019



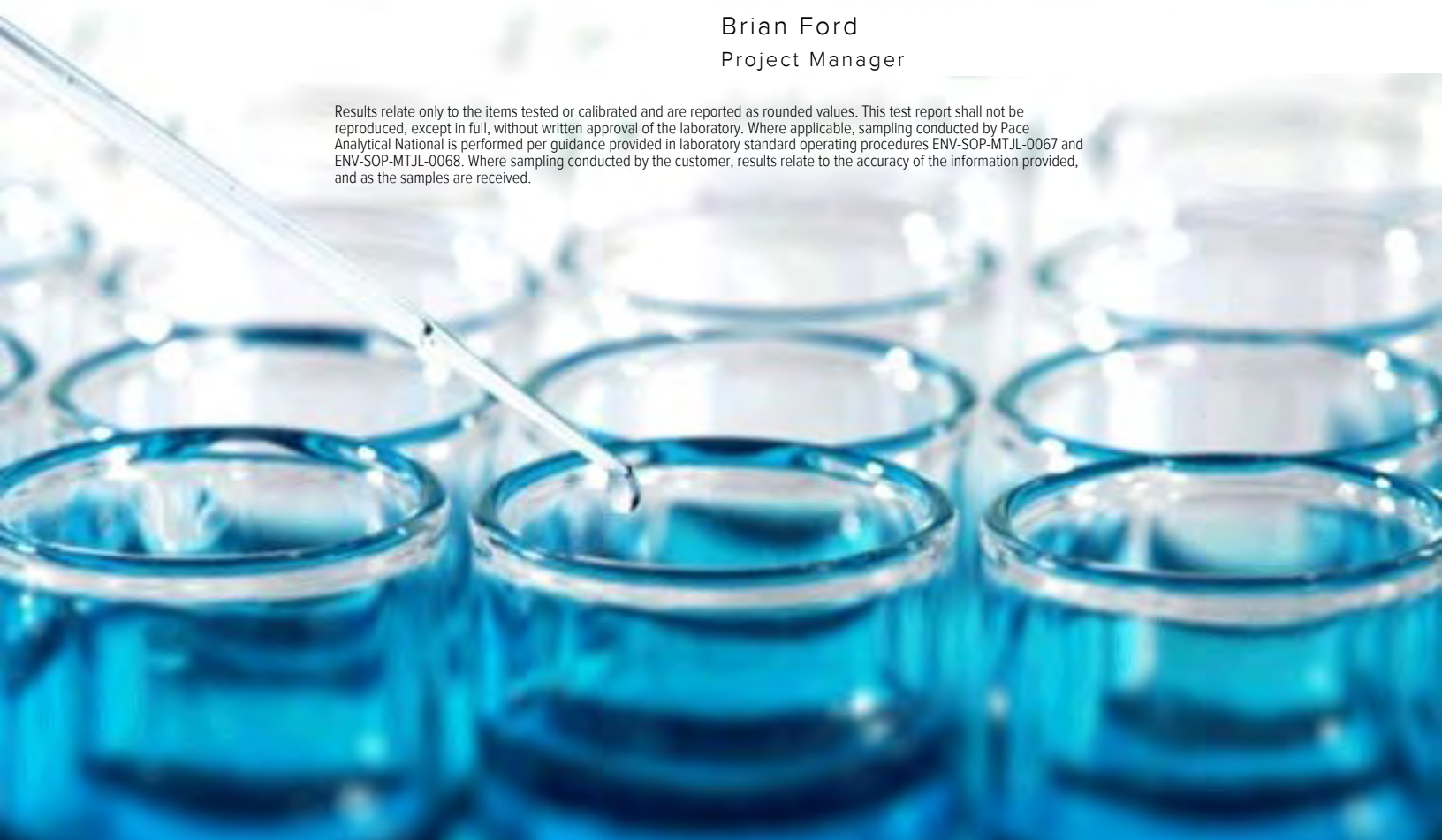
PES Environmental, Inc.- WA

Sample Delivery Group: L1120698
 Samples Received: 07/20/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

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MW-125-071819 L1120698-01 GW

Collected by Ben Hecht
Collected date/time 07/18/19 16:55
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 15:46	07/24/19 15:46	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 14:54	07/23/19 14:54	BMB	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW-158A-071919 L1120698-02 GW

Collected by Ben Hecht
Collected date/time 07/19/19 07:55
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317440	1	07/25/19 23:04	07/25/19 23:04	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314733	1	07/20/19 19:39	07/20/19 19:39	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 17:40	07/23/19 17:40	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1315585	1	07/22/19 22:32	07/23/19 10:08	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 16:10	07/24/19 16:10	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317137	1	07/25/19 16:57	07/25/19 16:57	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 15:16	07/23/19 15:16	BMB	Mt. Juliet, TN

MW-121-071919 L1120698-03 GW

Collected by Ben Hecht
Collected date/time 07/19/19 08:35
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 16:34	07/24/19 16:34	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 15:37	07/23/19 15:37	BMB	Mt. Juliet, TN

MW-138-071919 L1120698-04 GW

Collected by Ben Hecht
Collected date/time 07/19/19 10:05
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317440	1	07/25/19 23:11	07/25/19 23:11	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314733	1	07/20/19 19:53	07/20/19 19:53	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 17:54	07/23/19 17:54	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1315585	1	07/22/19 22:32	07/23/19 10:11	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 16:58	07/24/19 16:58	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317137	1	07/25/19 16:59	07/25/19 16:59	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 15:58	07/23/19 15:58	BMB	Mt. Juliet, TN

MW-146-071919 L1120698-05 GW

Collected by Ben Hecht
Collected date/time 07/19/19 10:25
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317440	1	07/25/19 23:18	07/25/19 23:18	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314733	1	07/20/19 20:08	07/20/19 20:08	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 18:21	07/23/19 18:21	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1315585	1	07/22/19 22:32	07/23/19 10:14	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 17:22	07/24/19 17:22	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317137	1	07/25/19 17:01	07/25/19 17:01	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 16:20	07/23/19 16:20	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319424	20	07/29/19 15:09	07/29/19 15:09	ADM	Mt. Juliet, TN



MW-119-071919 L1120698-06 GW

Collected by Ben Hecht
Collected date/time 07/19/19 10:25
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 16:41	07/23/19 16:41	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1318890	1	07/28/19 17:09	07/28/19 17:09	ADM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

MW-143-071919 L1120698-07 GW

Collected by Ben Hecht
Collected date/time 07/19/19 13:20
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317440	1	07/25/19 23:25	07/25/19 23:25	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314733	1	07/20/19 20:22	07/20/19 20:22	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 18:35	07/23/19 18:35	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1315585	1	07/22/19 22:32	07/23/19 10:17	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 17:46	07/24/19 17:46	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317137	1	07/25/19 17:09	07/25/19 17:09	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 17:02	07/23/19 17:02	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1318890	1	07/28/19 17:29	07/28/19 17:29	ADM	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

MW-106-071919 L1120698-08 GW

Collected by Ben Hecht
Collected date/time 07/19/19 13:35
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317440	1	07/25/19 23:32	07/25/19 23:32	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314733	1	07/20/19 20:51	07/20/19 20:51	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 20:18	07/23/19 20:18	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1315585	1	07/22/19 22:32	07/23/19 10:21	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 18:10	07/24/19 18:10	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317137	1	07/25/19 17:15	07/25/19 17:15	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 17:23	07/23/19 17:23	BMB	Mt. Juliet, TN

9 Sc

MW-913-071919 L1120698-09 GW

Collected by Ben Hecht
Collected date/time 07/19/19 12:00
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317440	1	07/25/19 23:48	07/25/19 23:48	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314733	1	07/20/19 21:49	07/20/19 21:49	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 20:31	07/23/19 20:31	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1315585	1	07/22/19 22:32	07/23/19 10:24	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 18:34	07/24/19 18:34	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317137	1	07/25/19 17:17	07/25/19 17:17	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 17:45	07/23/19 17:45	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1318890	20	07/28/19 17:49	07/28/19 17:49	ADM	Mt. Juliet, TN

EQ-071919 L1120698-10 GW

Collected by Ben Hecht
Collected date/time 07/19/19 15:00
Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317440	1	07/25/19 21:00	07/25/19 21:00	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1314733	1	07/20/19 22:03	07/20/19 22:03	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 20:45	07/23/19 20:45	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1315585	1	07/22/19 22:32	07/23/19 10:45	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 18:58	07/24/19 18:58	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317137	1	07/25/19 17:20	07/25/19 17:20	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 18:06	07/23/19 18:06	BMB	Mt. Juliet, TN



EQ-071919 L1120698-10 GW

Collected by Ben Hecht
 Collected date/time 07/19/19 15:00
 Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1318890	1	07/28/19 18:08	07/28/19 18:08	ADM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

TRIPBLANK-071919 L1120698-11 GW

Collected by Ben Hecht
 Collected date/time 07/19/19 00:00
 Received date/time 07/20/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1316734	1	07/24/19 14:58	07/24/19 14:58	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1315893	1	07/23/19 14:33	07/23/19 14:33	BMB	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/18/19 16:55

L1120698

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 15:46	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 15:46	WG1316734

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.89	<u>J</u>	1.05	25.0	1	07/23/2019 14:54	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 14:54	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 14:54	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 14:54	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 14:54	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 14:54	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 14:54	WG1315893
Bromomethane	U	<u>JO</u>	0.157	2.50	1	07/23/2019 14:54	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 14:54	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 14:54	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 14:54	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 14:54	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 14:54	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 14:54	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 14:54	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 14:54	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 14:54	WG1315893
Chloromethane	U	<u>JO</u>	0.153	1.25	1	07/23/2019 14:54	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 14:54	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 14:54	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 14:54	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 14:54	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 14:54	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 14:54	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 14:54	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 14:54	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 14:54	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 14:54	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 14:54	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 14:54	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 14:54	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 14:54	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 14:54	WG1315893
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/23/2019 14:54	WG1315893
2,2-Dichloropropane	U	<u>JO</u>	0.0929	0.500	1	07/23/2019 14:54	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 14:54	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 14:54	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 14:54	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 14:54	WG1315893
n-Hexane	U	<u>JO</u>	0.305	5.00	1	07/23/2019 14:54	WG1315893
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/23/2019 14:54	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 14:54	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 14:54	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 14:54	WG1315893

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/18/19 16:55

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	07/23/2019 14:54	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 14:54	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 14:54	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 14:54	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 14:54	WG1315893
Styrene	U	<u>JO</u>	0.117	0.500	1	07/23/2019 14:54	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 14:54	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 14:54	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 14:54	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 14:54	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 14:54	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 14:54	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 14:54	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 14:54	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 14:54	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 14:54	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 14:54	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 14:54	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 14:54	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 14:54	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 14:54	WG1315893
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 14:54	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 14:54	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 14:54	WG1315893
(S) Toluene-d8	102			80.0-120		07/23/2019 14:54	WG1315893
(S) 4-Bromofluorobenzene	97.5			77.0-126		07/23/2019 14:54	WG1315893
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		07/23/2019 14:54	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	330000		2710	20000	1	07/25/2019 23:04	WG1317440

Sample Narrative:

L1120698-02 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	26900		51.9	1000	1	07/20/2019 19:39	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 19:39	WG1314733
Sulfate	19800		77.4	5000	1	07/20/2019 19:39	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4640		102	1000	1	07/23/2019 17:40	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	69200		15.0	100	1	07/23/2019 10:08	WG1315585
Manganese	1370		0.250	5.00	1	07/23/2019 10:08	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 16:10	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 16:10	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	222		0.287	0.678	1	07/25/2019 16:57	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 16:57	WG1317137
Ethene	5.86		0.422	1.27	1	07/25/2019 16:57	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.79	J	1.05	25.0	1	07/23/2019 15:16	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 15:16	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 15:16	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 15:16	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 15:16	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 15:16	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 15:16	WG1315893
Bromomethane	U	JO	0.157	2.50	1	07/23/2019 15:16	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 15:16	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 15:16	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 15:16	WG1315893
Carbon disulfide	0.437	J	0.101	0.500	1	07/23/2019 15:16	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 15:16	WG1315893

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/19/19 07:55

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 15:16	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 15:16	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 15:16	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 15:16	WG1315893
Chloromethane	U	JO	0.153	1.25	1	07/23/2019 15:16	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 15:16	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 15:16	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 15:16	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 15:16	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 15:16	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 15:16	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 15:16	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 15:16	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 15:16	WG1315893
cis-1,2-Dichloroethene	0.290	J	0.0933	0.500	1	07/23/2019 15:16	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 15:16	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 15:16	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 15:16	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 15:16	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 15:16	WG1315893
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/23/2019 15:16	WG1315893
2,2-Dichloropropane	U	JO	0.0929	0.500	1	07/23/2019 15:16	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 15:16	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 15:16	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 15:16	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 15:16	WG1315893
n-Hexane	U	JO	0.305	5.00	1	07/23/2019 15:16	WG1315893
Iodomethane	U	JO	0.377	10.0	1	07/23/2019 15:16	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 15:16	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 15:16	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 15:16	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 15:16	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 15:16	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 15:16	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 15:16	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 15:16	WG1315893
Styrene	U	JO	0.117	0.500	1	07/23/2019 15:16	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 15:16	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 15:16	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 15:16	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 15:16	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 15:16	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 15:16	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 15:16	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 15:16	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 15:16	WG1315893
Trichloroethene	0.177	J	0.153	0.500	1	07/23/2019 15:16	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 15:16	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 15:16	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 15:16	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 15:16	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 15:16	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 07:55

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 15:16	WG1315893
Vinyl chloride	1.24		0.118	0.500	1	07/23/2019 15:16	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 15:16	WG1315893
<i>(S) Toluene-d8</i>	95.3			80.0-120		07/23/2019 15:16	WG1315893
<i>(S) 4-Bromofluorobenzene</i>	88.9			77.0-126		07/23/2019 15:16	WG1315893
<i>(S) 1,2-Dichloroethane-d4</i>	94.9			70.0-130		07/23/2019 15:16	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 08:35

L1120698

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 16:34	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 16:34	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.70	J	1.05	25.0	1	07/23/2019 15:37	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 15:37	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 15:37	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 15:37	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 15:37	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 15:37	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 15:37	WG1315893
Bromomethane	U	JO	0.157	2.50	1	07/23/2019 15:37	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 15:37	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 15:37	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 15:37	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 15:37	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 15:37	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 15:37	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 15:37	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 15:37	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 15:37	WG1315893
Chloromethane	U	JO	0.153	1.25	1	07/23/2019 15:37	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 15:37	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 15:37	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 15:37	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 15:37	WG1315893
1,3-Dichlorobenzene	0.133	J	0.130	0.500	1	07/23/2019 15:37	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 15:37	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 15:37	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 15:37	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 15:37	WG1315893
cis-1,2-Dichloroethene	1.01		0.0933	0.500	1	07/23/2019 15:37	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 15:37	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 15:37	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 15:37	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 15:37	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 15:37	WG1315893
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/23/2019 15:37	WG1315893
2,2-Dichloropropane	U	JO	0.0929	0.500	1	07/23/2019 15:37	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 15:37	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 15:37	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 15:37	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 15:37	WG1315893
n-Hexane	U	JO	0.305	5.00	1	07/23/2019 15:37	WG1315893
Iodomethane	U	JO	0.377	10.0	1	07/23/2019 15:37	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 15:37	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 15:37	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 15:37	WG1315893



Collected date/time: 07/19/19 08:35

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/23/2019 15:37	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 15:37	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 15:37	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 15:37	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 15:37	WG1315893
Styrene	U	<u>JO</u>	0.117	0.500	1	07/23/2019 15:37	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 15:37	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 15:37	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 15:37	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 15:37	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 15:37	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 15:37	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 15:37	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 15:37	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 15:37	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 15:37	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 15:37	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 15:37	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 15:37	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 15:37	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 15:37	WG1315893
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 15:37	WG1315893
Vinyl chloride	5.04		0.118	0.500	1	07/23/2019 15:37	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 15:37	WG1315893
(S) Toluene-d8	105			80.0-120		07/23/2019 15:37	WG1315893
(S) 4-Bromofluorobenzene	109			77.0-126		07/23/2019 15:37	WG1315893
(S) 1,2-Dichloroethane-d4	99.4			70.0-130		07/23/2019 15:37	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	133000		2710	20000	1	07/25/2019 23:11	WG1317440

Sample Narrative:

L1120698-04 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14900		51.9	1000	1	07/20/2019 19:53	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 19:53	WG1314733
Sulfate	53400		77.4	5000	1	07/20/2019 19:53	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1400	<u>B</u>	102	1000	1	07/23/2019 17:54	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	11700		15.0	100	1	07/23/2019 10:11	WG1315585
Manganese	560		0.250	5.00	1	07/23/2019 10:11	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 16:58	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 16:58	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	74.2		0.287	0.678	1	07/25/2019 16:59	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 16:59	WG1317137
Ethene	U		0.422	1.27	1	07/25/2019 16:59	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.82	<u>J</u>	1.05	25.0	1	07/23/2019 15:58	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 15:58	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 15:58	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 15:58	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 15:58	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 15:58	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 15:58	WG1315893
Bromomethane	U	<u>JO</u>	0.157	2.50	1	07/23/2019 15:58	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 15:58	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 15:58	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 15:58	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 15:58	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 15:58	WG1315893

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 07/19/19 10:05

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 15:58	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 15:58	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 15:58	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 15:58	WG1315893
Chloromethane	U	JO	0.153	1.25	1	07/23/2019 15:58	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 15:58	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 15:58	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 15:58	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 15:58	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 15:58	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 15:58	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 15:58	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 15:58	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 15:58	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 15:58	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 15:58	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 15:58	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 15:58	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 15:58	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 15:58	WG1315893
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/23/2019 15:58	WG1315893
2,2-Dichloropropane	U	JO	0.0929	0.500	1	07/23/2019 15:58	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 15:58	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 15:58	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 15:58	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 15:58	WG1315893
n-Hexane	U	JO	0.305	5.00	1	07/23/2019 15:58	WG1315893
Iodomethane	U	JO	0.377	10.0	1	07/23/2019 15:58	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 15:58	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 15:58	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 15:58	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 15:58	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 15:58	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 15:58	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 15:58	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 15:58	WG1315893
Styrene	U	JO	0.117	0.500	1	07/23/2019 15:58	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 15:58	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 15:58	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 15:58	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 15:58	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 15:58	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 15:58	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 15:58	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 15:58	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 15:58	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 15:58	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 15:58	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 15:58	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 15:58	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 15:58	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 15:58	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/19/19 10:05

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>J0</u>	0.645	5.00	1	07/23/2019 15:58	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 15:58	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 15:58	WG1315893
<i>(S) Toluene-d8</i>	125	<u>J1</u>		80.0-120		07/23/2019 15:58	WG1315893
<i>(S) 4-Bromofluorobenzene</i>	122			77.0-126		07/23/2019 15:58	WG1315893
<i>(S) 1,2-Dichloroethane-d4</i>	96.9			70.0-130		07/23/2019 15:58	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	310000		2710	20000	1	07/25/2019 23:18	WG1317440

Sample Narrative:

L1120698-05 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17200		51.9	1000	1	07/20/2019 20:08	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 20:08	WG1314733
Sulfate	23900		77.4	5000	1	07/20/2019 20:08	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3780		102	1000	1	07/23/2019 18:21	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2870		15.0	100	1	07/23/2019 10:14	WG1315585
Manganese	800		0.250	5.00	1	07/23/2019 10:14	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	46.3	J	31.6	100	1	07/24/2019 17:22	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 17:22	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	6490		0.287	0.678	1	07/25/2019 17:01	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:01	WG1317137
Ethene	463		0.422	1.27	1	07/25/2019 17:01	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/23/2019 16:20	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 16:20	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 16:20	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 16:20	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 16:20	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 16:20	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 16:20	WG1315893
Bromomethane	U	JO	0.157	2.50	1	07/23/2019 16:20	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 16:20	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 16:20	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 16:20	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 16:20	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 16:20	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 10:25

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 16:20	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 16:20	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 16:20	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 16:20	WG1315893
Chloromethane	U	JO	0.153	1.25	1	07/23/2019 16:20	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 16:20	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 16:20	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 16:20	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 16:20	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 16:20	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 16:20	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 16:20	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 16:20	WG1315893
1,1-Dichloroethene	1.15		0.188	0.500	1	07/23/2019 16:20	WG1315893
cis-1,2-Dichloroethene	257		1.87	10.0	20	07/29/2019 15:09	WG1319424
trans-1,2-Dichloroethene	3.29		0.152	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 16:20	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 16:20	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 16:20	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 16:20	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 16:20	WG1315893
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/23/2019 16:20	WG1315893
2,2-Dichloropropane	U	JO	0.0929	0.500	1	07/23/2019 16:20	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 16:20	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 16:20	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 16:20	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 16:20	WG1315893
n-Hexane	U	JO	0.305	5.00	1	07/23/2019 16:20	WG1315893
Iodomethane	U	JO	0.377	10.0	1	07/23/2019 16:20	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 16:20	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 16:20	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 16:20	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 16:20	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 16:20	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 16:20	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 16:20	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 16:20	WG1315893
Styrene	U	JO	0.117	0.500	1	07/23/2019 16:20	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 16:20	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 16:20	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 16:20	WG1315893
Tetrachloroethene	3.08		0.199	0.500	1	07/23/2019 16:20	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 16:20	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 16:20	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 16:20	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 16:20	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 16:20	WG1315893
Trichloroethene	14.4		0.153	0.500	1	07/23/2019 16:20	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 16:20	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 16:20	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 16:20	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 16:20	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 16:20	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/19/19 10:25

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 16:20	WG1315893
Vinyl chloride	580		2.36	10.0	20	07/29/2019 15:09	WG1319424
Xylenes, Total	U		0.316	1.50	1	07/23/2019 16:20	WG1315893
<i>(S) Toluene-d8</i>	109			80.0-120		07/23/2019 16:20	WG1315893
<i>(S) Toluene-d8</i>	105			80.0-120		07/29/2019 15:09	WG1319424
<i>(S) 4-Bromofluorobenzene</i>	88.7			77.0-126		07/23/2019 16:20	WG1315893
<i>(S) 4-Bromofluorobenzene</i>	96.6			77.0-126		07/29/2019 15:09	WG1319424
<i>(S) 1,2-Dichloroethane-d4</i>	93.3			70.0-130		07/23/2019 16:20	WG1315893
<i>(S) 1,2-Dichloroethane-d4</i>	117			70.0-130		07/29/2019 15:09	WG1319424

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.73	<u>J</u>	1.05	25.0	1	07/23/2019 16:41	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 16:41	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 16:41	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 16:41	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 16:41	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 16:41	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 16:41	WG1315893
Bromomethane	U	<u>JO</u>	0.157	2.50	1	07/23/2019 16:41	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 16:41	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 16:41	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 16:41	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 16:41	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 16:41	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 16:41	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 16:41	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 16:41	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 16:41	WG1315893
Chloromethane	U	<u>JO</u>	0.153	1.25	1	07/23/2019 16:41	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 16:41	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 16:41	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 16:41	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 16:41	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 16:41	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 16:41	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 16:41	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 16:41	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 16:41	WG1315893
cis-1,2-Dichloroethene	0.340	<u>J</u>	0.0933	0.500	1	07/28/2019 17:09	WG1318890
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 16:41	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 16:41	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 16:41	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 16:41	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 16:41	WG1315893
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/23/2019 16:41	WG1315893
2,2-Dichloropropane	U	<u>JO</u>	0.0929	0.500	1	07/23/2019 16:41	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 16:41	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 16:41	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 16:41	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 16:41	WG1315893
n-Hexane	U	<u>JO</u>	0.305	5.00	1	07/23/2019 16:41	WG1315893
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/23/2019 16:41	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 16:41	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 16:41	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 16:41	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 16:41	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 16:41	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 16:41	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 16:41	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 16:41	WG1315893
Styrene	U	<u>JO</u>	0.117	0.500	1	07/23/2019 16:41	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 16:41	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 16:41	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 10:25

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 16:41	WG1315893
Tetrachloroethene	0.303	J	0.199	0.500	1	07/23/2019 16:41	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 16:41	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 16:41	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 16:41	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 16:41	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 16:41	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 16:41	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 16:41	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 16:41	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 16:41	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 16:41	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 16:41	WG1315893
Vinyl acetate	U	JO	0.645	5.00	1	07/23/2019 16:41	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/28/2019 17:09	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 16:41	WG1315893
(S) Toluene-d8	128	J1		80.0-120		07/23/2019 16:41	WG1315893
(S) Toluene-d8	110			80.0-120		07/28/2019 17:09	WG1318890
(S) 4-Bromofluorobenzene	103			77.0-126		07/23/2019 16:41	WG1315893
(S) 4-Bromofluorobenzene	98.4			77.0-126		07/28/2019 17:09	WG1318890
(S) 1,2-Dichloroethane-d4	96.2			70.0-130		07/23/2019 16:41	WG1315893
(S) 1,2-Dichloroethane-d4	112			70.0-130		07/28/2019 17:09	WG1318890

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	403000		2710	20000	1	07/25/2019 23:25	WG1317440

Sample Narrative:

L1120698-07 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	58200		51.9	1000	1	07/20/2019 20:22	WG1314733
Nitrate	140		22.7	100	1	07/20/2019 20:22	WG1314733
Sulfate	6910		77.4	5000	1	07/20/2019 20:22	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12700		102	1000	1	07/23/2019 18:35	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2070		15.0	100	1	07/23/2019 10:17	WG1315585
Manganese	398		0.250	5.00	1	07/23/2019 10:17	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 17:46	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 17:46	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	4790		0.287	0.678	1	07/25/2019 17:09	WG1317137
Ethane	96.5		0.296	1.29	1	07/25/2019 17:09	WG1317137
Ethene	14.4		0.422	1.27	1	07/25/2019 17:09	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.80	J	1.05	25.0	1	07/23/2019 17:02	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 17:02	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 17:02	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 17:02	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 17:02	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 17:02	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 17:02	WG1315893
Bromomethane	U	JO	0.157	2.50	1	07/23/2019 17:02	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 17:02	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 17:02	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 17:02	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 17:02	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 17:02	WG1315893

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 07/19/19 13:20

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 17:02	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 17:02	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 17:02	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 17:02	WG1315893
Chloromethane	U	JO	0.153	1.25	1	07/23/2019 17:02	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 17:02	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 17:02	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 17:02	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 17:02	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 17:02	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 17:02	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 17:02	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 17:02	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 17:02	WG1315893
cis-1,2-Dichloroethene	0.309	J	0.0933	0.500	1	07/28/2019 17:29	WG1318890
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 17:02	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 17:02	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 17:02	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 17:02	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 17:02	WG1315893
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/23/2019 17:02	WG1315893
2,2-Dichloropropane	U	JO	0.0929	0.500	1	07/23/2019 17:02	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 17:02	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 17:02	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 17:02	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 17:02	WG1315893
n-Hexane	U	JO	0.305	5.00	1	07/23/2019 17:02	WG1315893
Iodomethane	U	JO	0.377	10.0	1	07/23/2019 17:02	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 17:02	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 17:02	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 17:02	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 17:02	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 17:02	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 17:02	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 17:02	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 17:02	WG1315893
Styrene	U	JO	0.117	0.500	1	07/23/2019 17:02	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 17:02	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 17:02	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 17:02	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 17:02	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 17:02	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 17:02	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 17:02	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 17:02	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 17:02	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 17:02	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 17:02	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 17:02	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 17:02	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 17:02	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 17:02	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 13:20

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 17:02	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/28/2019 17:29	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 17:02	WG1315893
(S) Toluene-d8	103			80.0-120		07/23/2019 17:02	WG1315893
(S) Toluene-d8	106			80.0-120		07/28/2019 17:29	WG1318890
(S) 4-Bromofluorobenzene	86.0			77.0-126		07/23/2019 17:02	WG1315893
(S) 4-Bromofluorobenzene	99.0			77.0-126		07/28/2019 17:29	WG1318890
(S) 1,2-Dichloroethane-d4	99.7			70.0-130		07/23/2019 17:02	WG1315893
(S) 1,2-Dichloroethane-d4	116			70.0-130		07/28/2019 17:29	WG1318890

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	266000		2710	20000	1	07/25/2019 23:32	WG1317440

Sample Narrative:

L1120698-08 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	24400		51.9	1000	1	07/20/2019 20:51	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 20:51	WG1314733
Sulfate	15000		77.4	5000	1	07/20/2019 20:51	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2230		102	1000	1	07/23/2019 20:18	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	13700		15.0	100	1	07/23/2019 10:21	WG1315585
Manganese	972		0.250	5.00	1	07/23/2019 10:21	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 18:10	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 18:10	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	39.5		0.287	0.678	1	07/25/2019 17:15	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:15	WG1317137
Ethene	U		0.422	1.27	1	07/25/2019 17:15	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.16	J	1.05	25.0	1	07/23/2019 17:23	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 17:23	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 17:23	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 17:23	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 17:23	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 17:23	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 17:23	WG1315893
Bromomethane	U	JO	0.157	2.50	1	07/23/2019 17:23	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 17:23	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 17:23	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 17:23	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 17:23	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 17:23	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 13:35

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 17:23	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 17:23	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 17:23	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 17:23	WG1315893
Chloromethane	U	JO	0.153	1.25	1	07/23/2019 17:23	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 17:23	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 17:23	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 17:23	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 17:23	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 17:23	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 17:23	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 17:23	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 17:23	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 17:23	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 17:23	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 17:23	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 17:23	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 17:23	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 17:23	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 17:23	WG1315893
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/23/2019 17:23	WG1315893
2,2-Dichloropropane	U	JO	0.0929	0.500	1	07/23/2019 17:23	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 17:23	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 17:23	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 17:23	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 17:23	WG1315893
n-Hexane	U	JO	0.305	5.00	1	07/23/2019 17:23	WG1315893
Iodomethane	U	JO	0.377	10.0	1	07/23/2019 17:23	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 17:23	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 17:23	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 17:23	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 17:23	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 17:23	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 17:23	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 17:23	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 17:23	WG1315893
Styrene	U	JO	0.117	0.500	1	07/23/2019 17:23	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 17:23	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 17:23	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 17:23	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 17:23	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 17:23	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 17:23	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 17:23	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 17:23	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 17:23	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 17:23	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 17:23	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 17:23	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 17:23	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 17:23	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 17:23	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/19/19 13:35

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 17:23	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 17:23	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 17:23	WG1315893
(S) Toluene-d8	120			80.0-120		07/23/2019 17:23	WG1315893
(S) 4-Bromofluorobenzene	95.7			77.0-126		07/23/2019 17:23	WG1315893
(S) 1,2-Dichloroethane-d4	98.9			70.0-130		07/23/2019 17:23	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	307000		2710	20000	1	07/25/2019 23:48	WG1317440

Sample Narrative:

L1120698-09 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17200		51.9	1000	1	07/20/2019 21:49	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 21:49	WG1314733
Sulfate	24200		77.4	5000	1	07/20/2019 21:49	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3670		102	1000	1	07/23/2019 20:31	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2950		15.0	100	1	07/23/2019 10:24	WG1315585
Manganese	817		0.250	5.00	1	07/23/2019 10:24	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	262		31.6	100	1	07/24/2019 18:34	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 18:34	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5480		0.287	0.678	1	07/25/2019 17:17	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:17	WG1317137
Ethene	387		0.422	1.27	1	07/25/2019 17:17	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/23/2019 17:45	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 17:45	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 17:45	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 17:45	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 17:45	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 17:45	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 17:45	WG1315893
Bromomethane	U	JO	0.157	2.50	1	07/23/2019 17:45	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 17:45	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 17:45	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 17:45	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 17:45	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 17:45	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 12:00

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 17:45	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 17:45	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 17:45	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 17:45	WG1315893
Chloromethane	U	JO	0.153	1.25	1	07/23/2019 17:45	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 17:45	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 17:45	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 17:45	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 17:45	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 17:45	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 17:45	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 17:45	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 17:45	WG1315893
1,1-Dichloroethene	1.37		0.188	0.500	1	07/23/2019 17:45	WG1315893
cis-1,2-Dichloroethene	371		1.87	10.0	20	07/28/2019 17:49	WG1318890
trans-1,2-Dichloroethene	3.50		0.152	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 17:45	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 17:45	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 17:45	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 17:45	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 17:45	WG1315893
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	07/23/2019 17:45	WG1315893
2,2-Dichloropropane	U	JO	0.0929	0.500	1	07/23/2019 17:45	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 17:45	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 17:45	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 17:45	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 17:45	WG1315893
n-Hexane	U	JO	0.305	5.00	1	07/23/2019 17:45	WG1315893
Iodomethane	U	JO	0.377	10.0	1	07/23/2019 17:45	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 17:45	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 17:45	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 17:45	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 17:45	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 17:45	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 17:45	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 17:45	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 17:45	WG1315893
Styrene	U	JO	0.117	0.500	1	07/23/2019 17:45	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 17:45	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 17:45	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 17:45	WG1315893
Tetrachloroethene	2.80		0.199	0.500	1	07/23/2019 17:45	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 17:45	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 17:45	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 17:45	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 17:45	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 17:45	WG1315893
Trichloroethene	15.9		0.153	0.500	1	07/23/2019 17:45	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 17:45	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 17:45	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 17:45	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 17:45	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 17:45	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/19/19 12:00

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 17:45	WG1315893
Vinyl chloride	842		2.36	10.0	20	07/28/2019 17:49	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 17:45	WG1315893
<i>(S) Toluene-d8</i>	105			80.0-120		07/23/2019 17:45	WG1315893
<i>(S) Toluene-d8</i>	104			80.0-120		07/28/2019 17:49	WG1318890
<i>(S) 4-Bromofluorobenzene</i>	106			77.0-126		07/23/2019 17:45	WG1315893
<i>(S) 4-Bromofluorobenzene</i>	95.8			77.0-126		07/28/2019 17:49	WG1318890
<i>(S) 1,2-Dichloroethane-d4</i>	94.0			70.0-130		07/23/2019 17:45	WG1315893
<i>(S) 1,2-Dichloroethane-d4</i>	115			70.0-130		07/28/2019 17:49	WG1318890

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	4460	<u>BJ</u>	2710	20000	1	07/25/2019 21:00	WG1317440

Sample Narrative:

L1120698-10 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	195	<u>J</u>	51.9	1000	1	07/20/2019 22:03	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 22:03	WG1314733
Sulfate	U		77.4	5000	1	07/20/2019 22:03	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	234	<u>BJ</u>	102	1000	1	07/23/2019 20:45	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	31.4	<u>J</u>	15.0	100	1	07/23/2019 10:45	WG1315585
Manganese	1.38	<u>J</u>	0.250	5.00	1	07/23/2019 10:45	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

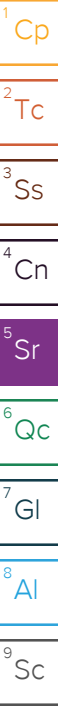
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 18:58	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 18:58	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	218		0.287	0.678	1	07/25/2019 17:20	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:20	WG1317137
Ethene	14.1		0.422	1.27	1	07/25/2019 17:20	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.98	<u>J</u>	1.05	25.0	1	07/23/2019 18:06	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 18:06	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 18:06	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 18:06	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 18:06	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 18:06	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 18:06	WG1315893
Bromomethane	U	<u>JO</u>	0.157	2.50	1	07/23/2019 18:06	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 18:06	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 18:06	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 18:06	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 18:06	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 18:06	WG1315893





Collected date/time: 07/19/19 15:00

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 18:06	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 18:06	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 18:06	WG1315893
Chloroform	0.295	<u>J</u>	0.0860	0.500	1	07/23/2019 18:06	WG1315893
Chloromethane	U	<u>JO</u>	0.153	1.25	1	07/23/2019 18:06	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 18:06	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 18:06	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 18:06	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 18:06	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 18:06	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 18:06	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 18:06	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 18:06	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 18:06	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/28/2019 18:08	WG1318890
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 18:06	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 18:06	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 18:06	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 18:06	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 18:06	WG1315893
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/23/2019 18:06	WG1315893
2,2-Dichloropropane	U	<u>JO</u>	0.0929	0.500	1	07/23/2019 18:06	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 18:06	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 18:06	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 18:06	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 18:06	WG1315893
n-Hexane	U	<u>JO</u>	0.305	5.00	1	07/23/2019 18:06	WG1315893
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/23/2019 18:06	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 18:06	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 18:06	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 18:06	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 18:06	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 18:06	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 18:06	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 18:06	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 18:06	WG1315893
Styrene	U	<u>JO</u>	0.117	0.500	1	07/23/2019 18:06	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 18:06	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 18:06	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 18:06	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 18:06	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 18:06	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 18:06	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 18:06	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 18:06	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 18:06	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 18:06	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 18:06	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 18:06	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 18:06	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 18:06	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 18:06	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 15:00

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 18:06	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/28/2019 18:08	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 18:06	WG1315893
(S) Toluene-d8	106			80.0-120		07/23/2019 18:06	WG1315893
(S) Toluene-d8	108			80.0-120		07/28/2019 18:08	WG1318890
(S) 4-Bromofluorobenzene	79.6			77.0-126		07/23/2019 18:06	WG1315893
(S) 4-Bromofluorobenzene	98.4			77.0-126		07/28/2019 18:08	WG1318890
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		07/23/2019 18:06	WG1315893
(S) 1,2-Dichloroethane-d4	112			70.0-130		07/28/2019 18:08	WG1318890

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/19/19 00:00

L1120698

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 14:58	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 14:58	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/23/2019 14:33	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 14:33	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 14:33	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 14:33	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 14:33	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 14:33	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 14:33	WG1315893
Bromomethane	U	<u>JO</u>	0.157	2.50	1	07/23/2019 14:33	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 14:33	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 14:33	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 14:33	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 14:33	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 14:33	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 14:33	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 14:33	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 14:33	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 14:33	WG1315893
Chloromethane	U	<u>JO</u>	0.153	1.25	1	07/23/2019 14:33	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 14:33	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 14:33	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 14:33	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 14:33	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 14:33	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 14:33	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 14:33	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 14:33	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 14:33	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 14:33	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 14:33	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 14:33	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 14:33	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 14:33	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 14:33	WG1315893
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/23/2019 14:33	WG1315893
2,2-Dichloropropane	U	<u>JO</u>	0.0929	0.500	1	07/23/2019 14:33	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 14:33	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 14:33	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 14:33	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 14:33	WG1315893
n-Hexane	U	<u>JO</u>	0.305	5.00	1	07/23/2019 14:33	WG1315893
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/23/2019 14:33	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 14:33	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 14:33	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 14:33	WG1315893



Collected date/time: 07/19/19 00:00

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/23/2019 14:33	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 14:33	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 14:33	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 14:33	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 14:33	WG1315893
Styrene	U	<u>JO</u>	0.117	0.500	1	07/23/2019 14:33	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 14:33	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 14:33	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 14:33	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 14:33	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 14:33	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 14:33	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 14:33	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 14:33	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 14:33	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 14:33	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 14:33	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 14:33	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 14:33	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 14:33	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 14:33	WG1315893
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 14:33	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 14:33	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 14:33	WG1315893
(S) Toluene-d8	104			80.0-120		07/23/2019 14:33	WG1315893
(S) 4-Bromofluorobenzene	106			77.0-126		07/23/2019 14:33	WG1315893
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		07/23/2019 14:33	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3434474-1 07/25/19 20:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	2810	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1120670-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1120670-07 07/25/19 21:15 • (DUP) R3434474-2 07/25/19 21:24

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	259000	260000	1	0.533		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1122061-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1122061-01 07/25/19 23:55 • (DUP) R3434474-5 07/26/19 00:02

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	64900	64100	1	1.18		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3434474-3 07/25/19 22:05

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	100000	100	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3432718-1 07/20/19 09:25

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	88.4	J	77.4	5000

L1120682-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1120682-04 07/20/19 16:17 • (DUP) R3432718-3 07/20/19 16:31

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Chloride	40800	40600	1	0.485				15
Nitrate	960	946	1	1.41				15
Sulfate	13400	13300	1	0.271				15

L1120698-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1120698-07 07/20/19 20:22 • (DUP) R3432718-6 07/20/19 20:36

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	ug/l		%	%		%	
Chloride	58200	58100	1	0.211				15
Nitrate	140	131	1	6.35				15
Sulfate	6910	6870	1	0.587				15

Laboratory Control Sample (LCS)

(LCS) R3432718-2 07/20/19 09:39

Analyte	Spike Amount		LCS Result	LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	ug/l			%	%	
Chloride	40000	39900	99.8		80.0-120		
Nitrate	8000	8400	105		80.0-120		
Sulfate	40000	41100	103		80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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L1120686-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	5360	56500	56200	102	102	1	80.0-120			0.483	15
Nitrate	5000	267	5490	5460	104	104	1	80.0-120			0.502	15
Sulfate	50000	ND	55000	55000	102	102	1	80.0-120			0.0749	15

L1120698-08 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	24400	74900	101	1	80.0-120	
Nitrate	5000	U	5200	104	1	80.0-120	
Sulfate	50000	15000	65800	102	1	80.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3433613-1 07/23/19 16:56	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	190	<u>1</u>	102	1000

L1120698-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1120698-04 07/23/19 17:54 • (DUP) R3433613-3 07/23/19 18:05	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	1400	1320	1	5.81		20

L1121124-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1121124-03 07/23/19 21:25 • (DUP) R3433613-6 07/23/19 21:38	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	7910	7670	1	3.08		20

Laboratory Control Sample (LCS)

(LCS) R3433613-2 07/23/19 17:27	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	74300	99.1	85.0-115	

L1120698-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120698-07 07/23/19 18:35 • (MS) R3433613-4 07/23/19 18:51 • (MSD) R3433613-5 07/23/19 19:07	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
TOC (Total Organic Carbon)	50000	12700	63800	63100	102	101	1	80.0-120			1.07	20

L1121210-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121210-05 07/23/19 23:55 • (MS) R3433613-7 07/24/19 00:12 • (MSD) R3433613-8 07/24/19 00:29	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
TOC (Total Organic Carbon)	50000	14900	66600	64500	103	99.2	1	80.0-120			3.22	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 6020B

[L1120698-02.04.05.07.08.09.10](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3433190-1 07/23/19 09:01				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3433190-2 07/23/19 09:05 • (LCSD) R3433190-3 07/23/19 09:08		(OS) L1120670-12 07/23/19 09:11 • (MS) R3433190-5 07/23/19 09:18 • (MSD) R3433190-6 07/23/19 09:21							
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	5320	5130	106	103	80.0-120			3.65	20
Manganese	50.0	50.1	50.9	100	102	80.0-120			1.53	20

L1120670-12 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	22.3	5130	5120	102	102	1	75.0-125			0.220	20
Manganese	50.0	1.03	50.2	51.2	98.4	100	1	75.0-125			1.88	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1120698-01.02.03.04.05.07.08.09.10.11](#)

Method Blank (MB)

(MB) R3433855-3 07/24/19 13:37

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) a,a'-Trifluorotoluene(FID)	110			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3433855-2 07/24/19 12:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5440	99.0	70.0-124	
^(S) a,a'-Trifluorotoluene(FID)			94.7	78.0-120	

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2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1120698-02.04.05.07.08.09.10](#)

Method Blank (MB)

(MB) R3434376-1 07/25/19 16:33

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1120670-14 Original Sample (OS) • Duplicate (DUP)

(OS) L1120670-14 07/25/19 16:44 • (DUP) R3434376-2 07/25/19 17:12

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434376-3 07/25/19 17:23 • (LCSD) R3434376-4 07/25/19 17:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	73.1	74.6	108	110	85.0-115			1.93	20
Ethane	129	117	115	90.5	89.2	85.0-115			1.48	20
Ethene	127	116	113	91.0	89.1	85.0-115			2.04	20

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Method Blank (MB)

(MB) R3433905-2 07/23/19 10:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3433905-2 07/23/19 10:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	105			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	95.0			70.0-130

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3433905-1 07/23/19 09:14

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	133	107	19.0-160	
Acrylonitrile	125	118	94.1	55.0-149	
Benzene	25.0	22.4	89.8	70.0-123	
Bromobenzene	25.0	22.5	90.1	73.0-121	
Bromodichloromethane	25.0	23.8	95.3	75.0-120	
Bromochloromethane	25.0	27.9	112	76.0-122	
Bromoform	25.0	23.6	94.5	68.0-132	
Bromomethane	25.0	14.7	58.9	10.0-160	
n-Butylbenzene	25.0	21.2	84.7	73.0-125	
sec-Butylbenzene	25.0	21.1	84.5	75.0-125	
tert-Butylbenzene	25.0	20.1	80.4	76.0-124	
Carbon disulfide	25.0	22.1	88.4	61.0-128	
Carbon tetrachloride	25.0	23.2	92.7	68.0-126	
Chlorobenzene	25.0	22.0	88.0	80.0-121	
Chlorodibromomethane	25.0	22.9	91.6	77.0-125	
Chloroethane	25.0	24.4	97.4	47.0-150	
Chloroform	25.0	23.4	93.5	73.0-120	
Chloromethane	25.0	18.1	72.3	41.0-142	
2-Chlorotoluene	25.0	21.9	87.8	76.0-123	
4-Chlorotoluene	25.0	23.7	94.7	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	22.3	89.3	58.0-134	
1,2-Dibromoethane	25.0	22.9	91.5	80.0-122	
Dibromomethane	25.0	25.2	101	80.0-120	
1,2-Dichlorobenzene	25.0	24.4	97.7	79.0-121	
1,3-Dichlorobenzene	25.0	24.6	98.5	79.0-120	
1,4-Dichlorobenzene	25.0	21.3	85.1	79.0-120	
Dichlorodifluoromethane	25.0	29.4	118	51.0-149	
1,1-Dichloroethane	25.0	22.6	90.4	70.0-126	
1,2-Dichloroethane	25.0	23.4	93.5	70.0-128	
1,1-Dichloroethene	25.0	22.0	88.1	71.0-124	
cis-1,2-Dichloroethene	25.0	22.8	91.2	73.0-120	
trans-1,2-Dichloroethene	25.0	24.6	98.5	73.0-120	
1,2-Dichloropropane	25.0	24.7	98.8	77.0-125	
1,1-Dichloropropene	25.0	23.8	95.3	74.0-126	
1,3-Dichloropropene	25.0	22.7	91.0	80.0-120	
cis-1,3-Dichloropropene	25.0	25.2	101	80.0-123	
trans-1,3-Dichloropropene	25.0	23.2	92.9	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.5	69.9	33.0-144	
2,2-Dichloropropane	25.0	19.1	76.3	58.0-130	
Di-isopropyl ether	25.0	22.4	89.5	58.0-138	

Public Review Draft

1 Cp
2 Tc
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Laboratory Control Sample (LCS)

(LCS) R3433905-1 07/23/19 09:14

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	21.5	86.0	79.0-123	
Hexachloro-1,3-butadiene	25.0	21.6	86.3	54.0-138	
2-Hexanone	125	111	88.8	67.0-149	
n-Hexane	25.0	19.2	76.8	57.0-133	
Iodomethane	125	83.3	66.6	33.0-147	
Isopropylbenzene	25.0	21.6	86.5	76.0-127	
p-Isopropyltoluene	25.0	21.5	86.2	76.0-125	
2-Butanone (MEK)	125	114	91.1	44.0-160	
Methylene Chloride	25.0	23.8	95.1	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	113	90.1	68.0-142	
Methyl tert-butyl ether	25.0	24.6	98.4	68.0-125	
Naphthalene	25.0	22.9	91.4	54.0-135	
n-Propylbenzene	25.0	23.3	93.3	77.0-124	
Styrene	25.0	19.8	79.3	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	21.8	87.0	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	21.9	87.7	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	23.4	93.6	69.0-132	
Tetrachloroethene	25.0	22.0	87.9	72.0-132	
Toluene	25.0	21.9	87.6	79.0-120	
1,2,3-Trichlorobenzene	25.0	24.6	98.4	50.0-138	
1,2,4-Trichlorobenzene	25.0	24.3	97.3	57.0-137	
1,1,1-Trichloroethane	25.0	23.5	94.2	73.0-124	
1,1,2-Trichloroethane	25.0	20.9	83.6	80.0-120	
Trichloroethene	25.0	24.8	99.1	78.0-124	
Trichlorofluoromethane	25.0	25.1	101	59.0-147	
1,2,3-Trichloropropane	25.0	23.5	94.1	73.0-130	
1,2,4-Trimethylbenzene	25.0	21.1	84.3	76.0-121	
1,2,3-Trimethylbenzene	25.0	21.5	86.0	77.0-120	
1,3,5-Trimethylbenzene	25.0	22.3	89.0	76.0-122	
Vinyl acetate	125	86.4	69.2	11.0-160	
Vinyl chloride	25.0	22.8	91.3	67.0-131	
Xylenes, Total	75.0	63.8	85.1	79.0-123	
(S) Toluene-d8			91.7	80.0-120	
(S) 4-Bromofluorobenzene			98.6	77.0-126	
(S) 1,2-Dichloroethane-d4			99.4	70.0-130	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1120698-06.07.09.10](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(MB) R3435312-4 07/28/19 16:10				
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	108			80.0-120
(S) 4-Bromofluorobenzene	97.9			77.0-126
(S) 1,2-Dichloroethane-d4	113			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3435312-1 07/28/19 14:52 • (LCSD) R3435312-2 07/28/19 15:12										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	25.0	23.5	23.6	94.0	94.5	73.0-120			0.487	20
Vinyl chloride	25.0	28.3	28.9	113	116	67.0-131			2.22	20
(S) Toluene-d8				106	108	80.0-120				
(S) 4-Bromofluorobenzene				98.3	98.5	77.0-126				
(S) 1,2-Dichloroethane-d4				115	114	70.0-130				

Public Review Draft

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Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(MB) R3435403-4 07/29/19 13:16				
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	108			80.0-120
(S) 4-Bromofluorobenzene	96.4			77.0-126
(S) 1,2-Dichloroethane-d4	114			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS		LCSD		LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
		ug/l	ug/l	ug/l	ug/l							
(LCS) R3435403-1 07/29/19 11:58 • (LCSD) R3435403-2 07/29/19 12:18												
cis-1,2-Dichloroethene	25.0	22.8	22.3	91.2	89.1	73.0-120					2.37	20
Vinyl chloride	25.0	26.4	26.2	105	105	67.0-131					0.606	20
(S) Toluene-d8				105	104	80.0-120						
(S) 4-Bromofluorobenzene				98.0	98.3	77.0-126						
(S) 1,2-Dichloroethane-d4				115	115	70.0-130						

Public Review Draft

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

1	Cp
2	Tc
3	Ss
4	Cn
5	Sr
6	Qc
7	Gl
8	Al
9	Sc

Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

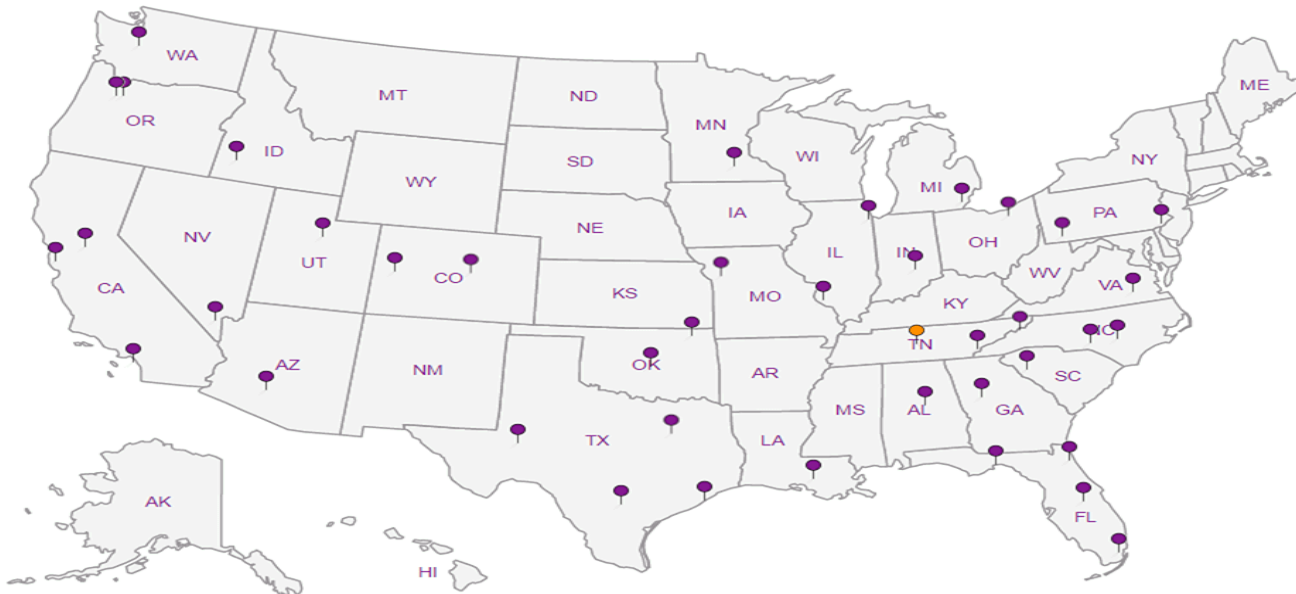
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: bomeal@pesenv.com,
haldeaman@pesenv.com

KV115@PESENV.COM
KSPRINGSTEAD@PESENV.COM

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Pace Analytical
National Center for Testing & Innovation

12055 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



L# *L120698*

1093

Account: PESENVSWA

Template: T152679

Prelogin: P718645

TSR: 110 - Brian Ford

Pg: 7-5-19 CS

Shipped Via: FedEx Ground

Remarks: Sample # (lab only)

Pres	Analysis / Container / Preservative
CHK	
	NO3,Cl, SO4 125mlHDPE-NoPres
	Alkalinity 125mlHDPE-NoPres
	EEM RSK175LL 40mlAmb-HCl
	NWTPHGX 40mlAmb HCl
	TOC 250mlAmb-HCl
	Total Fe Mn 6020 250mlHDPE-HNO3
	VOCs 8260LLC 40mlAmb-HCl

Report to: Brian O'Neal/Bill Haldeaman

Project: American Livestock

Description: American Livestock

Client Project #: 1413 001.05.601

City/State: Seattle, WA

Lab Project #: PESENVSWA-ALP

Phone: 206-529-3980

Fax: 206-529-3985

Collected by (print): *Brian Hecht*

Collected by (signature): *Brian Hecht*

Site/Facility ID #: *American Livestock*

Rush? (Lab MUST Be Notified)

Same Day Five Day

Next Day 5 Day (Rad Only)

Two Day 10 Day (Rad Only)

Three Day

Date Results Needed: *STAT*

Quote #

P.O. #

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-125-071817	Grab	GW	24	7/18/19	16:55	6
MW-158A-071919		GW	95	7/19/19	07:55	12
MW-121-071919		GW	20		08:35	6
MW-138-071919		GW	110		10:05	12
MW-146-071919		GW	45		10:25	12
MW-119-071919		GW	30		10:25	3
MW-143-071919		GW	75		13:20	12
MW106-071919		GW	135		13:35	12
MW-913-071919		GW	45		12:00	12
EA-071919		GW	-		15:00	12

Remarks: *Nitrate has a 48 hour holding time.
+ TRIP BLANK, analyze for NWTPHGX and VOC
for QA/QC - email OK

Matrix: SS - Soil, F - Filter, AR - Air, B - Bioassay

GW - Groundwater, WW - Wastewater

DW - Drinking Water, OT - Other

Relinquished by: (Signature) *[Signature]* Date: 7-19-19 Time: 1700

Relinquished by: (Signature) *[Signature]* Date: _____ Time: _____

Tracking # 1082

Trip Blank Received: Yes No

Temp: 5.1-1.5°C

Date: 7/20/19

Temp: 8:45

Bottles Received: 99

Flow: _____

Other: _____

Sample Receipt Checklist

COC Seal Present/Intact: NP Y

COC Signed/Account: NP Y

Bottles arrive intact: NP Y

Correct bottles used: NP Y

Sufficient volume sent: NP Y

If Applicable

VQA Zero Headspace: NP Y

Preservation Correct: NP Y

RAD SCREEN: NP Y

If preservation required by Login: Date/Time

Hold: _____

Condition: OK NCF



Collected date/time: 07/18/19 16:55

L1120698

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 15:46	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 15:46	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.89	J U	1.05	25.0	1	07/23/2019 14:54	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 14:54	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 14:54	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 14:54	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 14:54	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 14:54	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 14:54	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 14:54	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 14:54	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 14:54	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 14:54	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 14:54	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 14:54	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 14:54	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 14:54	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 14:54	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 14:54	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 14:54	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 14:54	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 14:54	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 14:54	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 14:54	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 14:54	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 14:54	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 14:54	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 14:54	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 14:54	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 14:54	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 14:54	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 14:54	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 14:54	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 14:54	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 14:54	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 14:54	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 14:54	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 14:54	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 14:54	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 14:54	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 14:54	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 14:54	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 14:54	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 14:54	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 14:54	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 14:54	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 14:54	WG1315893

IC 8/6/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methylene Chloride	U		1.07	2.50	1	07/23/2019 14:54	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 14:54	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 14:54	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 14:54	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 14:54	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 14:54	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 14:54	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 14:54	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 14:54	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 14:54	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 14:54	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 14:54	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 14:54	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 14:54	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 14:54	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 14:54	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 14:54	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 14:54	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 14:54	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 14:54	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 14:54	WG1315893
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 14:54	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 14:54	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 14:54	WG1315893
(S) Toluene-d8	102			80.0-120		07/23/2019 14:54	WG1315893
(S) 4-Bromofluorobenzene	97.5			77.0-126		07/23/2019 14:54	WG1315893
(S) 1,2-Dichloroethane-d4	93.8			70.0-130		07/23/2019 14:54	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	330000		2710	20000	1	07/25/2019 23:04	WG1317440

Sample Narrative:

L1120698-02 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	26900		51.9	1000	1	07/20/2019 19:39	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 19:39	WG1314733
Sulfate	19800		77.4	5000	1	07/20/2019 19:39	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4640		102	1000	1	07/23/2019 17:40	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	69200		15.0	100	1	07/23/2019 10:08	WG1315585
Manganese	1370		0.250	5.00	1	07/23/2019 10:08	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 16:10	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 16:10	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	222		0.287	0.678	1	07/25/2019 16:57	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 16:57	WG1317137
Ethene	5.86		0.422	1.27	1	07/25/2019 16:57	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.79	U J	1.05	25.0	1	07/23/2019 15:16	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 15:16	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 15:16	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 15:16	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 15:16	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 15:16	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 15:16	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 15:16	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 15:16	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 15:16	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 15:16	WG1315893
Carbon disulfide	0.437	J J	0.101	0.500	1	07/23/2019 15:16	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 15:16	WG1315893

JC 8/6/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/19/19 07:55

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	07/23/2019 15:16	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 15:16	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 15:16	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 15:16	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 15:16	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 15:16	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 15:16	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 15:16	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 15:16	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 15:16	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 15:16	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 15:16	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 15:16	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 15:16	WG1315893
cis-1,2-Dichloroethene	0.290	J U	0.0933	0.500	1	07/23/2019 15:16	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 15:16	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 15:16	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 15:16	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 15:16	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 15:16	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 15:16	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 15:16	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 15:16	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 15:16	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 15:16	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 15:16	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 15:16	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 15:16	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 15:16	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 15:16	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 15:16	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 15:16	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 15:16	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 15:16	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 15:16	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 15:16	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 15:16	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 15:16	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 15:16	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 15:16	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 15:16	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 15:16	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 15:16	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 15:16	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 15:16	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 15:16	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 15:16	WG1315893
Trichloroethene	0.177	J U	0.153	0.500	1	07/23/2019 15:16	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 15:16	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 15:16	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 15:16	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 15:16	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 15:16	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 07:55

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 15:16	WG1315893
Vinyl chloride	1.24		0.118	0.500	1	07/23/2019 15:16	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 15:16	WG1315893
(S) Toluene-d8	95.3			80.0-120		07/23/2019 15:16	WG1315893
(S) 4-Bromofluorobenzene	88.9			77.0-126		07/23/2019 15:16	WG1315893
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		07/23/2019 15:16	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 08:35

L1120698

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 16:34	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 16:34	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.70	J J	1.05	25.0	1	07/23/2019 15:37	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 15:37	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 15:37	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 15:37	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 15:37	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 15:37	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 15:37	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 15:37	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 15:37	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 15:37	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 15:37	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 15:37	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 15:37	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 15:37	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 15:37	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 15:37	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 15:37	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 15:37	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 15:37	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 15:37	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 15:37	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 15:37	WG1315893
1,3-Dichlorobenzene	0.133	J J	0.130	0.500	1	07/23/2019 15:37	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 15:37	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 15:37	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 15:37	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 15:37	WG1315893
cis-1,2-Dichloroethene	1.01		0.0933	0.500	1	07/23/2019 15:37	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 15:37	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 15:37	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 15:37	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 15:37	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 15:37	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 15:37	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 15:37	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 15:37	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 15:37	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 15:37	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 15:37	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 15:37	WG1315893 JC 8/6/19
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 15:37	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 15:37	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 15:37	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 15:37	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 15:37	WG1315893



Collected date/time: 07/19/19 08:35

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/23/2019 15:37	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 15:37	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 15:37	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 15:37	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 15:37	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 15:37	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 15:37	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 15:37	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 15:37	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 15:37	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 15:37	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 15:37	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 15:37	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 15:37	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 15:37	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 15:37	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 15:37	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 15:37	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 15:37	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 15:37	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 15:37	WG1315893
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 15:37	WG1315893
Vinyl chloride	5.04		0.118	0.500	1	07/23/2019 15:37	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 15:37	WG1315893
(S) Toluene-d8	105			80.0-120		07/23/2019 15:37	WG1315893
(S) 4-Bromofluorobenzene	109			77.0-126		07/23/2019 15:37	WG1315893
(S) 1,2-Dichloroethane-d4	99.4			70.0-130		07/23/2019 15:37	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	133000		2710	20000	1	07/25/2019 23:11	WG1317440

Sample Narrative:

L1120698-04 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14900		51.9	1000	1	07/20/2019 19:53	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 19:53	WG1314733
Sulfate	53400		77.4	5000	1	07/20/2019 19:53	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1400	B	102	1000	1	07/23/2019 17:54	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	11700		15.0	100	1	07/23/2019 10:11	WG1315585
Manganese	560		0.250	5.00	1	07/23/2019 10:11	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 16:58	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 16:58	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	74.2		0.287	0.678	1	07/25/2019 16:59	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 16:59	WG1317137
Ethene	U		0.422	1.27	1	07/25/2019 16:59	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.82	J J	1.05	25.0	1	07/23/2019 15:58	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 15:58	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 15:58	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 15:58	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 15:58	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 15:58	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 15:58	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 15:58	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 15:58	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 15:58	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 15:58	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 15:58	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 15:58	WG1315893

JC 8/6/19

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/19/19 10:05

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	07/23/2019 15:58	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 15:58	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 15:58	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 15:58	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 15:58	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 15:58	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 15:58	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 15:58	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 15:58	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 15:58	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 15:58	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 15:58	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 15:58	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 15:58	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 15:58	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 15:58	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 15:58	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 15:58	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 15:58	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 15:58	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 15:58	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 15:58	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 15:58	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 15:58	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 15:58	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 15:58	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 15:58	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 15:58	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 15:58	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 15:58	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 15:58	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 15:58	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 15:58	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 15:58	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 15:58	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 15:58	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 15:58	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 15:58	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 15:58	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 15:58	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 15:58	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 15:58	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 15:58	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 15:58	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 15:58	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 15:58	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 15:58	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 15:58	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 15:58	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 15:58	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 15:58	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 15:58	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 15:58	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 10:05

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 15:58	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 15:58	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 15:58	WG1315893
(S) Toluene-d8	125	J1		80.0-120		07/23/2019 15:58	WG1315893
(S) 4-Bromofluorobenzene	122			77.0-126		07/23/2019 15:58	WG1315893
(S) 1,2-Dichloroethane-d4	96.9			70.0-130		07/23/2019 15:58	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	310000		2710	20000	1	07/25/2019 23:18	WG1317440

Sample Narrative:

L1120698-05 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17200		51.9	1000	1	07/20/2019 20:08	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 20:08	WG1314733
Sulfate	23900		77.4	5000	1	07/20/2019 20:08	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3780		102	1000	1	07/23/2019 18:21	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2870		15.0	100	1	07/23/2019 10:14	WG1315585
Manganese	800		0.250	5.00	1	07/23/2019 10:14	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	46.3	J J	31.6	100	1	07/24/2019 17:22	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 17:22	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	6490		0.287	0.678	1	07/25/2019 17:01	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:01	WG1317137
Ethene	463		0.422	1.27	1	07/25/2019 17:01	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/23/2019 16:20	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 16:20	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 16:20	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 16:20	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 16:20	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 16:20	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 16:20	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 16:20	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 16:20	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 16:20	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 16:20	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 16:20	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 16:20	WG1315893

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 10:25

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 16:20	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 16:20	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 16:20	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 16:20	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 16:20	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 16:20	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 16:20	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 16:20	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 16:20	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 16:20	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 16:20	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 16:20	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 16:20	WG1315893
1,1-Dichloroethene	1.15		0.188	0.500	1	07/23/2019 16:20	WG1315893
cis-1,2-Dichloroethene	257	J	1.87	10.0	20	07/29/2019 15:09	WG1319424
trans-1,2-Dichloroethene	3.29		0.152	0.500	1	07/23/2019 16:20	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 16:20	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 16:20	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 16:20	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 16:20	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 16:20	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 16:20	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 16:20	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 16:20	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 16:20	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 16:20	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 16:20	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 16:20	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 16:20	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 16:20	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 16:20	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 16:20	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 16:20	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 16:20	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 16:20	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 16:20	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 16:20	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 16:20	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 16:20	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 16:20	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 16:20	WG1315893
Tetrachloroethene	3.08		0.199	0.500	1	07/23/2019 16:20	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 16:20	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 16:20	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 16:20	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 16:20	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 16:20	WG1315893
Trichloroethene	14.4		0.153	0.500	1	07/23/2019 16:20	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 16:20	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 16:20	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 16:20	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 16:20	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 16:20	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 10:25

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 16:20	WG1315893
Vinyl chloride	580	J	2.36	10.0	20	07/29/2019 15:09	WG1319424
Xylenes, Total	U		0.316	1.50	1	07/23/2019 16:20	WG1315893
(S) Toluene-d8	109			80.0-120		07/23/2019 16:20	WG1315893
(S) Toluene-d8	105			80.0-120		07/29/2019 15:09	WG1319424
(S) 4-Bromofluorobenzene	88.7			77.0-126		07/23/2019 16:20	WG1315893
(S) 4-Bromofluorobenzene	96.6			77.0-126		07/29/2019 15:09	WG1319424
(S) 1,2-Dichloroethane-d4	93.3			70.0-130		07/23/2019 16:20	WG1315893
(S) 1,2-Dichloroethane-d4	117			70.0-130		07/29/2019 15:09	WG1319424

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	5.73	J J	1.05	25.0	1	07/23/2019 16:41	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 16:41	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 16:41	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 16:41	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 16:41	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 16:41	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 16:41	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 16:41	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 16:41	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 16:41	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 16:41	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 16:41	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 16:41	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 16:41	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 16:41	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 16:41	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 16:41	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 16:41	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 16:41	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 16:41	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 16:41	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 16:41	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 16:41	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 16:41	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 16:41	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 16:41	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 16:41	WG1315893
cis-1,2-Dichloroethene	0.340	J J	0.0933	0.500	1	07/28/2019 17:09	WG1318890
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 16:41	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 16:41	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 16:41	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 16:41	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 16:41	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 16:41	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 16:41	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 16:41	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 16:41	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 16:41	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 16:41	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 16:41	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 16:41	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 16:41	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 16:41	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 16:41	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 16:41	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 16:41	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 16:41	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 16:41	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 16:41	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 16:41	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 16:41	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 16:41	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 16:41	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/6/19



Collected date/time: 07/19/19 10:25

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 16:41	WG1315893
Tetrachloroethene	0.303	J J	0.199	0.500	1	07/23/2019 16:41	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 16:41	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 16:41	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 16:41	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 16:41	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 16:41	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 16:41	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 16:41	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 16:41	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 16:41	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 16:41	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 16:41	WG1315893
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 16:41	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/28/2019 17:09	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 16:41	WG1315893
(S) Toluene-d8	128	J1		80.0-120		07/23/2019 16:41	WG1315893
(S) Toluene-d8	110			80.0-120		07/28/2019 17:09	WG1318890
(S) 4-Bromofluorobenzene	103			77.0-126		07/23/2019 16:41	WG1315893
(S) 4-Bromofluorobenzene	98.4			77.0-126		07/28/2019 17:09	WG1318890
(S) 1,2-Dichloroethane-d4	96.2			70.0-130		07/23/2019 16:41	WG1315893
(S) 1,2-Dichloroethane-d4	112			70.0-130		07/28/2019 17:09	WG1318890

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	403000		2710	20000	1	07/25/2019 23:25	WG1317440

Sample Narrative:

L1120698-07 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	58200		51.9	1000	1	07/20/2019 20:22	WG1314733
Nitrate	140		22.7	100	1	07/20/2019 20:22	WG1314733
Sulfate	6910		77.4	5000	1	07/20/2019 20:22	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	12700		102	1000	1	07/23/2019 18:35	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2070		15.0	100	1	07/23/2019 10:17	WG1315585
Manganese	398		0.250	5.00	1	07/23/2019 10:17	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 17:46	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 17:46	WG1316734

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Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	4790		0.287	0.678	1	07/25/2019 17:09	WG1317137
Ethane	96.5		0.296	1.29	1	07/25/2019 17:09	WG1317137
Ethene	14.4		0.422	1.27	1	07/25/2019 17:09	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.80	J	1.05	25.0	1	07/23/2019 17:02	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 17:02	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 17:02	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 17:02	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 17:02	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 17:02	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 17:02	WG1315893
Bromomethane	U	UJ	0.157	2.50	1	07/23/2019 17:02	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 17:02	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 17:02	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 17:02	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 17:02	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 17:02	WG1315893

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 07/19/19 13:20

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 17:02	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 17:02	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 17:02	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 17:02	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 17:02	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 17:02	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 17:02	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 17:02	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 17:02	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 17:02	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 17:02	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 17:02	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 17:02	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 17:02	WG1315893
cis-1,2-Dichloroethene	0.309	J J	0.0933	0.500	1	07/28/2019 17:29	WG1318890
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 17:02	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 17:02	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 17:02	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 17:02	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 17:02	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 17:02	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 17:02	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 17:02	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 17:02	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 17:02	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 17:02	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 17:02	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 17:02	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 17:02	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 17:02	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 17:02	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 17:02	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 17:02	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 17:02	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 17:02	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 17:02	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 17:02	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 17:02	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 17:02	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 17:02	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 17:02	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 17:02	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 17:02	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 17:02	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 17:02	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 17:02	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 17:02	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 17:02	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 17:02	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 17:02	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 17:02	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 17:02	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 17:02	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 13:20

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 17:02	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/28/2019 17:29	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 17:02	WG1315893
(S) Toluene-d8	103			80.0-120		07/23/2019 17:02	WG1315893
(S) Toluene-d8	106			80.0-120		07/28/2019 17:29	WG1318890
(S) 4-Bromofluorobenzene	86.0			77.0-126		07/23/2019 17:02	WG1315893
(S) 4-Bromofluorobenzene	99.0			77.0-126		07/28/2019 17:29	WG1318890
(S) 1,2-Dichloroethane-d4	99.7			70.0-130		07/23/2019 17:02	WG1315893
(S) 1,2-Dichloroethane-d4	116			70.0-130		07/28/2019 17:29	WG1318890

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	266000		2710	20000	1	07/25/2019 23:32	WG1317440

Sample Narrative:

L1120698-08 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	24400		51.9	1000	1	07/20/2019 20:51	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 20:51	WG1314733
Sulfate	15000		77.4	5000	1	07/20/2019 20:51	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2230		102	1000	1	07/23/2019 20:18	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	13700		15.0	100	1	07/23/2019 10:21	WG1315585
Manganese	972		0.250	5.00	1	07/23/2019 10:21	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 18:10	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 18:10	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	39.5		0.287	0.678	1	07/25/2019 17:15	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:15	WG1317137
Ethene	U		0.422	1.27	1	07/25/2019 17:15	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.16	J J	1.05	25.0	1	07/23/2019 17:23	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 17:23	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 17:23	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 17:23	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 17:23	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 17:23	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 17:23	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 17:23	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 17:23	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 17:23	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 17:23	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 17:23	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 17:23	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/6/19



Collected date/time: 07/19/19 13:35

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	07/23/2019 17:23	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 17:23	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 17:23	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 17:23	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 17:23	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 17:23	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 17:23	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 17:23	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 17:23	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 17:23	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 17:23	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 17:23	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 17:23	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 17:23	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 17:23	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 17:23	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 17:23	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 17:23	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 17:23	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 17:23	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 17:23	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 17:23	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 17:23	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 17:23	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 17:23	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 17:23	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 17:23	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 17:23	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 17:23	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 17:23	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 17:23	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 17:23	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 17:23	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 17:23	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 17:23	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 17:23	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 17:23	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 17:23	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 17:23	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 17:23	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 17:23	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 17:23	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 17:23	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 17:23	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 17:23	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 17:23	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 17:23	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 17:23	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 17:23	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 17:23	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 17:23	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 17:23	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 17:23	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 13:35

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 17:23	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 17:23	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 17:23	WG1315893
(S) Toluene-d8	120			80.0-120		07/23/2019 17:23	WG1315893
(S) 4-Bromofluorobenzene	95.7			77.0-126		07/23/2019 17:23	WG1315893
(S) 1,2-Dichloroethane-d4	98.9			70.0-130		07/23/2019 17:23	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	307000		2710	20000	1	07/25/2019 23:48	WG1317440

Sample Narrative:

L1120698-09 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17200		51.9	1000	1	07/20/2019 21:49	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 21:49	WG1314733
Sulfate	24200		77.4	5000	1	07/20/2019 21:49	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3670		102	1000	1	07/23/2019 20:31	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2950		15.0	100	1	07/23/2019 10:24	WG1315585
Manganese	817		0.250	5.00	1	07/23/2019 10:24	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	262	J+	31.6	100	1	07/24/2019 18:34	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 18:34	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5480		0.287	0.678	1	07/25/2019 17:17	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:17	WG1317137
Ethene	387		0.422	1.27	1	07/25/2019 17:17	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/23/2019 17:45	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 17:45	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 17:45	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 17:45	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 17:45	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 17:45	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 17:45	WG1315893
Bromomethane	U	UJ JO	0.157	2.50	1	07/23/2019 17:45	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 17:45	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 17:45	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 17:45	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 17:45	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 17:45	WG1315893

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 12:00

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 17:45	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 17:45	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 17:45	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 17:45	WG1315893
Chloromethane	U	UJ JO	0.153	1.25	1	07/23/2019 17:45	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 17:45	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 17:45	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 17:45	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 17:45	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 17:45	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 17:45	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 17:45	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 17:45	WG1315893
1,1-Dichloroethene	1.37		0.188	0.500	1	07/23/2019 17:45	WG1315893
cis-1,2-Dichloroethene	371	J	1.87	10.0	20	07/28/2019 17:49	WG1318890
trans-1,2-Dichloroethene	3.50		0.152	0.500	1	07/23/2019 17:45	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 17:45	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 17:45	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 17:45	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 17:45	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 17:45	WG1315893
trans-1,4-Dichloro-2-butene	U	UJ JO	0.257	5.00	1	07/23/2019 17:45	WG1315893
2,2-Dichloropropane	U	UJ JO	0.0929	0.500	1	07/23/2019 17:45	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 17:45	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 17:45	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 17:45	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 17:45	WG1315893
n-Hexane	U	UJ JO	0.305	5.00	1	07/23/2019 17:45	WG1315893
Iodomethane	U	UJ JO	0.377	10.0	1	07/23/2019 17:45	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 17:45	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 17:45	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 17:45	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 17:45	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 17:45	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 17:45	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 17:45	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 17:45	WG1315893
Styrene	U	UJ JO	0.117	0.500	1	07/23/2019 17:45	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 17:45	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 17:45	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 17:45	WG1315893
Tetrachloroethene	2.80		0.199	0.500	1	07/23/2019 17:45	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 17:45	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 17:45	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 17:45	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 17:45	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 17:45	WG1315893
Trichloroethene	15.9		0.153	0.500	1	07/23/2019 17:45	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 17:45	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 17:45	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 17:45	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 17:45	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 17:45	WG1315893

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 12:00

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 17:45	WG1315893
Vinyl chloride	842	J	2.36	10.0	20	07/28/2019 17:49	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 17:45	WG1315893
(S) Toluene-d8	105			80.0-120		07/23/2019 17:45	WG1315893
(S) Toluene-d8	104			80.0-120		07/28/2019 17:49	WG1318890
(S) 4-Bromofluorobenzene	106			77.0-126		07/23/2019 17:45	WG1315893
(S) 4-Bromofluorobenzene	95.8			77.0-126		07/28/2019 17:49	WG1318890
(S) 1,2-Dichloroethane-d4	94.0			70.0-130		07/23/2019 17:45	WG1315893
(S) 1,2-Dichloroethane-d4	115			70.0-130		07/28/2019 17:49	WG1318890

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	4460	<u>B</u> <u>J</u>	2710	20000	1	07/25/2019 21:00	WG1317440

Sample Narrative:

L1120698-10 WG1317440: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	195	<u>J</u>	51.9	1000	1	07/20/2019 22:03	WG1314733
Nitrate	U		22.7	100	1	07/20/2019 22:03	WG1314733
Sulfate	U		77.4	5000	1	07/20/2019 22:03	WG1314733

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	234	<u>B</u> <u>J</u>	102	1000	1	07/23/2019 20:45	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	31.4	<u>J</u>	15.0	100	1	07/23/2019 10:45	WG1315585
Manganese	1.38	<u>J</u>	0.250	5.00	1	07/23/2019 10:45	WG1315585

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 18:58	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/24/2019 18:58	WG1316734

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	218		0.287	0.678	1	07/25/2019 17:20	WG1317137
Ethane	U		0.296	1.29	1	07/25/2019 17:20	WG1317137
Ethene	14.1		0.422	1.27	1	07/25/2019 17:20	WG1317137

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.98	<u>J</u>	1.05	25.0	1	07/23/2019 18:06	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 18:06	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 18:06	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 18:06	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 18:06	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 18:06	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 18:06	WG1315893
Bromomethane	U	<u>UJ</u> <u>JO</u>	0.157	2.50	1	07/23/2019 18:06	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 18:06	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 18:06	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 18:06	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 18:06	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 18:06	WG1315893

JC 8/6/19



Collected date/time: 07/19/19 15:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/23/2019 18:06	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 18:06	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 18:06	WG1315893
Chloroform	0.295	<u>J</u>	0.0860	0.500	1	07/23/2019 18:06	WG1315893
Chloromethane	U	<u>UJ</u> <u>JO</u>	0.153	1.25	1	07/23/2019 18:06	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 18:06	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 18:06	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 18:06	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 18:06	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 18:06	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 18:06	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 18:06	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 18:06	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 18:06	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/28/2019 18:08	WG1318890
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 18:06	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 18:06	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 18:06	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 18:06	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 18:06	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 18:06	WG1315893
trans-1,4-Dichloro-2-butene	U	<u>UJ</u> <u>JO</u>	0.257	5.00	1	07/23/2019 18:06	WG1315893
2,2-Dichloropropane	U	<u>UJ</u> <u>JO</u>	0.0929	0.500	1	07/23/2019 18:06	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 18:06	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 18:06	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 18:06	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 18:06	WG1315893
n-Hexane	U	<u>UJ</u> <u>JO</u>	0.305	5.00	1	07/23/2019 18:06	WG1315893
Iodomethane	U	<u>UJ</u> <u>JO</u>	0.377	10.0	1	07/23/2019 18:06	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 18:06	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 18:06	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 18:06	WG1315893
Methylene Chloride	U		1.07	2.50	1	07/23/2019 18:06	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 18:06	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 18:06	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 18:06	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 18:06	WG1315893
Styrene	U	<u>UJ</u> <u>JO</u>	0.117	0.500	1	07/23/2019 18:06	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 18:06	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 18:06	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 18:06	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 18:06	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 18:06	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 18:06	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 18:06	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 18:06	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 18:06	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 18:06	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 18:06	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 18:06	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 18:06	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 18:06	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 18:06	WG1315893

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/6/19



Collected date/time: 07/19/19 15:00

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Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	UJ JO	0.645	5.00	1	07/23/2019 18:06	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/28/2019 18:08	WG1318890
Xylenes, Total	U		0.316	1.50	1	07/23/2019 18:06	WG1315893
(S) Toluene-d8	106			80.0-120		07/23/2019 18:06	WG1315893
(S) Toluene-d8	108			80.0-120		07/28/2019 18:08	WG1318890
(S) 4-Bromofluorobenzene	79.6			77.0-126		07/23/2019 18:06	WG1315893
(S) 4-Bromofluorobenzene	98.4			77.0-126		07/28/2019 18:08	WG1318890
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		07/23/2019 18:06	WG1315893
(S) 1,2-Dichloroethane-d4	112			70.0-130		07/28/2019 18:08	WG1318890

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/19/19 00:00

L1120698

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/24/2019 14:58	WG1316734
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/24/2019 14:58	WG1316734

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/23/2019 14:33	WG1315893
Acrylonitrile	U		0.873	5.00	1	07/23/2019 14:33	WG1315893
Benzene	U		0.0896	0.500	1	07/23/2019 14:33	WG1315893
Bromobenzene	U		0.133	0.500	1	07/23/2019 14:33	WG1315893
Bromodichloromethane	U		0.0800	0.500	1	07/23/2019 14:33	WG1315893
Bromochloromethane	U		0.145	0.500	1	07/23/2019 14:33	WG1315893
Bromoform	U		0.186	0.500	1	07/23/2019 14:33	WG1315893
Bromomethane	U	<u>JO</u>	0.157	2.50	1	07/23/2019 14:33	WG1315893
n-Butylbenzene	U		0.143	0.500	1	07/23/2019 14:33	WG1315893
sec-Butylbenzene	U		0.134	0.500	1	07/23/2019 14:33	WG1315893
tert-Butylbenzene	U		0.183	0.500	1	07/23/2019 14:33	WG1315893
Carbon disulfide	U		0.101	0.500	1	07/23/2019 14:33	WG1315893
Carbon tetrachloride	U		0.159	0.500	1	07/23/2019 14:33	WG1315893
Chlorobenzene	U		0.140	0.500	1	07/23/2019 14:33	WG1315893
Chlorodibromomethane	U		0.128	0.500	1	07/23/2019 14:33	WG1315893
Chloroethane	U		0.141	2.50	1	07/23/2019 14:33	WG1315893
Chloroform	U		0.0860	0.500	1	07/23/2019 14:33	WG1315893
Chloromethane	U	<u>JO</u>	0.153	1.25	1	07/23/2019 14:33	WG1315893
2-Chlorotoluene	U		0.111	0.500	1	07/23/2019 14:33	WG1315893
4-Chlorotoluene	U		0.0972	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/23/2019 14:33	WG1315893
1,2-Dibromoethane	U		0.193	0.500	1	07/23/2019 14:33	WG1315893
Dibromomethane	U		0.117	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dichlorobenzene	U		0.101	0.500	1	07/23/2019 14:33	WG1315893
1,3-Dichlorobenzene	U		0.130	0.500	1	07/23/2019 14:33	WG1315893
1,4-Dichlorobenzene	U		0.121	0.500	1	07/23/2019 14:33	WG1315893
Dichlorodifluoromethane	U		0.127	2.50	1	07/23/2019 14:33	WG1315893
1,1-Dichloroethane	U		0.114	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dichloroethane	U		0.108	0.500	1	07/23/2019 14:33	WG1315893
1,1-Dichloroethene	U		0.188	0.500	1	07/23/2019 14:33	WG1315893
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/23/2019 14:33	WG1315893
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/23/2019 14:33	WG1315893
1,2-Dichloropropane	U		0.190	0.500	1	07/23/2019 14:33	WG1315893
1,1-Dichloropropene	U		0.128	0.500	1	07/23/2019 14:33	WG1315893
1,3-Dichloropropane	U		0.147	1.00	1	07/23/2019 14:33	WG1315893
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/23/2019 14:33	WG1315893
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/23/2019 14:33	WG1315893
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	07/23/2019 14:33	WG1315893
2,2-Dichloropropane	U	<u>JO</u>	0.0929	0.500	1	07/23/2019 14:33	WG1315893
Di-isopropyl ether	U		0.0924	0.500	1	07/23/2019 14:33	WG1315893
Ethylbenzene	U		0.158	0.500	1	07/23/2019 14:33	WG1315893
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/23/2019 14:33	WG1315893
2-Hexanone	U		0.757	5.00	1	07/23/2019 14:33	WG1315893
n-Hexane	U	<u>JO</u>	0.305	5.00	1	07/23/2019 14:33	WG1315893
Iodomethane	U	<u>JO</u>	0.377	10.0	1	07/23/2019 14:33	WG1315893
Isopropylbenzene	U		0.126	0.500	1	07/23/2019 14:33	WG1315893
p-Isopropyltoluene	U		0.138	0.500	1	07/23/2019 14:33	WG1315893
2-Butanone (MEK)	U		1.28	5.00	1	07/23/2019 14:33	WG1315893

JC 8/6/19



Collected date/time: 07/19/19 00:00

L1120698

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/23/2019 14:33	WG1315893
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/23/2019 14:33	WG1315893
Methyl tert-butyl ether	U		0.102	0.500	1	07/23/2019 14:33	WG1315893
Naphthalene	U		0.174	2.50	1	07/23/2019 14:33	WG1315893
n-Propylbenzene	U		0.162	0.500	1	07/23/2019 14:33	WG1315893
Styrene	U	<u>JO</u>	0.117	0.500	1	07/23/2019 14:33	WG1315893
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/23/2019 14:33	WG1315893
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/23/2019 14:33	WG1315893
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/23/2019 14:33	WG1315893
Tetrachloroethene	U		0.199	0.500	1	07/23/2019 14:33	WG1315893
Toluene	U		0.412	0.500	1	07/23/2019 14:33	WG1315893
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/23/2019 14:33	WG1315893
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/23/2019 14:33	WG1315893
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/23/2019 14:33	WG1315893
1,1,2-Trichloroethane	U		0.186	0.500	1	07/23/2019 14:33	WG1315893
Trichloroethene	U		0.153	0.500	1	07/23/2019 14:33	WG1315893
Trichlorofluoromethane	U		0.130	2.50	1	07/23/2019 14:33	WG1315893
1,2,3-Trichloropropane	U		0.247	2.50	1	07/23/2019 14:33	WG1315893
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/23/2019 14:33	WG1315893
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/23/2019 14:33	WG1315893
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/23/2019 14:33	WG1315893
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	07/23/2019 14:33	WG1315893
Vinyl chloride	U		0.118	0.500	1	07/23/2019 14:33	WG1315893
Xylenes, Total	U		0.316	1.50	1	07/23/2019 14:33	WG1315893
(S) Toluene-d8	104			80.0-120		07/23/2019 14:33	WG1315893
(S) 4-Bromofluorobenzene	106			77.0-126		07/23/2019 14:33	WG1315893
(S) 1,2-Dichloroethane-d4	94.9			70.0-130		07/23/2019 14:33	WG1315893

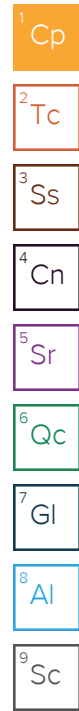
- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



ANALYTICAL REPORT

August 01, 2019



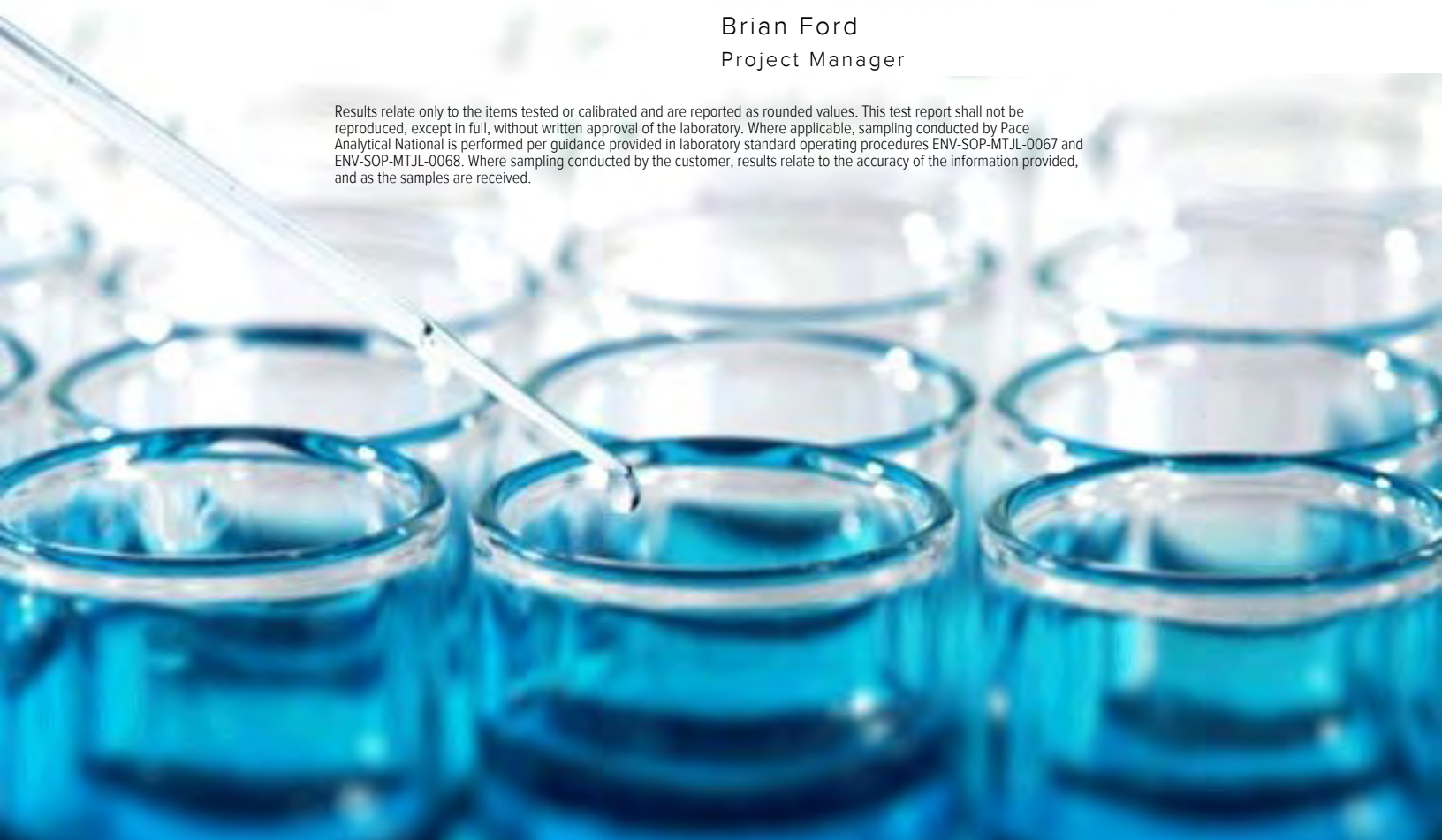
PES Environmental, Inc.- WA

Sample Delivery Group: L1121210
 Samples Received: 07/23/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-159-072219 L1121210-01 GW

Collected by Ben Hecht
Collected date/time 07/21/19 16:50
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317068	1	07/25/19 06:38	07/25/19 06:38	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317007	1	07/25/19 00:48	07/25/19 00:48	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1320771	1	07/31/19 17:23	07/31/19 17:23	BMB	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

MW-104-072219 L1121210-02 GW

Collected by Ben Hecht
Collected date/time 07/22/19 06:20
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317446	1	07/26/19 16:02	07/26/19 16:02	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	1	07/23/19 16:59	07/23/19 16:59	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	2	07/23/19 22:07	07/23/19 22:07	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	1	07/23/19 15:42	07/23/19 21:17	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317068	1	07/25/19 07:02	07/25/19 07:02	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 11:22	07/26/19 11:22	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317007	1	07/25/19 01:10	07/25/19 01:10	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1320771	1	07/31/19 17:43	07/31/19 17:43	BMB	Mt. Juliet, TN

MW-148-072219 L1121210-03 GW

Collected by Ben Hecht
Collected date/time 07/22/19 10:05
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317446	1	07/26/19 16:11	07/26/19 16:11	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	1	07/23/19 18:04	07/23/19 18:04	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	5	07/24/19 08:21	07/24/19 08:21	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 23:22	07/23/19 23:22	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	1	07/23/19 15:42	07/23/19 21:21	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317068	1	07/25/19 07:26	07/25/19 07:26	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 11:27	07/26/19 11:27	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317370	1	07/26/19 21:29	07/26/19 21:29	JHH	Mt. Juliet, TN

MW-153-072219 L1121210-04 GW

Collected by Ben Hecht
Collected date/time 07/22/19 11:40
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317446	1	07/26/19 16:19	07/26/19 16:19	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	1	07/23/19 18:21	07/23/19 18:21	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 23:38	07/23/19 23:38	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	1	07/23/19 15:42	07/23/19 20:29	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317068	1	07/25/19 07:50	07/25/19 07:50	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 11:29	07/26/19 11:29	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 12:38	07/25/19 12:38	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319848	1	07/30/19 14:04	07/30/19 14:04	BMB	Mt. Juliet, TN

MW-157-072219 L1121210-05 GW

Collected by Ben Hecht
Collected date/time 07/22/19 12:30
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317446	1	07/26/19 16:35	07/26/19 16:35	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	1	07/23/19 18:37	07/23/19 18:37	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1315948	1	07/23/19 23:55	07/23/19 23:55	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	1	07/23/19 15:42	07/23/19 21:26	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	5	07/23/19 15:42	07/23/19 21:51	LD	Mt. Juliet, TN



MW-157-072219 L1121210-05 GW

Collected by Ben Hecht
Collected date/time 07/22/19 12:30
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317068	1	07/25/19 08:13	07/25/19 08:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 11:32	07/26/19 11:32	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 13:26	07/25/19 13:26	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319848	100	07/30/19 14:26	07/30/19 14:26	BMB	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

MW-156-072219 L1121210-06 GW

Collected by Ben Hecht
Collected date/time 07/22/19 14:20
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317446	1	07/26/19 16:42	07/26/19 16:42	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	1	07/23/19 19:27	07/23/19 19:27	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	5	07/24/19 08:57	07/24/19 08:57	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1316685	1	07/25/19 00:00	07/25/19 00:00	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	1	07/23/19 15:42	07/23/19 21:30	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	10	07/23/19 15:42	07/23/19 21:56	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317068	1	07/25/19 08:37	07/25/19 08:37	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 11:40	07/26/19 11:40	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 14:13	07/25/19 14:13	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319848	50	07/30/19 18:58	07/30/19 18:58	BMB	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

MW-107-072219 L1121210-07 GW

Collected by Ben Hecht
Collected date/time 07/22/19 14:50
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317446	1	07/26/19 16:49	07/26/19 16:49	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1315944	1	07/23/19 19:43	07/23/19 19:43	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1316685	1	07/25/19 00:15	07/25/19 00:15	EEM	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1316057	1	07/23/19 15:42	07/23/19 21:35	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317068	1	07/25/19 09:01	07/25/19 09:01	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 11:44	07/26/19 11:44	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317908	10	07/26/19 14:42	07/26/19 14:42	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 14:36	07/25/19 14:36	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319848	10	07/30/19 15:10	07/30/19 15:10	BMB	Mt. Juliet, TN

9 Sc

TRIP-072219 L1121210-08 GW

Collected by Ben Hecht
Collected date/time 07/22/19 15:00
Received date/time 07/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1317381	1	07/25/19 13:13	07/25/19 13:13	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317007	1	07/25/19 00:05	07/25/19 00:05	ACG	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/21/19 16:50

L1121210

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 06:38	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/25/2019 06:38	WG1317068

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.13	J	1.05	25.0	1	07/25/2019 00:48	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 00:48	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 00:48	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 00:48	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 00:48	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 00:48	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 00:48	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 00:48	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 00:48	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 00:48	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 00:48	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 00:48	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 00:48	WG1317007
Chlorobenzene	U		0.140	0.500	1	07/25/2019 00:48	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 00:48	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 00:48	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 00:48	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 00:48	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 00:48	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 00:48	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 00:48	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 00:48	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 00:48	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 00:48	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 00:48	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 00:48	WG1317007
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 00:48	WG1317007
cis-1,2-Dichloroethene	0.918		0.0933	0.500	1	07/25/2019 00:48	WG1317007
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 00:48	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 00:48	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 00:48	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 00:48	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 00:48	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 00:48	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 00:48	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 00:48	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 00:48	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 00:48	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 00:48	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 00:48	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 00:48	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 00:48	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 00:48	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 00:48	WG1317007

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/21/19 16:50

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 00:48	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 00:48	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 00:48	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 00:48	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 00:48	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 00:48	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 00:48	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 00:48	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 00:48	WG1317007
Tetrachloroethene	U		0.199	0.500	1	07/31/2019 17:23	WG1320771
Toluene	U		0.412	0.500	1	07/25/2019 00:48	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 00:48	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 00:48	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 00:48	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 00:48	WG1317007
Trichloroethene	U		0.153	0.500	1	07/25/2019 00:48	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 00:48	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 00:48	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 00:48	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 00:48	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 00:48	WG1317007
Vinyl acetate	U		0.645	5.00	1	07/25/2019 00:48	WG1317007
Vinyl chloride	0.691		0.118	0.500	1	07/25/2019 00:48	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 00:48	WG1317007
(S) Toluene-d8	110			80.0-120		07/25/2019 00:48	WG1317007
(S) Toluene-d8	97.7			80.0-120		07/31/2019 17:23	WG1320771
(S) 4-Bromofluorobenzene	105			77.0-126		07/25/2019 00:48	WG1317007
(S) 4-Bromofluorobenzene	95.4			77.0-126		07/31/2019 17:23	WG1320771
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/25/2019 00:48	WG1317007
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/31/2019 17:23	WG1320771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	201000		2710	20000	1	07/26/2019 16:02	WG1317446

Sample Narrative:

L1121210-02 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17000		51.9	1000	1	07/23/2019 16:59	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 16:59	WG1315944
Sulfate	7400		77.4	5000	1	07/23/2019 16:59	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7110		204	2000	2	07/23/2019 22:07	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3000		15.0	100	1	07/23/2019 21:17	WG1316057
Manganese	164		0.250	5.00	1	07/23/2019 21:17	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	50.4	J	31.6	100	1	07/25/2019 07:02	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 07:02	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	375		0.287	0.678	1	07/26/2019 11:22	WG1317907
Ethane	2.94		0.296	1.29	1	07/26/2019 11:22	WG1317907
Ethene	28.6		0.422	1.27	1	07/26/2019 11:22	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	4.88	J	1.05	25.0	1	07/25/2019 01:10	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 01:10	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 01:10	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 01:10	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 01:10	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 01:10	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 01:10	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 01:10	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 01:10	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 01:10	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 01:10	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 01:10	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 01:10	WG1317007

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/22/19 06:20

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 01:10	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 01:10	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 01:10	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 01:10	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 01:10	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 01:10	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 01:10	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 01:10	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 01:10	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 01:10	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 01:10	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 01:10	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 01:10	WG1317007
1,1-Dichloroethene	5.38		0.188	0.500	1	07/25/2019 01:10	WG1317007
cis-1,2-Dichloroethene	160		0.0933	0.500	1	07/25/2019 01:10	WG1317007
trans-1,2-Dichloroethene	2.10		0.152	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 01:10	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 01:10	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 01:10	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 01:10	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 01:10	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 01:10	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 01:10	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 01:10	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 01:10	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 01:10	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 01:10	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 01:10	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 01:10	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 01:10	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 01:10	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 01:10	WG1317007
Methylene Chloride	U		1.07	2.50	1	07/25/2019 01:10	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 01:10	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 01:10	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 01:10	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 01:10	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 01:10	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 01:10	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 01:10	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 01:10	WG1317007
Tetrachloroethene	0.282	U	0.199	0.500	1	07/31/2019 17:43	WG1320771
Toluene	U		0.412	0.500	1	07/25/2019 01:10	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 01:10	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 01:10	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 01:10	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 01:10	WG1317007
Trichloroethene	28.3		0.153	0.500	1	07/25/2019 01:10	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 01:10	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 01:10	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 01:10	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 01:10	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 01:10	WG1317007

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 06:20

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 01:10	WG1317007
Vinyl chloride	57.1		0.118	0.500	1	07/25/2019 01:10	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 01:10	WG1317007
(S) Toluene-d8	106			80.0-120		07/25/2019 01:10	WG1317007
(S) Toluene-d8	100			80.0-120		07/31/2019 17:43	WG1320771
(S) 4-Bromofluorobenzene	103			77.0-126		07/25/2019 01:10	WG1317007
(S) 4-Bromofluorobenzene	103			77.0-126		07/31/2019 17:43	WG1320771
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 01:10	WG1317007
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/31/2019 17:43	WG1320771

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	160000		2710	20000	1	07/26/2019 16:11	WG1317446

Sample Narrative:

L1121210-03 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17000		51.9	1000	1	07/23/2019 18:04	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 18:04	WG1315944
Sulfate	173000		387	25000	5	07/24/2019 08:21	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3510		102	1000	1	07/23/2019 23:22	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5440		15.0	100	1	07/23/2019 21:21	WG1316057
Manganese	534		0.250	5.00	1	07/23/2019 21:21	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 07:26	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/25/2019 07:26	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1940		0.287	0.678	1	07/26/2019 11:27	WG1317907
Ethane	U		0.296	1.29	1	07/26/2019 11:27	WG1317907
Ethene	4.66		0.422	1.27	1	07/26/2019 11:27	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.48	J	1.05	25.0	1	07/26/2019 21:29	WG1317370
Acrylonitrile	U		0.873	5.00	1	07/26/2019 21:29	WG1317370
Benzene	U		0.0896	0.500	1	07/26/2019 21:29	WG1317370
Bromobenzene	U		0.133	0.500	1	07/26/2019 21:29	WG1317370
Bromodichloromethane	U		0.0800	0.500	1	07/26/2019 21:29	WG1317370
Bromochloromethane	U		0.145	0.500	1	07/26/2019 21:29	WG1317370
Bromoform	U		0.186	0.500	1	07/26/2019 21:29	WG1317370
Bromomethane	U		0.157	2.50	1	07/26/2019 21:29	WG1317370
n-Butylbenzene	U		0.143	0.500	1	07/26/2019 21:29	WG1317370
sec-Butylbenzene	U		0.134	0.500	1	07/26/2019 21:29	WG1317370
tert-Butylbenzene	U		0.183	0.500	1	07/26/2019 21:29	WG1317370
Carbon disulfide	U		0.101	0.500	1	07/26/2019 21:29	WG1317370
Carbon tetrachloride	U		0.159	0.500	1	07/26/2019 21:29	WG1317370

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/22/19 10:05

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/26/2019 21:29	WG1317370
Chlorodibromomethane	U		0.128	0.500	1	07/26/2019 21:29	WG1317370
Chloroethane	U		0.141	2.50	1	07/26/2019 21:29	WG1317370
Chloroform	U		0.0860	0.500	1	07/26/2019 21:29	WG1317370
Chloromethane	U		0.153	1.25	1	07/26/2019 21:29	WG1317370
2-Chlorotoluene	U		0.111	0.500	1	07/26/2019 21:29	WG1317370
4-Chlorotoluene	U		0.0972	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/26/2019 21:29	WG1317370
1,2-Dibromoethane	U		0.193	0.500	1	07/26/2019 21:29	WG1317370
Dibromomethane	U		0.117	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dichlorobenzene	U		0.101	0.500	1	07/26/2019 21:29	WG1317370
1,3-Dichlorobenzene	U		0.130	0.500	1	07/26/2019 21:29	WG1317370
1,4-Dichlorobenzene	U		0.121	0.500	1	07/26/2019 21:29	WG1317370
Dichlorodifluoromethane	U		0.127	2.50	1	07/26/2019 21:29	WG1317370
1,1-Dichloroethane	U		0.114	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dichloroethane	U		0.108	0.500	1	07/26/2019 21:29	WG1317370
1,1-Dichloroethene	U		0.188	0.500	1	07/26/2019 21:29	WG1317370
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/26/2019 21:29	WG1317370
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dichloropropane	U		0.190	0.500	1	07/26/2019 21:29	WG1317370
1,1-Dichloropropene	U		0.128	0.500	1	07/26/2019 21:29	WG1317370
1,3-Dichloropropane	U		0.147	1.00	1	07/26/2019 21:29	WG1317370
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/26/2019 21:29	WG1317370
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/26/2019 21:29	WG1317370
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/26/2019 21:29	WG1317370
2,2-Dichloropropane	U		0.0929	0.500	1	07/26/2019 21:29	WG1317370
Di-isopropyl ether	U		0.0924	0.500	1	07/26/2019 21:29	WG1317370
Ethylbenzene	U		0.158	0.500	1	07/26/2019 21:29	WG1317370
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/26/2019 21:29	WG1317370
2-Hexanone	U		0.757	5.00	1	07/26/2019 21:29	WG1317370
n-Hexane	U		0.305	5.00	1	07/26/2019 21:29	WG1317370
Iodomethane	U		0.377	10.0	1	07/26/2019 21:29	WG1317370
Isopropylbenzene	U		0.126	0.500	1	07/26/2019 21:29	WG1317370
p-Isopropyltoluene	U		0.138	0.500	1	07/26/2019 21:29	WG1317370
2-Butanone (MEK)	U		1.28	5.00	1	07/26/2019 21:29	WG1317370
Methylene Chloride	U		1.07	2.50	1	07/26/2019 21:29	WG1317370
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/26/2019 21:29	WG1317370
Methyl tert-butyl ether	U		0.102	0.500	1	07/26/2019 21:29	WG1317370
Naphthalene	U		0.174	2.50	1	07/26/2019 21:29	WG1317370
n-Propylbenzene	U		0.162	0.500	1	07/26/2019 21:29	WG1317370
Styrene	U		0.117	0.500	1	07/26/2019 21:29	WG1317370
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/26/2019 21:29	WG1317370
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/26/2019 21:29	WG1317370
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/26/2019 21:29	WG1317370
Tetrachloroethene	0.415	<u>BJ</u>	0.199	0.500	1	07/26/2019 21:29	WG1317370
Toluene	U		0.412	0.500	1	07/26/2019 21:29	WG1317370
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/26/2019 21:29	WG1317370
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/26/2019 21:29	WG1317370
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/26/2019 21:29	WG1317370
1,1,2-Trichloroethane	U		0.186	0.500	1	07/26/2019 21:29	WG1317370
Trichloroethene	U		0.153	0.500	1	07/26/2019 21:29	WG1317370
Trichlorofluoromethane	U		0.130	2.50	1	07/26/2019 21:29	WG1317370
1,2,3-Trichloropropane	U		0.247	2.50	1	07/26/2019 21:29	WG1317370
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/26/2019 21:29	WG1317370
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/26/2019 21:29	WG1317370
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/26/2019 21:29	WG1317370

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/22/19 10:05

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/26/2019 21:29	WG1317370
Vinyl chloride	0.253	↓	0.118	0.500	1	07/26/2019 21:29	WG1317370
Xylenes, Total	U		0.316	1.50	1	07/26/2019 21:29	WG1317370
<i>(S) Toluene-d8</i>	107			80.0-120		07/26/2019 21:29	WG1317370
<i>(S) 4-Bromofluorobenzene</i>	103			77.0-126		07/26/2019 21:29	WG1317370
<i>(S) 1,2-Dichloroethane-d4</i>	106			70.0-130		07/26/2019 21:29	WG1317370

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	160000		2710	20000	1	07/26/2019 16:19	WG1317446

Sample Narrative:

L1121210-04 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	8310		51.9	1000	1	07/23/2019 18:21	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 18:21	WG1315944
Sulfate	6780		77.4	5000	1	07/23/2019 18:21	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1840	<u>B</u>	102	1000	1	07/23/2019 23:38	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1670		15.0	100	1	07/23/2019 20:29	WG1316057
Manganese	325		0.250	5.00	1	07/23/2019 20:29	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 07:50	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 07:50	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	27.0		0.287	0.678	1	07/26/2019 11:29	WG1317907
Ethane	U		0.296	1.29	1	07/26/2019 11:29	WG1317907
Ethene	U		0.422	1.27	1	07/26/2019 11:29	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.98	<u>J</u>	1.05	25.0	1	07/25/2019 12:38	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 12:38	WG1317389
Benzene	0.177	<u>J</u>	0.0896	0.500	1	07/25/2019 12:38	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 12:38	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 12:38	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 12:38	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 12:38	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 12:38	WG1317389
n-Butylbenzene	0.162	<u>J</u>	0.143	0.500	1	07/25/2019 12:38	WG1317389
sec-Butylbenzene	0.159	<u>J</u>	0.134	0.500	1	07/25/2019 12:38	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 12:38	WG1317389
Carbon disulfide	0.250	<u>J</u>	0.101	0.500	1	07/25/2019 12:38	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 12:38	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 11:40

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 12:38	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 12:38	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 12:38	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 12:38	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 12:38	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 12:38	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 12:38	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 12:38	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 12:38	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 12:38	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 12:38	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 12:38	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 12:38	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 12:38	WG1317389
cis-1,2-Dichloroethene	0.384	U	0.0933	0.500	1	07/25/2019 12:38	WG1317389
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 12:38	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 12:38	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 12:38	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 12:38	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 12:38	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 12:38	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 12:38	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 12:38	WG1317389
Ethylbenzene	0.227	U	0.158	0.500	1	07/25/2019 12:38	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 12:38	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 12:38	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 12:38	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 12:38	WG1317389
Isopropylbenzene	0.134	U	0.126	0.500	1	07/25/2019 12:38	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 12:38	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 12:38	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 12:38	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 12:38	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 12:38	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 12:38	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 12:38	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 12:38	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 12:38	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 12:38	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 12:38	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 14:04	WG1319848
Toluene	0.716		0.412	0.500	1	07/25/2019 12:38	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 12:38	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 12:38	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 12:38	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 12:38	WG1317389
Trichloroethene	0.190	U	0.153	0.500	1	07/25/2019 12:38	WG1317389
Trichlorofluoromethane	U	U	0.130	2.50	1	07/25/2019 12:38	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 12:38	WG1317389
1,2,4-Trimethylbenzene	0.225	U	0.123	0.500	1	07/25/2019 12:38	WG1317389
1,2,3-Trimethylbenzene	0.139	U	0.0739	0.500	1	07/25/2019 12:38	WG1317389
1,3,5-Trimethylbenzene	0.141	U	0.124	0.500	1	07/25/2019 12:38	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/22/19 11:40

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 12:38	WG1317389
Vinyl chloride	0.235	↓	0.118	0.500	1	07/25/2019 12:38	WG1317389
Xylenes, Total	0.819	↓	0.316	1.50	1	07/25/2019 12:38	WG1317389
(S) Toluene-d8	106			80.0-120		07/25/2019 12:38	WG1317389
(S) Toluene-d8	106			80.0-120		07/30/2019 14:04	WG1319848
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 12:38	WG1317389
(S) 4-Bromofluorobenzene	100			77.0-126		07/30/2019 14:04	WG1319848
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 12:38	WG1317389
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/30/2019 14:04	WG1319848

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	464000		2710	20000	1	07/26/2019 16:35	WG1317446

Sample Narrative:

L1121210-05 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	43700		51.9	1000	1	07/23/2019 18:37	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 18:37	WG1315944
Sulfate	46700		77.4	5000	1	07/23/2019 18:37	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14900		102	1000	1	07/23/2019 23:55	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	11400		15.0	100	1	07/23/2019 21:26	WG1316057
Manganese	1730		1.25	25.0	5	07/23/2019 21:51	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3880		31.6	100	1	07/25/2019 08:13	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 08:13	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5090		0.287	0.678	1	07/26/2019 11:32	WG1317907
Ethane	45.8		0.296	1.29	1	07/26/2019 11:32	WG1317907
Ethene	56.2		0.422	1.27	1	07/26/2019 11:32	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.65	J	1.05	25.0	1	07/25/2019 13:26	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 13:26	WG1317389
Benzene	0.327	J	0.0896	0.500	1	07/25/2019 13:26	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 13:26	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 13:26	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 13:26	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 13:26	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 13:26	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 13:26	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 13:26	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 13:26	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 13:26	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 13:26	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 12:30

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 13:26	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 13:26	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 13:26	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 13:26	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 13:26	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 13:26	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 13:26	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 13:26	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 13:26	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 13:26	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 13:26	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 13:26	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 13:26	WG1317389
1,1-Dichloroethene	17.5		0.188	0.500	1	07/25/2019 13:26	WG1317389
cis-1,2-Dichloroethene	4530		9.33	50.0	100	07/30/2019 14:26	WG1319848
trans-1,2-Dichloroethene	18.4		0.152	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 13:26	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 13:26	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 13:26	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 13:26	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 13:26	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 13:26	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 13:26	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 13:26	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 13:26	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 13:26	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 13:26	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 13:26	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 13:26	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 13:26	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 13:26	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 13:26	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 13:26	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 13:26	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 13:26	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 13:26	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 13:26	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 13:26	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 13:26	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 13:26	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 13:26	WG1317389
Tetrachloroethene	U		19.9	50.0	100	07/30/2019 14:26	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 13:26	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 13:26	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 13:26	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 13:26	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 13:26	WG1317389
Trichloroethene	27.6		0.153	0.500	1	07/25/2019 13:26	WG1317389
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/25/2019 13:26	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 13:26	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 13:26	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 13:26	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 13:26	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 12:30

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	07/25/2019 13:26	WG1317389
Vinyl chloride	666		11.8	50.0	100	07/30/2019 14:26	WG1319848
Xylenes, Total	U		0.316	1.50	1	07/25/2019 13:26	WG1317389
(S) Toluene-d8	108			80.0-120		07/25/2019 13:26	WG1317389
(S) Toluene-d8	105			80.0-120		07/30/2019 14:26	WG1319848
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 13:26	WG1317389
(S) 4-Bromofluorobenzene	99.3			77.0-126		07/30/2019 14:26	WG1319848
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/25/2019 13:26	WG1317389
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/30/2019 14:26	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1121210-05 WG1317389, WG1319848: Not all compounds reportable at lower dilution.
 L1121210-05 WG1317389, WG1319848: Cannot be reanalyzed at lower dilution due to high levels of target analytes.



Collected date/time: 07/22/19 14:20

L1121210

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	606000		2710	20000	1	07/26/2019 16:42	WG1317446

Sample Narrative:

L1121210-06 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	45500		51.9	1000	1	07/23/2019 19:27	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 19:27	WG1315944
Sulfate	181000		387	25000	5	07/24/2019 08:57	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	42000		102	1000	1	07/25/2019 00:00	WG1316685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	19900		15.0	100	1	07/23/2019 21:30	WG1316057
Manganese	8680		2.50	50.0	10	07/23/2019 21:56	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3100		31.6	100	1	07/25/2019 08:37	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/25/2019 08:37	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2340		0.287	0.678	1	07/26/2019 11:40	WG1317907
Ethane	50.0		0.296	1.29	1	07/26/2019 11:40	WG1317907
Ethene	U		0.422	1.27	1	07/26/2019 11:40	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	4.94	J	1.05	25.0	1	07/25/2019 14:13	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 14:13	WG1317389
Benzene	0.492	J	0.0896	0.500	1	07/25/2019 14:13	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 14:13	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 14:13	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 14:13	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 14:13	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 14:13	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 14:13	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 14:13	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 14:13	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 14:13	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 14:13	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 14:20

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 14:13	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 14:13	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 14:13	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 14:13	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 14:13	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 14:13	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 14:13	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 14:13	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 14:13	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 14:13	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 14:13	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 14:13	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 14:13	WG1317389
1,1-Dichloroethene	13.2		0.188	0.500	1	07/25/2019 14:13	WG1317389
cis-1,2-Dichloroethene	2310		4.66	25.0	50	07/30/2019 18:58	WG1319848
trans-1,2-Dichloroethene	14.5		0.152	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 14:13	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 14:13	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 14:13	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 14:13	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 14:13	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 14:13	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 14:13	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 14:13	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 14:13	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 14:13	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 14:13	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 14:13	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 14:13	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 14:13	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 14:13	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 14:13	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 14:13	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 14:13	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 14:13	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 14:13	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 14:13	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 14:13	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 14:13	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 14:13	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 14:13	WG1317389
Tetrachloroethene	232		9.95	25.0	50	07/30/2019 18:58	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 14:13	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 14:13	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 14:13	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 14:13	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 14:13	WG1317389
Trichloroethene	1270		7.65	25.0	50	07/30/2019 18:58	WG1319848
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/25/2019 14:13	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 14:13	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 14:13	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 14:13	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 14:13	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 14:20

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 14:13	WG1317389
Vinyl chloride	82.0		0.118	0.500	1	07/25/2019 14:13	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 14:13	WG1317389
<i>(S) Toluene-d8</i>	108			80.0-120		07/25/2019 14:13	WG1317389
<i>(S) Toluene-d8</i>	106			80.0-120		07/30/2019 18:58	WG1319848
<i>(S) 4-Bromofluorobenzene</i>	102			77.0-126		07/25/2019 14:13	WG1317389
<i>(S) 4-Bromofluorobenzene</i>	100			77.0-126		07/30/2019 18:58	WG1319848
<i>(S) 1,2-Dichloroethane-d4</i>	103			70.0-130		07/25/2019 14:13	WG1317389
<i>(S) 1,2-Dichloroethane-d4</i>	110			70.0-130		07/30/2019 18:58	WG1319848

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 14:50

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	527000		2710	20000	1	07/26/2019 16:49	WG1317446

Sample Narrative:

L1121210-07 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	40300		51.9	1000	1	07/23/2019 19:43	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 19:43	WG1315944
Sulfate	30300		77.4	5000	1	07/23/2019 19:43	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	18900		102	1000	1	07/25/2019 00:15	WG1316685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3080		15.0	100	1	07/23/2019 21:35	WG1316057
Manganese	1040		0.250	5.00	1	07/23/2019 21:35	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	210		31.6	100	1	07/25/2019 09:01	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 09:01	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	16400		2.87	6.78	10	07/26/2019 14:42	WG1317908
Ethane	133		0.296	1.29	1	07/26/2019 11:44	WG1317907
Ethene	81.5		0.422	1.27	1	07/26/2019 11:44	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.28	J	1.05	25.0	1	07/25/2019 14:36	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 14:36	WG1317389
Benzene	0.188	J	0.0896	0.500	1	07/25/2019 14:36	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 14:36	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 14:36	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 14:36	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 14:36	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 14:36	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 14:36	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 14:36	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 14:36	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 14:36	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 14:36	WG1317389

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/22/19 14:50

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 14:36	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 14:36	WG1317389
Chloroethane	3.61		0.141	2.50	1	07/25/2019 14:36	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 14:36	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 14:36	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 14:36	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 14:36	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 14:36	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 14:36	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 14:36	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 14:36	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 14:36	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 14:36	WG1317389
1,1-Dichloroethene	0.825		0.188	0.500	1	07/25/2019 14:36	WG1317389
cis-1,2-Dichloroethene	290		0.933	5.00	10	07/30/2019 15:10	WG1319848
trans-1,2-Dichloroethene	7.08		0.152	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 14:36	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 14:36	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 14:36	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 14:36	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 14:36	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 14:36	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 14:36	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 14:36	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 14:36	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 14:36	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 14:36	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 14:36	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 14:36	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 14:36	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 14:36	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 14:36	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 14:36	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 14:36	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 14:36	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 14:36	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 14:36	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 14:36	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 14:36	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 14:36	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 14:36	WG1317389
Tetrachloroethene	U		1.99	5.00	10	07/30/2019 15:10	WG1319848
Toluene	0.758		0.412	0.500	1	07/25/2019 14:36	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 14:36	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 14:36	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 14:36	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 14:36	WG1317389
Trichloroethene	2.62	U	1.53	5.00	10	07/30/2019 15:10	WG1319848
Trichlorofluoromethane	U	U	0.130	2.50	1	07/25/2019 14:36	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 14:36	WG1317389
1,2,4-Trimethylbenzene	0.144	U	0.123	0.500	1	07/25/2019 14:36	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 14:36	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 14:36	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/22/19 14:50

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 14:36	WG1317389
Vinyl chloride	307		1.18	5.00	10	07/30/2019 15:10	WG1319848
Xylenes, Total	0.609	<u>J</u>	0.316	1.50	1	07/25/2019 14:36	WG1317389
(S) Toluene-d8	106			80.0-120		07/25/2019 14:36	WG1317389
(S) Toluene-d8	106			80.0-120		07/30/2019 15:10	WG1319848
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 14:36	WG1317389
(S) 4-Bromofluorobenzene	101			77.0-126		07/30/2019 15:10	WG1319848
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/25/2019 14:36	WG1317389
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/30/2019 15:10	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1121210-07 WG1317389, WG1319848: Not all compounds reportable at lower dilution.
 L1121210-07 WG1317389, WG1319848: Cannot be reanalyzed at lower dilution due to high levels of target analytes.



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 13:13	WG1317381
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 13:13	WG1317381

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/25/2019 00:05	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 00:05	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 00:05	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 00:05	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 00:05	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 00:05	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 00:05	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 00:05	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 00:05	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 00:05	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 00:05	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 00:05	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 00:05	WG1317007
Chlorobenzene	U		0.140	0.500	1	07/25/2019 00:05	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 00:05	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 00:05	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 00:05	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 00:05	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 00:05	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 00:05	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 00:05	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 00:05	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 00:05	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 00:05	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 00:05	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 00:05	WG1317007
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 00:05	WG1317007
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/25/2019 00:05	WG1317007
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 00:05	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 00:05	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 00:05	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 00:05	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 00:05	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 00:05	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 00:05	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 00:05	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 00:05	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 00:05	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 00:05	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 00:05	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 00:05	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 00:05	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 00:05	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 00:05	WG1317007

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 15:00

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 00:05	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 00:05	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 00:05	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 00:05	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 00:05	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 00:05	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 00:05	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 00:05	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 00:05	WG1317007
Tetrachloroethene	1.07	<u>B</u>	0.199	0.500	1	07/25/2019 00:05	WG1317007
Toluene	U		0.412	0.500	1	07/25/2019 00:05	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 00:05	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 00:05	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 00:05	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 00:05	WG1317007
Trichloroethene	U		0.153	0.500	1	07/25/2019 00:05	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 00:05	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 00:05	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 00:05	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 00:05	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 00:05	WG1317007
Vinyl acetate	U		0.645	5.00	1	07/25/2019 00:05	WG1317007
Vinyl chloride	U		0.118	0.500	1	07/25/2019 00:05	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 00:05	WG1317007
(S) Toluene-d8	106			80.0-120		07/25/2019 00:05	WG1317007
(S) 4-Bromofluorobenzene	98.4			77.0-126		07/25/2019 00:05	WG1317007
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 00:05	WG1317007

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1121210-08 WG1317007: PCE detection likely from instrument contamination/carryover, no sample remaining for re-analysis.

Method Blank (MB)

(MB) R3434841-1 07/26/19 14:59

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	2860	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1121183-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121183-01 07/26/19 15:41 • (DUP) R3434841-2 07/26/19 15:48

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	144000	149000	1	2.92		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1121537-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121537-01 07/26/19 18:09 • (DUP) R3434841-4 07/26/19 18:17

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	533000	534000	1	0.236		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3434841-3 07/26/19 16:26

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	101000	101	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3433627-1 07/23/19 08:13

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	277	J	51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1121210-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1121210-02 07/23/19 16:59 • (DUP) R3433627-3 07/23/19 17:15

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	17000	16400	1	3.40		15
Nitrate	U	0.000	1	0.000		15
Sulfate	7400	7120	1	3.85		15

L1121210-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1121210-07 07/23/19 19:43 • (DUP) R3433627-6 07/23/19 19:59

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Chloride	40300	39900	1	0.931		15
Nitrate	U	0.000	1	0.000		15
Sulfate	30300	30400	1	0.390		15

Laboratory Control Sample (LCS)

(LCS) R3433627-2 07/23/19 08:30

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39400	98.5	80.0-120	
Nitrate	8000	8060	101	80.0-120	
Sulfate	40000	39000	97.5	80.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1121210-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	77000	67900	68000	102	102	1	80.0-120			0.0881	15
Nitrate	5000	U	5010	5020	100	100	1	80.0-120			0.0279	15
Sulfate	50000	7400	58900	59000	103	103	1	80.0-120			0.142	15

L1121210-07 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	40300	89100	97.6	1	80.0-120	
Nitrate	5000	U	4530	90.6	1	80.0-120	
Sulfate	50000	30300	79700	98.9	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3433613-1 07/23/19 16:56	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	190	<u>1</u>	102	1000

L1120698-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1120698-04 07/23/19 17:54 • (DUP) R3433613-3 07/23/19 18:05	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	1400	1320	1	5.81		20

L1121124-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1121124-03 07/23/19 21:25 • (DUP) R3433613-6 07/23/19 21:38	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	7910	7670	1	3.08		20

Laboratory Control Sample (LCS)

(LCS) R3433613-2 07/23/19 17:27	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	74300	99.1	85.0-115	

L1120698-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1120698-07 07/23/19 18:35 • (MS) R3433613-4 07/23/19 18:51 • (MSD) R3433613-5 07/23/19 19:07	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	12700	63800	63100	102	101	1	80.0-120			1.07	20

L1121210-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121210-05 07/23/19 23:55 • (MS) R3433613-7 07/24/19 00:12 • (MSD) R3433613-8 07/24/19 00:29	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	14900	66600	64500	103	99.2	1	80.0-120			3.22	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3434105-1 07/24/19 22:22			
Analyte	MB Result	<u>MB Qualifier</u>	MB MDL
	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	363	J	102
			1000

L1121236-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1121236-02 07/25/19 02:27 • (DUP) R3434105-5 07/25/19 02:40			
Analyte	Original Result	DUP Result	Dilution
	ug/l	ug/l	%
TOC (Total Organic Carbon)	1030000	1010000	20
			2.06
			DUP RPD
			<u>DUP Qualifier</u>
			Limits
			20

L1121548-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1121548-05 07/25/19 07:23 • (DUP) R3434105-8 07/25/19 07:37			
Analyte	Original Result	DUP Result	Dilution
	ug/l	ug/l	%
TOC (Total Organic Carbon)	884	758	1
			15.3
			J
			20

Laboratory Control Sample (LCS)

(LCS) R3434105-2 07/24/19 22:59			
Analyte	Spike Amount	LCS Result	LCS Rec.
	ug/l	ug/l	%
TOC (Total Organic Carbon)	75000	74500	99.3
			85.0-115
			<u>LCS Qualifier</u>

L1121210-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121210-07 07/25/19 00:15 • (MS) R3434105-3 07/25/19 00:35 • (MSD) R3434105-4 07/25/19 00:55			
Analyte	Spike Amount	Original Result	MS Result
	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	50000	18900	68500
			68900
			99.2
			99.9
			1
			80.0-120
			<u>MS Qualifier</u>
			<u>MSD Qualifier</u>
			RPD
			0.480
			20

L1121236-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121236-06 07/25/19 03:35 • (MS) R3434105-6 07/25/19 03:54 • (MSD) R3434105-7 07/25/19 04:11			
Analyte	Spike Amount	Original Result	MS Result
	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	50000	1820	51500
			52500
			99.3
			101
			1
			80.0-120
			<u>MS Qualifier</u>
			<u>MSD Qualifier</u>
			RPD
			1.87
			20

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Iron	U	ug/l	15.0	100
Manganese	U	ug/l	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
		ug/l	%	ug/l	%							
Iron	5000	5190	104	5390	104	108	108	80.0-120			3.70	20
Manganese	50.0	51.4	103	512	103	102	102	80.0-120			0.379	20

L1121210-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result		MS Result		MSD Result		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
		ug/l	%	ug/l	%	ug/l	%						
Iron	5000	1670	100	6670	112	112	112	1	75.0-125			8.55	20
Manganese	50.0	325	81.2	365	375	375	375	1	75.0-125			2.58	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L1121210-01.02.03.04.05.06.07](#)

Method Blank (MB)

(MB) R3434118-3 07/24/19 23:03

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) <i>o,o</i> -Trifluorotoluene(FID)	110			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3434118-2 07/24/19 22:15

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5030	91.4	70.0-124	
^(S) <i>o,o</i> -Trifluorotoluene(FID)			93.2	78.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc- WA

PROJECT:

1413.001.05.601

SDG:

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1121210-08](#)

Method Blank (MB)

(MB) R3435238-3 07/25/19 11:30

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	110			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3435238-2 07/25/19 10:42

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4980	90.5	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			90.7	78.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc- WA

PROJECT:

1413.001.05.601

SDG:

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Volatile Organic Compounds (GC) by Method RSK175

[L1121210-02.03.04.05.06.07](#)

Method Blank (MB)

(MB) R3434651-1 07/26/19 10:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1121638-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121638-01 07/26/19 11:03 • (DUP) R3434651-2 07/26/19 11:42

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	%		ug/l	%		
Methane	ND	0.000	1	0.000			20
Ethane	ND	0.000	1	0.000			20
Ethene	ND	0.000	1	0.000			20

L1121358-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1121358-06 07/26/19 12:40 • (DUP) R3434651-3 07/26/19 13:01

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	%		ug/l	%		
Methane	ND	0.000	1	0.000			20
Ethane	ND	0.000	1	0.000			20
Ethene	ND	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434651-4 07/26/19 13:04 • (LCSD) R3434651-5 07/26/19 13:07

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	%	ug/l	%	ug/l	%							
Methane	67.8		72.5	72.0	107	106			85.0-115			0.736	20
Ethane	129		118	121	91.7	93.7			85.0-115			2.15	20
Ethene	127		118	120	92.8	94.3			85.0-115			1.55	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

DATE/TIME:

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Public Review Draft

Volatile Organic Compounds (GC) by Method RSK175

[L1121210-07](#)

Method Blank (MB)

(MB) R3434735-1 07/26/19 13:25	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l
Methane	U		0.287	0.678

L1121816-21 Original Sample (OS) • Duplicate (DUP)

(OS) L1121816-21 07/26/19 13:30 • (DUP) R3434735-2 07/26/19 14:06	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l	%	%		%
Methane	U	0.000	1	0.000		20

L1121975-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1121975-08 07/26/19 14:27 • (DUP) R3434735-3 07/26/19 14:47	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Analyte	ug/l	ug/l	%	%		%
Methane	410	423	1	3.14		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434735-4 07/26/19 14:50 • (LCSD) R3434735-5 07/26/19 14:54	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	73.6	73.9	108	109	85.0-115			0.402	20

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT: PES Environmental, Inc- WA

PROJECT: 1413.001.05.601

SDG: L1121210

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121210-01.02.08](#)

Method Blank (MB)

(MB) R3434112-2 07/24/19 18:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
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9 Sc

ACCOUNT:

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121210-01.02.08](#)

Method Blank (MB)

(MB) R3434112-2 07/24/19 18:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.226	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	2.04		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	105			70.0-130

Public Review Draft

1 Cp
2 Tc
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Laboratory Control Sample (LCS)

(LCS) R3434112-1 07/24/19 09:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	135	108	19.0-160	
Acrylonitrile	125	140	112	55.0-149	
Benzene	25.0	25.0	99.9	70.0-123	
Bromobenzene	25.0	23.5	94.1	73.0-121	
Bromodichloromethane	25.0	26.7	107	75.0-120	
Bromochloromethane	25.0	26.5	106	76.0-122	
Bromoform	25.0	24.5	97.9	68.0-132	
Bromomethane	25.0	26.2	105	10.0-160	
n-Butylbenzene	25.0	27.5	110	73.0-125	
sec-Butylbenzene	25.0	26.9	108	75.0-125	
tert-Butylbenzene	25.0	26.8	107	76.0-124	
Carbon disulfide	25.0	25.8	103	61.0-128	
Carbon tetrachloride	25.0	29.1	116	68.0-126	
Chlorobenzene	25.0	25.5	102	80.0-121	
Chlorodibromomethane	25.0	27.5	110	77.0-125	
Chloroethane	25.0	25.6	102	47.0-150	
Chloroform	25.0	24.9	99.6	73.0-120	
Chloromethane	25.0	23.7	94.8	41.0-142	
2-Chlorotoluene	25.0	24.7	98.9	76.0-123	
4-Chlorotoluene	25.0	25.0	99.9	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.5	97.9	58.0-134	
1,2-Dibromoethane	25.0	27.4	110	80.0-122	
Dibromomethane	25.0	26.8	107	80.0-120	
1,2-Dichlorobenzene	25.0	25.1	100	79.0-121	
1,3-Dichlorobenzene	25.0	25.2	101	79.0-120	
1,4-Dichlorobenzene	25.0	25.0	100	79.0-120	
Dichlorodifluoromethane	25.0	25.7	103	51.0-149	
1,1-Dichloroethane	25.0	25.7	103	70.0-126	
1,2-Dichloroethane	25.0	26.3	105	70.0-128	
1,1-Dichloroethene	25.0	26.4	105	71.0-124	
cis-1,2-Dichloroethene	25.0	25.1	100	73.0-120	
trans-1,2-Dichloroethene	25.0	25.4	102	73.0-120	
1,2-Dichloropropane	25.0	25.9	104	77.0-125	
1,1-Dichloropropene	25.0	26.1	104	74.0-126	
1,3-Dichloropropene	25.0	26.0	104	80.0-120	
cis-1,3-Dichloropropene	25.0	26.7	107	80.0-123	
trans-1,3-Dichloropropene	25.0	26.6	106	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	21.5	86.1	33.0-144	
2,2-Dichloropropane	25.0	27.3	109	58.0-130	
Di-isopropyl ether	25.0	25.9	104	58.0-138	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
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Volatile Organic Compounds (GC/MS) by Method 8260C

Laboratory Control Sample (LCS)

(LCS) R3434112-1 07/24/19 09:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.1	101	79.0-123	1 Cp
Hexachloro-1,3-butadiene	25.0	27.6	110	54.0-138	3 Ss
2-Hexanone	125	135	108	67.0-149	2 Tc
n-Hexane	25.0	29.1	116	57.0-133	4 Cn
Iodomethane	125	125	99.9	33.0-147	
Isopropylbenzene	25.0	26.8	107	76.0-127	
p-Isopropyltoluene	25.0	27.3	109	76.0-125	
2-Butanone (MEK)	125	134	107	44.0-160	
Methylene Chloride	25.0	25.5	102	67.0-120	5 Sr
4-Methyl-2-pentanone (MIBK)	125	127	102	68.0-142	6 Qc
Methyl tert-butyl ether	25.0	26.5	106	68.0-125	
Naphthalene	25.0	25.1	100	54.0-135	7 Gl
n-Propylbenzene	25.0	25.8	103	77.0-124	
Styrene	25.0	27.1	108	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	27.4	110	75.0-125	8 Al
1,1,2,2-Tetrachloroethane	25.0	26.1	104	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	24.4	97.5	69.0-132	
Tetrachloroethene	25.0	29.8	119	72.0-132	
Toluene	25.0	24.8	99.1	79.0-120	
1,2,3-Trichlorobenzene	25.0	25.3	101	50.0-138	
1,2,4-Trichlorobenzene	25.0	26.4	106	57.0-137	
1,1,1-Trichloroethane	25.0	26.9	108	73.0-124	
1,1,2-Trichloroethane	25.0	26.5	106	80.0-120	
Trichloroethene	25.0	24.2	96.8	78.0-124	
Trichlorofluoromethane	25.0	21.6	86.3	59.0-147	
1,2,3-Trichloropropane	25.0	25.8	103	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.5	102	76.0-121	
1,2,3-Trimethylbenzene	25.0	25.3	101	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.5	98.2	76.0-122	
Vinyl acetate	125	147	118	11.0-160	
Vinyl chloride	25.0	26.9	108	67.0-131	
Xylenes, Total	75.0	75.9	101	79.0-123	
(S) Toluene-d8			106	80.0-120	
(S) 4-Bromofluorobenzene			105	77.0-126	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3435237-3_07/26/19 11:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3435237-3_07/26/19 11:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	0.488	J	0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	111			80.0-120
(S) 4-Bromofluorobenzene	107			77.0-126
(S) 1,2-Dichloroethane-d4	106			70.0-130

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3435237-1 07/26/19 10:06 • (LCSD) R3435237-2 07/26/19 10:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	133	134	106	107	19.0-160			0.695	27
Acrylonitrile	125	142	141	113	113	55.0-149			0.668	20
Benzene	25.0	24.7	24.7	98.7	98.7	70.0-123			0.0200	20
Bromobenzene	25.0	24.1	24.2	96.5	96.6	73.0-121			0.181	20
Bromodichloromethane	25.0	26.9	26.4	107	106	75.0-120			1.67	20
Bromochloromethane	25.0	26.5	26.3	106	105	76.0-122			0.633	20
Bromoform	25.0	24.6	24.8	98.2	99.4	68.0-132			1.13	20
Bromomethane	25.0	26.1	25.4	104	101	10.0-160			2.79	25
n-Butylbenzene	25.0	27.5	28.4	110	114	73.0-125			3.26	20
sec-Butylbenzene	25.0	27.3	27.5	109	110	75.0-125			0.705	20
tert-Butylbenzene	25.0	26.8	26.9	107	107	76.0-124			0.329	20
Carbon disulfide	25.0	26.1	25.7	104	103	61.0-128			1.73	20
Carbon tetrachloride	25.0	29.8	30.5	119	122	68.0-126			2.16	20
Chlorobenzene	25.0	25.5	25.5	102	102	80.0-121			0.220	20
Chlorodibromomethane	25.0	27.4	26.9	110	107	77.0-125			2.05	20
Chloroethane	25.0	25.4	24.8	101	99.0	47.0-150			2.40	20
Chloroform	25.0	25.2	25.2	101	101	73.0-120			0.101	20
Chloromethane	25.0	24.5	24.0	98.0	96.1	41.0-142			1.98	20
2-Chlorotoluene	25.0	25.1	25.4	100	102	76.0-123			1.43	20
4-Chlorotoluene	25.0	25.8	25.2	103	101	75.0-122			2.14	20
1,2-Dibromo-3-Chloropropane	25.0	23.9	24.4	95.7	97.5	58.0-134			1.93	20
1,2-Dibromoethane	25.0	26.6	26.7	106	107	80.0-122			0.271	20
Dibromomethane	25.0	27.0	26.6	108	106	80.0-120			1.63	20
1,2-Dichlorobenzene	25.0	24.7	25.4	98.9	102	79.0-121			2.57	20
1,3-Dichlorobenzene	25.0	25.3	25.5	101	102	79.0-120			0.997	20
1,4-Dichlorobenzene	25.0	24.7	24.8	98.8	99.2	79.0-120			0.394	20
Dichlorodifluoromethane	25.0	29.6	30.4	118	122	51.0-149			2.81	20
1,1-Dichloroethane	25.0	26.3	26.0	105	104	70.0-126			1.30	20
1,2-Dichloroethane	25.0	25.7	25.6	103	102	70.0-128			0.539	20
1,1-Dichloroethene	25.0	27.3	26.8	109	107	71.0-124			1.49	20
cis-1,2-Dichloroethene	25.0	25.3	25.4	101	102	73.0-120			0.542	20
trans-1,2-Dichloroethene	25.0	26.1	25.6	104	102	73.0-120			1.94	20
1,2-Dichloropropane	25.0	25.3	25.8	101	103	77.0-125			1.98	20
1,1-Dichloropropene	25.0	26.5	26.1	106	104	74.0-126			1.64	20
1,3-Dichloropropene	25.0	25.6	25.7	103	103	80.0-120			0.452	20
cis-1,3-Dichloropropene	25.0	27.6	27.2	110	109	80.0-123			1.51	20
trans-1,3-Dichloropropene	25.0	26.6	26.8	106	107	78.0-124			0.795	20
trans-1,4-Dichloro-2-butene	25.0	23.2	23.8	92.7	95.2	33.0-144			2.61	20
2,2-Dichloropropane	25.0	26.4	27.1	105	109	58.0-130			2.88	20
Diisopropyl ether	25.0	26.0	25.9	104	103	58.0-138			0.354	20

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2 Tc
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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3435237-1 07/26/19 10:06 • (LCSD) R3435237-2 07/26/19 10:27

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	25.3	24.5	101	98.0	79.0-123			3.06	20
Hexachloro-1,3-butadiene	25.0	25.8	27.1	103	109	54.0-138			5.20	20
2-Hexanone	125	134	136	108	109	67.0-149			1.49	20
n-Hexane	25.0	30.9	28.7	124	115	57.0-133			7.52	20
Iodomethane	125	126	125	101	99.9	33.0-147			1.33	26
Isopropylbenzene	25.0	26.5	26.2	106	105	76.0-127			0.894	20
p-Isopropyltoluene	25.0	27.2	27.9	109	112	76.0-125			2.39	20
2-Butanone (MEK)	125	134	135	107	108	44.0-160			0.891	20
Methylene Chloride	25.0	25.9	25.5	104	102	67.0-120			1.52	20
4-Methyl-2-pentanone (MIBK)	125	127	127	101	102	68.0-142			0.568	20
Methyl tert-butyl ether	25.0	26.1	26.5	104	106	68.0-125			1.63	20
Naphthalene	25.0	24.1	26.1	96.3	105	54.0-135			8.26	20
n-Propylbenzene	25.0	26.2	26.4	105	106	77.0-124			0.683	20
Styrene	25.0	26.9	26.1	107	104	73.0-130			2.80	20
1,1,1,2-Tetrachloroethane	25.0	27.4	26.8	110	107	75.0-125			1.99	20
1,1,2,2-Tetrachloroethane	25.0	27.1	27.0	108	108	65.0-130			0.240	20
1,1,2-Trichlorotrifluoroethane	25.0	25.7	25.1	103	100	69.0-132			2.16	20
Tetrachloroethene	25.0	27.1	26.6	108	106	72.0-132			1.82	20
Toluene	25.0	24.3	24.4	97.3	97.6	79.0-120			0.272	20
1,2,3-Trichlorobenzene	25.0	23.6	25.6	94.5	102	50.0-138			7.91	20
1,2,4-Trichlorobenzene	25.0	25.1	26.5	100	106	57.0-137			5.23	20
1,1,1-Trichloroethane	25.0	27.3	26.8	109	107	73.0-124			1.83	20
1,1,2-Trichloroethane	25.0	26.2	26.1	105	104	80.0-120			0.379	20
Trichloroethene	25.0	25.1	24.7	100	98.7	78.0-124			1.48	20
Trichlorofluoromethane	25.0	21.1	21.4	84.2	85.6	59.0-147			1.64	20
1,2,3-Trichloropropane	25.0	26.2	26.1	105	104	73.0-130			0.483	20
1,2,4-Trimethylbenzene	25.0	25.4	25.8	102	103	76.0-121			1.47	20
1,2,3-Trimethylbenzene	25.0	24.8	25.4	99.1	102	77.0-120			2.65	20
1,3,5-Trimethylbenzene	25.0	24.8	25.1	99.3	101	76.0-122			1.31	20
Vinyl acetate	125	147	146	117	116	11.0-160			0.669	20
Vinyl chloride	25.0	28.4	27.5	113	110	67.0-131			3.22	20
Xylenes, Total	75.0	74.3	74.5	99.1	99.3	79.0-123			0.269	20
(S) Toluene-d8				106	106	80.0-120				
(S) 4-Bromofluorobenzene				105	103	77.0-126				
(S) 1,2-Dichloroethane-d4				106	108	70.0-130				

Public Review Draft

1 Cp
2 Tc
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6 Qc
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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3435471-2 07/25/19 10:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3435471-2 07/25/19 10:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	108			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	104			70.0-130

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Laboratory Control Sample (LCS)

(LCS) R343547-1 07/25/19 09:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	135	108	19.0-160	
Acrylonitrile	125	141	113	55.0-149	
Benzene	25.0	24.9	99.6	70.0-123	
Bromobenzene	25.0	24.1	96.2	73.0-121	
Bromodichloromethane	25.0	26.1	105	75.0-120	
Bromochloromethane	25.0	26.5	106	76.0-122	
Bromoform	25.0	24.2	96.8	68.0-132	
Bromomethane	25.0	26.5	106	10.0-160	
n-Butylbenzene	25.0	28.1	112	73.0-125	
sec-Butylbenzene	25.0	27.0	108	75.0-125	
tert-Butylbenzene	25.0	27.1	108	76.0-124	
Carbon disulfide	25.0	25.7	103	61.0-128	
Carbon tetrachloride	25.0	29.5	118	68.0-126	
Chlorobenzene	25.0	25.5	102	80.0-121	
Chlorodibromomethane	25.0	27.3	109	77.0-125	
Chloroethane	25.0	25.9	103	47.0-150	
Chloroform	25.0	24.7	98.9	73.0-120	
Chloromethane	25.0	23.3	93.2	41.0-142	
2-Chlorotoluene	25.0	25.4	101	76.0-123	
4-Chlorotoluene	25.0	25.4	101	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	25.5	102	58.0-134	
1,2-Dibromoethane	25.0	26.5	106	80.0-122	
Dibromomethane	25.0	26.6	107	80.0-120	
1,2-Dichlorobenzene	25.0	25.4	101	79.0-121	
1,3-Dichlorobenzene	25.0	25.4	102	79.0-120	
1,4-Dichlorobenzene	25.0	24.9	99.4	79.0-120	
Dichlorodifluoromethane	25.0	25.3	101	51.0-149	
1,1-Dichloroethane	25.0	26.2	105	70.0-126	
1,2-Dichloroethane	25.0	25.7	103	70.0-128	
1,1-Dichloroethene	25.0	26.2	105	71.0-124	
cis-1,2-Dichloroethene	25.0	25.1	100	73.0-120	
trans-1,2-Dichloroethene	25.0	25.9	103	73.0-120	
1,2-Dichloropropane	25.0	25.7	103	77.0-125	
1,1-Dichloropropene	25.0	26.3	105	74.0-126	
1,3-Dichloropropene	25.0	25.9	104	80.0-120	
cis-1,3-Dichloropropene	25.0	27.0	108	80.0-123	
trans-1,3-Dichloropropene	25.0	26.3	105	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	21.3	85.0	33.0-144	
2,2-Dichloropropane	25.0	27.5	110	58.0-130	
Di-isopropyl ether	25.0	25.8	103	58.0-138	

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Laboratory Control Sample (LCS)

(LCS) R343547-1 07/25/19 09:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.1	100	79.0-123	1 Cp
Hexachloro-1,3-butadiene	25.0	27.9	112	54.0-138	3 Ss
2-Hexanone	125	135	108	67.0-149	2 Tc
n-Hexane	25.0	30.0	120	57.0-133	4 Cn
Iodomethane	125	125	99.9	33.0-147	
Isopropylbenzene	25.0	26.6	106	76.0-127	
p-Isopropyltoluene	25.0	27.9	112	76.0-125	
2-Butanone (MEK)	125	131	105	44.0-160	5 Sr
Methylene Chloride	25.0	26.5	106	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	125	100	68.0-142	6 Qc
Methyl tert-butyl ether	25.0	26.3	105	68.0-125	
Naphthalene	25.0	25.9	103	54.0-135	7 Gl
n-Propylbenzene	25.0	26.4	105	77.0-124	
Styrene	25.0	26.8	107	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	27.1	108	75.0-125	8 Al
1,1,2,2-Tetrachloroethane	25.0	27.1	108	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	25.0	100	69.0-132	
Toluene	25.0	24.4	97.6	79.0-120	
1,2,3-Trichlorobenzene	25.0	25.8	103	50.0-138	
1,2,4-Trichlorobenzene	25.0	26.7	107	57.0-137	
1,1,1-Trichloroethane	25.0	26.9	108	73.0-124	
1,1,2-Trichloroethane	25.0	25.8	103	80.0-120	
Trichloroethene	25.0	23.8	95.1	78.0-124	
Trichlorofluoromethane	25.0	21.5	86.0	59.0-147	
1,2,3-Trichloropropane	25.0	25.8	103	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.7	103	76.0-121	
1,2,3-Trimethylbenzene	25.0	25.6	102	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.9	99.6	76.0-122	
Vinyl acetate	125	149	119	11.0-160	
Vinyl chloride	25.0	27.0	108	67.0-131	
Xylenes, Total	75.0	74.9	99.9	79.0-123	
(S) Toluene-d8			105	80.0-120	
(S) 4-Bromofluorobenzene			104	77.0-126	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

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1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121210-04.05.06.07](#)

Method Blank (MB)

(MB) R3435761-3 07/30/19 10:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	106			80.0-120
(S) 4-Bromofluorobenzene	103			77.0-126
(S) 1,2-Dichloroethane-d4	107			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3435761-1 07/30/19 09:25 • (LCSD) R3435761-2 07/30/19 09:47

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	25.0	25.1	26.3	100	105	73.0-120			4.61	20
Tetrachloroethene	25.0	27.3	28.6	109	114	72.0-132			4.40	20
Trichloroethene	25.0	25.4	25.7	102	103	78.0-124			1.25	20
Vinyl chloride	25.0	28.5	29.1	114	117	67.0-131			2.07	20
(S) Toluene-d8				108	105	80.0-120				
(S) 4-Bromofluorobenzene				104	105	77.0-126				
(S) 1,2-Dichloroethane-d4				106	108	70.0-130				

Public Review Draft

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121210-01.02](#)

Method Blank (MB)

(MB) R3436162-2 07/31/19 16:23

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Tetrachloroethene	U		0.199	0.500
(S) Toluene-d8	92.2		93.4	80.0-120
(S) 4-Bromofluorobenzene	99.0		101	77.0-126
(S) 1,2-Dichloroethane-d4	110		111	70.0-130

Laboratory Control Sample (LCS)

(LCS) R3436162-1 07/31/19 14:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Tetrachloroethene	25.0	23.3	93.1	72.0-132	
(S) Toluene-d8			93.4	80.0-120	
(S) 4-Bromofluorobenzene			101	77.0-126	
(S) 1,2-Dichloroethane-d4			111	70.0-130	

Public Review Draft

¹ Cp
² Tc
³ Ss
⁴ Cn
⁵ Sr
⁶ Qc
⁷ Gl
⁸ Al
⁹ Sc

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
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Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

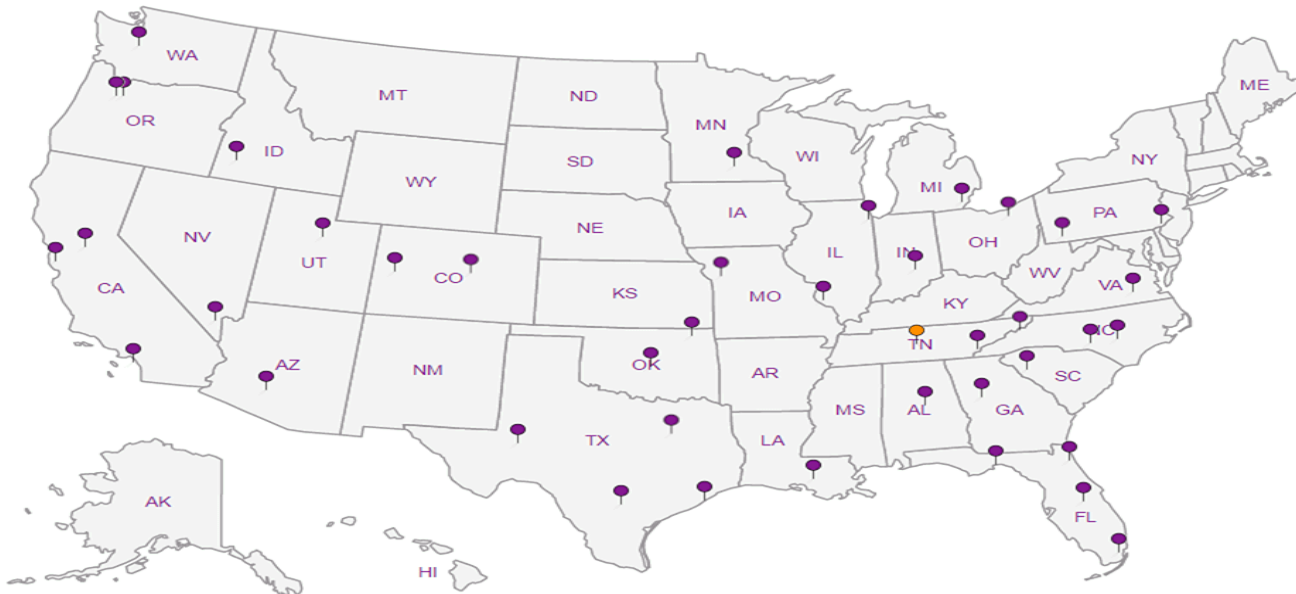
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Email To: boneal@pesenv.com; khaldeman@pesenv.com;

1215 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Pace Analytical
National Center for Testing & Innovation

Analysis / Container / Preservative

Billing Information:

Pres
Chk

Report to: Brian O'Neal/Bill Haldeman

Project: American Lymex

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #: 1413.001.05.601

Lab Project #: PESENVSWA-ALP

Collected by (print): Ben Hecht

Site/Facility ID #: American Lymex

P.O. #

Collected by (signature): Ben Hecht

Rush? (Lab MUST Be Notified)

Quote #

Immediately Packed on Ice N Y

Same Day
Next Day
Two Day
Three Day

5 Day (Rad Only)
10 Day (Rad Only)

Date Results Needed
5/19/19

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

NO3,Cl, SO4	125mlHDPE-NoPres		
Alkalinity	125mlHDPE-NoPres		
EEM RSK175LL	40mlAmb-HCl		
NWTPHGX	40mlAmb HCl		
TOC	250mlAmb-HCl		
Total Fe Mn	6020 250mlHDPE-HNO3		
VOCs	8260LLC 40mlAmb-HCl		

Account: PESENVSWA	Template: T152679	Prelogin: P718645	TSR: 110 - Brian Ford	PB: 7-5-19 BS	Shipped Via: FedEx Ground	Remarks	Sample # (lab only)
							-01
							02
							03
							04
							05
							06
							07
							08

MW-159-072219	Grab	GW	26	7-21-19	1650	6												
MW104-072219		GW	114	7-22-19	0620	12												
MW-148-072219		GW	75		10:05	12												
MW-153-072219		GW	125		11:40	12												
MW-157-072219		GW	75		12:30	12												
MW-158-072219		GW	45		14:20	12												
MW107-072219		GW	40		14:50	12												
TRIP-072219		GW	-	7-22-19	1500	1												

Remarks: *Nitrate has a 48 hour holding time.

TR RALAC, bill PES, Email okay

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks: *Nitrate has a 48 hour holding time.

Tracking # 08259685609

Temp: 15.0°C
pH: 7.13
Flow: 0.845

Sample Receipt Checklist
COC Seal Present/Intact: NP NY N
COC Signed/Accurate: NY NY N
Bottles arrive intact: NY NY N
Correct bottles used: NY NY N
Sufficient volume sent: NY NY N
If Applicable
VOA zero Headspace: NY NY N
Preservation Correct/Checked: NY NY N

Relinquished by: (Signature) [Signature]

Date: 7-22-19

Time: 1630

Received by: (Signature) [Signature]

Date: 7/23/19

Time: 0845

Condition: NCF / OK

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

Condition:

Relinquished by: (Signature)

Date:

Time:

Received for lab by: (Signature)

Date:

Time:

Condition:



Collected date/time: 07/21/19 16:50

L1121210

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 06:38	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/25/2019 06:38	WG1317068

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	2.13	J J	1.05	25.0	1	07/25/2019 00:48	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 00:48	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 00:48	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 00:48	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 00:48	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 00:48	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 00:48	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 00:48	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 00:48	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 00:48	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 00:48	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 00:48	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 00:48	WG1317007
Chlorobenzene	U		0.140	0.500	1	07/25/2019 00:48	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 00:48	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 00:48	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 00:48	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 00:48	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 00:48	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 00:48	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 00:48	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 00:48	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 00:48	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 00:48	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 00:48	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 00:48	WG1317007
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 00:48	WG1317007
cis-1,2-Dichloroethene	0.918		0.0933	0.500	1	07/25/2019 00:48	WG1317007
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 00:48	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 00:48	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 00:48	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 00:48	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 00:48	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 00:48	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 00:48	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 00:48	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 00:48	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 00:48	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 00:48	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 00:48	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 00:48	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 00:48	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 00:48	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 00:48	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 00:48	WG1317007

JC 8/6/19



Collected date/time: 07/21/19 16:50

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 00:48	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 00:48	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 00:48	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 00:48	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 00:48	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 00:48	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 00:48	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 00:48	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 00:48	WG1317007
Tetrachloroethene	U		0.199	0.500	1	07/31/2019 17:23	WG1320771
Toluene	U		0.412	0.500	1	07/25/2019 00:48	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 00:48	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 00:48	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 00:48	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 00:48	WG1317007
Trichloroethene	U		0.153	0.500	1	07/25/2019 00:48	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 00:48	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 00:48	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 00:48	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 00:48	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 00:48	WG1317007
Vinyl acetate	U		0.645	5.00	1	07/25/2019 00:48	WG1317007
Vinyl chloride	0.691		0.118	0.500	1	07/25/2019 00:48	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 00:48	WG1317007
(S) Toluene-d8	110			80.0-120		07/25/2019 00:48	WG1317007
(S) Toluene-d8	97.7			80.0-120		07/31/2019 17:23	WG1320771
(S) 4-Bromofluorobenzene	105			77.0-126		07/25/2019 00:48	WG1317007
(S) 4-Bromofluorobenzene	95.4			77.0-126		07/31/2019 17:23	WG1320771
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/25/2019 00:48	WG1317007
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/31/2019 17:23	WG1320771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	201000		2710	20000	1	07/26/2019 16:02	WG1317446

Sample Narrative:

L1121210-02 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17000		51.9	1000	1	07/23/2019 16:59	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 16:59	WG1315944
Sulfate	7400		77.4	5000	1	07/23/2019 16:59	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7110		204	2000	2	07/23/2019 22:07	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3000		15.0	100	1	07/23/2019 21:17	WG1316057
Manganese	164		0.250	5.00	1	07/23/2019 21:17	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	50.4	J	31.6	100	1	07/25/2019 07:02	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 07:02	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	375		0.287	0.678	1	07/26/2019 11:22	WG1317907
Ethane	2.94		0.296	1.29	1	07/26/2019 11:22	WG1317907
Ethene	28.6		0.422	1.27	1	07/26/2019 11:22	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	4.88	J	1.05	25.0	1	07/25/2019 01:10	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 01:10	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 01:10	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 01:10	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 01:10	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 01:10	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 01:10	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 01:10	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 01:10	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 01:10	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 01:10	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 01:10	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 01:10	WG1317007

JC 8/6/19

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/22/19 06:20

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 01:10	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 01:10	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 01:10	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 01:10	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 01:10	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 01:10	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 01:10	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 01:10	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 01:10	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 01:10	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 01:10	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 01:10	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 01:10	WG1317007
1,1-Dichloroethene	5.38		0.188	0.500	1	07/25/2019 01:10	WG1317007
cis-1,2-Dichloroethene	160		0.0933	0.500	1	07/25/2019 01:10	WG1317007
trans-1,2-Dichloroethene	2.10		0.152	0.500	1	07/25/2019 01:10	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 01:10	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 01:10	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 01:10	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 01:10	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 01:10	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 01:10	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 01:10	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 01:10	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 01:10	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 01:10	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 01:10	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 01:10	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 01:10	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 01:10	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 01:10	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 01:10	WG1317007
Methylene Chloride	U		1.07	2.50	1	07/25/2019 01:10	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 01:10	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 01:10	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 01:10	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 01:10	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 01:10	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 01:10	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 01:10	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 01:10	WG1317007
Tetrachloroethene	0.282	J U	0.199	0.500	1	07/31/2019 17:43	WG1320771
Toluene	U		0.412	0.500	1	07/25/2019 01:10	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 01:10	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 01:10	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 01:10	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 01:10	WG1317007
Trichloroethene	28.3		0.153	0.500	1	07/25/2019 01:10	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 01:10	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 01:10	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 01:10	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 01:10	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 01:10	WG1317007

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/22/19 06:20

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 01:10	WG1317007
Vinyl chloride	57.1		0.118	0.500	1	07/25/2019 01:10	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 01:10	WG1317007
(S) Toluene-d8	106			80.0-120		07/25/2019 01:10	WG1317007
(S) Toluene-d8	100			80.0-120		07/31/2019 17:43	WG1320771
(S) 4-Bromofluorobenzene	103			77.0-126		07/25/2019 01:10	WG1317007
(S) 4-Bromofluorobenzene	103			77.0-126		07/31/2019 17:43	WG1320771
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 01:10	WG1317007
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/31/2019 17:43	WG1320771

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/22/19 10:05

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	160000		2710	20000	1	07/26/2019 16:11	WG1317446

Sample Narrative:

L1121210-03 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17000		51.9	1000	1	07/23/2019 18:04	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 18:04	WG1315944
Sulfate	173000		387	25000	5	07/24/2019 08:21	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3510		102	1000	1	07/23/2019 23:22	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5440		15.0	100	1	07/23/2019 21:21	WG1316057
Manganese	534		0.250	5.00	1	07/23/2019 21:21	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 07:26	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/25/2019 07:26	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	1940		0.287	0.678	1	07/26/2019 11:27	WG1317907
Ethane	U		0.296	1.29	1	07/26/2019 11:27	WG1317907
Ethene	4.66		0.422	1.27	1	07/26/2019 11:27	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.48	J	1.05	25.0	1	07/26/2019 21:29	WG1317370
Acrylonitrile	U		0.873	5.00	1	07/26/2019 21:29	WG1317370
Benzene	U		0.0896	0.500	1	07/26/2019 21:29	WG1317370
Bromobenzene	U		0.133	0.500	1	07/26/2019 21:29	WG1317370
Bromodichloromethane	U		0.0800	0.500	1	07/26/2019 21:29	WG1317370
Bromochloromethane	U		0.145	0.500	1	07/26/2019 21:29	WG1317370
Bromoform	U		0.186	0.500	1	07/26/2019 21:29	WG1317370
Bromomethane	U		0.157	2.50	1	07/26/2019 21:29	WG1317370
n-Butylbenzene	U		0.143	0.500	1	07/26/2019 21:29	WG1317370
sec-Butylbenzene	U		0.134	0.500	1	07/26/2019 21:29	WG1317370
tert-Butylbenzene	U		0.183	0.500	1	07/26/2019 21:29	WG1317370
Carbon disulfide	U		0.101	0.500	1	07/26/2019 21:29	WG1317370
Carbon tetrachloride	U		0.159	0.500	1	07/26/2019 21:29	WG1317370

JC 8/6/19

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/22/19 10:05

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/26/2019 21:29	WG1317370
Chlorodibromomethane	U		0.128	0.500	1	07/26/2019 21:29	WG1317370
Chloroethane	U		0.141	2.50	1	07/26/2019 21:29	WG1317370
Chloroform	U		0.0860	0.500	1	07/26/2019 21:29	WG1317370
Chloromethane	U		0.153	1.25	1	07/26/2019 21:29	WG1317370
2-Chlorotoluene	U		0.111	0.500	1	07/26/2019 21:29	WG1317370
4-Chlorotoluene	U		0.0972	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/26/2019 21:29	WG1317370
1,2-Dibromoethane	U		0.193	0.500	1	07/26/2019 21:29	WG1317370
Dibromomethane	U		0.117	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dichlorobenzene	U		0.101	0.500	1	07/26/2019 21:29	WG1317370
1,3-Dichlorobenzene	U		0.130	0.500	1	07/26/2019 21:29	WG1317370
1,4-Dichlorobenzene	U		0.121	0.500	1	07/26/2019 21:29	WG1317370
Dichlorodifluoromethane	U		0.127	2.50	1	07/26/2019 21:29	WG1317370
1,1-Dichloroethane	U		0.114	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dichloroethane	U		0.108	0.500	1	07/26/2019 21:29	WG1317370
1,1-Dichloroethene	U		0.188	0.500	1	07/26/2019 21:29	WG1317370
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/26/2019 21:29	WG1317370
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/26/2019 21:29	WG1317370
1,2-Dichloropropane	U		0.190	0.500	1	07/26/2019 21:29	WG1317370
1,1-Dichloropropene	U		0.128	0.500	1	07/26/2019 21:29	WG1317370
1,3-Dichloropropane	U		0.147	1.00	1	07/26/2019 21:29	WG1317370
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/26/2019 21:29	WG1317370
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/26/2019 21:29	WG1317370
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/26/2019 21:29	WG1317370
2,2-Dichloropropane	U		0.0929	0.500	1	07/26/2019 21:29	WG1317370
Di-isopropyl ether	U		0.0924	0.500	1	07/26/2019 21:29	WG1317370
Ethylbenzene	U		0.158	0.500	1	07/26/2019 21:29	WG1317370
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/26/2019 21:29	WG1317370
2-Hexanone	U		0.757	5.00	1	07/26/2019 21:29	WG1317370
n-Hexane	U		0.305	5.00	1	07/26/2019 21:29	WG1317370
Iodomethane	U		0.377	10.0	1	07/26/2019 21:29	WG1317370
Isopropylbenzene	U		0.126	0.500	1	07/26/2019 21:29	WG1317370
p-Isopropyltoluene	U		0.138	0.500	1	07/26/2019 21:29	WG1317370
2-Butanone (MEK)	U		1.28	5.00	1	07/26/2019 21:29	WG1317370
Methylene Chloride	U		1.07	2.50	1	07/26/2019 21:29	WG1317370
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/26/2019 21:29	WG1317370
Methyl tert-butyl ether	U		0.102	0.500	1	07/26/2019 21:29	WG1317370
Naphthalene	U		0.174	2.50	1	07/26/2019 21:29	WG1317370
n-Propylbenzene	U		0.162	0.500	1	07/26/2019 21:29	WG1317370
Styrene	U		0.117	0.500	1	07/26/2019 21:29	WG1317370
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/26/2019 21:29	WG1317370
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/26/2019 21:29	WG1317370
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/26/2019 21:29	WG1317370
Tetrachloroethene	0.415	U B J	0.199	0.500	1	07/26/2019 21:29	WG1317370
Toluene	U		0.412	0.500	1	07/26/2019 21:29	WG1317370
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/26/2019 21:29	WG1317370
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/26/2019 21:29	WG1317370
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/26/2019 21:29	WG1317370
1,1,2-Trichloroethane	U		0.186	0.500	1	07/26/2019 21:29	WG1317370
Trichloroethene	U		0.153	0.500	1	07/26/2019 21:29	WG1317370
Trichlorofluoromethane	U		0.130	2.50	1	07/26/2019 21:29	WG1317370
1,2,3-Trichloropropane	U		0.247	2.50	1	07/26/2019 21:29	WG1317370
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/26/2019 21:29	WG1317370
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/26/2019 21:29	WG1317370
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/26/2019 21:29	WG1317370

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/6/19



Collected date/time: 07/22/19 10:05

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/26/2019 21:29	WG1317370
Vinyl chloride	0.253	J ↓	0.118	0.500	1	07/26/2019 21:29	WG1317370
Xylenes, Total	U		0.316	1.50	1	07/26/2019 21:29	WG1317370
(S) Toluene-d8	107			80.0-120		07/26/2019 21:29	WG1317370
(S) 4-Bromofluorobenzene	103			77.0-126		07/26/2019 21:29	WG1317370
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/26/2019 21:29	WG1317370

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	160000		2710	20000	1	07/26/2019 16:19	WG1317446

Sample Narrative:

L1121210-04 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	8310		51.9	1000	1	07/23/2019 18:21	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 18:21	WG1315944
Sulfate	6780		77.4	5000	1	07/23/2019 18:21	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1840	B	102	1000	1	07/23/2019 23:38	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1670		15.0	100	1	07/23/2019 20:29	WG1316057
Manganese	325		0.250	5.00	1	07/23/2019 20:29	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 07:50	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 07:50	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	27.0		0.287	0.678	1	07/26/2019 11:29	WG1317907
Ethane	U		0.296	1.29	1	07/26/2019 11:29	WG1317907
Ethene	U		0.422	1.27	1	07/26/2019 11:29	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.98	J J	1.05	25.0	1	07/25/2019 12:38	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 12:38	WG1317389
Benzene	0.177	J J	0.0896	0.500	1	07/25/2019 12:38	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 12:38	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 12:38	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 12:38	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 12:38	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 12:38	WG1317389
n-Butylbenzene	0.162	J J	0.143	0.500	1	07/25/2019 12:38	WG1317389
sec-Butylbenzene	0.159	J J	0.134	0.500	1	07/25/2019 12:38	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 12:38	WG1317389
Carbon disulfide	0.250	J J	0.101	0.500	1	07/25/2019 12:38	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 12:38	WG1317389

JC 8/6/19

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/22/19 11:40

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 12:38	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 12:38	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 12:38	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 12:38	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 12:38	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 12:38	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 12:38	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 12:38	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 12:38	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 12:38	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 12:38	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 12:38	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 12:38	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 12:38	WG1317389
cis-1,2-Dichloroethene	0.384	J U	0.0933	0.500	1	07/25/2019 12:38	WG1317389
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 12:38	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 12:38	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 12:38	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 12:38	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 12:38	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 12:38	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 12:38	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 12:38	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 12:38	WG1317389
Ethylbenzene	0.227	J U	0.158	0.500	1	07/25/2019 12:38	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 12:38	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 12:38	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 12:38	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 12:38	WG1317389
Isopropylbenzene	0.134	J U	0.126	0.500	1	07/25/2019 12:38	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 12:38	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 12:38	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 12:38	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 12:38	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 12:38	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 12:38	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 12:38	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 12:38	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 12:38	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 12:38	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 12:38	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 14:04	WG1319848
Toluene	0.716		0.412	0.500	1	07/25/2019 12:38	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 12:38	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 12:38	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 12:38	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 12:38	WG1317389
Trichloroethene	0.190	J U	0.153	0.500	1	07/25/2019 12:38	WG1317389
Trichlorofluoromethane	U	UJ UO	0.130	2.50	1	07/25/2019 12:38	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 12:38	WG1317389
1,2,4-Trimethylbenzene	0.225	J U	0.123	0.500	1	07/25/2019 12:38	WG1317389
1,2,3-Trimethylbenzene	0.139	J U	0.0739	0.500	1	07/25/2019 12:38	WG1317389
1,3,5-Trimethylbenzene	0.141	J U	0.124	0.500	1	07/25/2019 12:38	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/22/19 11:40

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 12:38	WG1317389
Vinyl chloride	0.235	J ↓	0.118	0.500	1	07/25/2019 12:38	WG1317389
Xylenes, Total	0.819	J ↓	0.316	1.50	1	07/25/2019 12:38	WG1317389
(S) Toluene-d8	106			80.0-120		07/25/2019 12:38	WG1317389
(S) Toluene-d8	106			80.0-120		07/30/2019 14:04	WG1319848
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 12:38	WG1317389
(S) 4-Bromofluorobenzene	100			77.0-126		07/30/2019 14:04	WG1319848
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 12:38	WG1317389
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/30/2019 14:04	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	464000		2710	20000	1	07/26/2019 16:35	WG1317446

Sample Narrative:

L1121210-05 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	43700		51.9	1000	1	07/23/2019 18:37	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 18:37	WG1315944
Sulfate	46700		77.4	5000	1	07/23/2019 18:37	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	14900		102	1000	1	07/23/2019 23:55	WG1315948

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	11400		15.0	100	1	07/23/2019 21:26	WG1316057
Manganese	1730		1.25	25.0	5	07/23/2019 21:51	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3880	J+	31.6	100	1	07/25/2019 08:13	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 08:13	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5090		0.287	0.678	1	07/26/2019 11:32	WG1317907
Ethane	45.8		0.296	1.29	1	07/26/2019 11:32	WG1317907
Ethene	56.2		0.422	1.27	1	07/26/2019 11:32	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.65	J J	1.05	25.0	1	07/25/2019 13:26	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 13:26	WG1317389
Benzene	0.327	J J	0.0896	0.500	1	07/25/2019 13:26	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 13:26	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 13:26	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 13:26	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 13:26	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 13:26	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 13:26	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 13:26	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 13:26	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 13:26	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 13:26	WG1317389

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/6/19



Collected date/time: 07/22/19 12:30

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 13:26	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 13:26	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 13:26	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 13:26	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 13:26	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 13:26	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 13:26	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 13:26	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 13:26	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 13:26	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 13:26	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 13:26	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 13:26	WG1317389
1,1-Dichloroethene	17.5		0.188	0.500	1	07/25/2019 13:26	WG1317389
cis-1,2-Dichloroethene	4530		9.33	50.0	100	07/30/2019 14:26	WG1319848
trans-1,2-Dichloroethene	18.4		0.152	0.500	1	07/25/2019 13:26	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 13:26	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 13:26	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 13:26	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 13:26	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 13:26	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 13:26	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 13:26	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 13:26	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 13:26	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 13:26	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 13:26	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 13:26	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 13:26	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 13:26	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 13:26	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 13:26	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 13:26	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 13:26	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 13:26	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 13:26	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 13:26	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 13:26	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 13:26	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 13:26	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 13:26	WG1317389
Tetrachloroethene	U		19.9	50.0	100	07/30/2019 14:26	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 13:26	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 13:26	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 13:26	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 13:26	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 13:26	WG1317389
Trichloroethene	27.6		0.153	0.500	1	07/25/2019 13:26	WG1317389
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/25/2019 13:26	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 13:26	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 13:26	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 13:26	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 13:26	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/22/19 12:30

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 13:26	WG1317389
Vinyl chloride	666		11.8	50.0	100	07/30/2019 14:26	WG1319848
Xylenes, Total	U		0.316	1.50	1	07/25/2019 13:26	WG1317389
(S) Toluene-d8	108			80.0-120		07/25/2019 13:26	WG1317389
(S) Toluene-d8	105			80.0-120		07/30/2019 14:26	WG1319848
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 13:26	WG1317389
(S) 4-Bromofluorobenzene	99.3			77.0-126		07/30/2019 14:26	WG1319848
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/25/2019 13:26	WG1317389
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/30/2019 14:26	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1121210-05 WG1317389, WG1319848: Not all compounds reportable at lower dilution.
 L1121210-05 WG1317389, WG1319848: Cannot be reanalyzed at lower dilution due to high levels of target analytes.

JC 8/6/19



Collected date/time: 07/22/19 14:20

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	606000		2710	20000	1	07/26/2019 16:42	WG1317446

Sample Narrative:

L1121210-06 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	45500		51.9	1000	1	07/23/2019 19:27	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 19:27	WG1315944
Sulfate	181000		387	25000	5	07/24/2019 08:57	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	42000		102	1000	1	07/25/2019 00:00	WG1316685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	19900		15.0	100	1	07/23/2019 21:30	WG1316057
Manganese	8680		2.50	50.0	10	07/23/2019 21:56	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	3100	J+	31.6	100	1	07/25/2019 08:37	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	111			78.0-120		07/25/2019 08:37	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2340		0.287	0.678	1	07/26/2019 11:40	WG1317907
Ethane	50.0		0.296	1.29	1	07/26/2019 11:40	WG1317907
Ethene	U		0.422	1.27	1	07/26/2019 11:40	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	4.94	J J	1.05	25.0	1	07/25/2019 14:13	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 14:13	WG1317389
Benzene	0.492	J J	0.0896	0.500	1	07/25/2019 14:13	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 14:13	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 14:13	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 14:13	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 14:13	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 14:13	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 14:13	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 14:13	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 14:13	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 14:13	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 14:13	WG1317389

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/22/19 14:20

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 14:13	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 14:13	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 14:13	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 14:13	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 14:13	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 14:13	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 14:13	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 14:13	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 14:13	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 14:13	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 14:13	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 14:13	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 14:13	WG1317389
1,1-Dichloroethene	13.2		0.188	0.500	1	07/25/2019 14:13	WG1317389
cis-1,2-Dichloroethene	2310		4.66	25.0	50	07/30/2019 18:58	WG1319848
trans-1,2-Dichloroethene	14.5		0.152	0.500	1	07/25/2019 14:13	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 14:13	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 14:13	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 14:13	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 14:13	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 14:13	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 14:13	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 14:13	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 14:13	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 14:13	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 14:13	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 14:13	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 14:13	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 14:13	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 14:13	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 14:13	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 14:13	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 14:13	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 14:13	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 14:13	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 14:13	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 14:13	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 14:13	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 14:13	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 14:13	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 14:13	WG1317389
Tetrachloroethene	232		9.95	25.0	50	07/30/2019 18:58	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 14:13	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 14:13	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 14:13	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 14:13	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 14:13	WG1317389
Trichloroethene	1270		7.65	25.0	50	07/30/2019 18:58	WG1319848
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/25/2019 14:13	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 14:13	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 14:13	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 14:13	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 14:13	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/22/19 14:20

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 14:13	WG1317389
Vinyl chloride	82.0		0.118	0.500	1	07/25/2019 14:13	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 14:13	WG1317389
<i>(S) Toluene-d8</i>	108			80.0-120		07/25/2019 14:13	WG1317389
<i>(S) Toluene-d8</i>	106			80.0-120		07/30/2019 18:58	WG1319848
<i>(S) 4-Bromofluorobenzene</i>	102			77.0-126		07/25/2019 14:13	WG1317389
<i>(S) 4-Bromofluorobenzene</i>	100			77.0-126		07/30/2019 18:58	WG1319848
<i>(S) 1,2-Dichloroethane-d4</i>	103			70.0-130		07/25/2019 14:13	WG1317389
<i>(S) 1,2-Dichloroethane-d4</i>	110			70.0-130		07/30/2019 18:58	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/22/19 14:50

L1121210

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	527000		2710	20000	1	07/26/2019 16:49	WG1317446

Sample Narrative:

L1121210-07 WG1317446: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	40300		51.9	1000	1	07/23/2019 19:43	WG1315944
Nitrate	U		22.7	100	1	07/23/2019 19:43	WG1315944
Sulfate	30300		77.4	5000	1	07/23/2019 19:43	WG1315944

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	18900		102	1000	1	07/25/2019 00:15	WG1316685

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3080		15.0	100	1	07/23/2019 21:35	WG1316057
Manganese	1040		0.250	5.00	1	07/23/2019 21:35	WG1316057

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	210	J+	31.6	100	1	07/25/2019 09:01	WG1317068
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 09:01	WG1317068

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	16400		2.87	6.78	10	07/26/2019 14:42	WG1317908
Ethane	133		0.296	1.29	1	07/26/2019 11:44	WG1317907
Ethene	81.5		0.422	1.27	1	07/26/2019 11:44	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.28	J J	1.05	25.0	1	07/25/2019 14:36	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 14:36	WG1317389
Benzene	0.188	J J	0.0896	0.500	1	07/25/2019 14:36	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 14:36	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 14:36	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 14:36	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 14:36	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 14:36	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 14:36	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 14:36	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 14:36	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 14:36	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 14:36	WG1317389

JC 8/6/19

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/22/19 14:50

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 14:36	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 14:36	WG1317389
Chloroethane	3.61		0.141	2.50	1	07/25/2019 14:36	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 14:36	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 14:36	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 14:36	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 14:36	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 14:36	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 14:36	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 14:36	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 14:36	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 14:36	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 14:36	WG1317389
1,1-Dichloroethene	0.825		0.188	0.500	1	07/25/2019 14:36	WG1317389
cis-1,2-Dichloroethene	290		0.933	5.00	10	07/30/2019 15:10	WG1319848
trans-1,2-Dichloroethene	7.08		0.152	0.500	1	07/25/2019 14:36	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 14:36	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 14:36	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 14:36	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 14:36	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 14:36	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 14:36	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 14:36	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 14:36	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 14:36	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 14:36	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 14:36	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 14:36	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 14:36	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 14:36	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 14:36	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 14:36	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 14:36	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 14:36	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 14:36	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 14:36	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 14:36	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 14:36	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 14:36	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 14:36	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 14:36	WG1317389
Tetrachloroethene	U		1.99	5.00	10	07/30/2019 15:10	WG1319848
Toluene	0.758		0.412	0.500	1	07/25/2019 14:36	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 14:36	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 14:36	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 14:36	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 14:36	WG1317389
Trichloroethene	2.62	J U	1.53	5.00	10	07/30/2019 15:10	WG1319848
Trichlorofluoromethane	U	UJ UO	0.130	2.50	1	07/25/2019 14:36	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 14:36	WG1317389
1,2,4-Trimethylbenzene	0.144	J U	0.123	0.500	1	07/25/2019 14:36	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 14:36	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 14:36	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/6/19



Collected date/time: 07/22/19 14:50

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Vinyl acetate	U		0.645	5.00	1	07/25/2019 14:36	WG1317389
Vinyl chloride	307		1.18	5.00	10	07/30/2019 15:10	WG1319848
Xylenes, Total	0.609	J ↓	0.316	1.50	1	07/25/2019 14:36	WG1317389
(S) Toluene-d8	106			80.0-120		07/25/2019 14:36	WG1317389
(S) Toluene-d8	106			80.0-120		07/30/2019 15:10	WG1319848
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 14:36	WG1317389
(S) 4-Bromofluorobenzene	101			77.0-126		07/30/2019 15:10	WG1319848
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/25/2019 14:36	WG1317389
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/30/2019 15:10	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1121210-07 WG1317389, WG1319848: Not all compounds reportable at lower dilution.
 L1121210-07 WG1317389, WG1319848: Cannot be reanalyzed at lower dilution due to high levels of target analytes.

JC 8/6/19



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/25/2019 13:13	WG1317381
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/25/2019 13:13	WG1317381

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/25/2019 00:05	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 00:05	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 00:05	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 00:05	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 00:05	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 00:05	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 00:05	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 00:05	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 00:05	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 00:05	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 00:05	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 00:05	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 00:05	WG1317007
Chlorobenzene	U		0.140	0.500	1	07/25/2019 00:05	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 00:05	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 00:05	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 00:05	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 00:05	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 00:05	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 00:05	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 00:05	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 00:05	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 00:05	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 00:05	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 00:05	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 00:05	WG1317007
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 00:05	WG1317007
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/25/2019 00:05	WG1317007
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 00:05	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 00:05	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 00:05	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 00:05	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 00:05	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 00:05	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 00:05	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 00:05	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 00:05	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 00:05	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 00:05	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 00:05	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 00:05	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 00:05	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 00:05	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 00:05	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 00:05	WG1317007

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/6/19



Collected date/time: 07/22/19 15:00

L1121210

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 00:05	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 00:05	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 00:05	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 00:05	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 00:05	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 00:05	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 00:05	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 00:05	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 00:05	WG1317007
Tetrachloroethene	1.07	<u>B</u>	0.199	0.500	1	07/25/2019 00:05	WG1317007
Toluene	U		0.412	0.500	1	07/25/2019 00:05	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 00:05	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 00:05	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 00:05	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 00:05	WG1317007
Trichloroethene	U		0.153	0.500	1	07/25/2019 00:05	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 00:05	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 00:05	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 00:05	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 00:05	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 00:05	WG1317007
Vinyl acetate	U		0.645	5.00	1	07/25/2019 00:05	WG1317007
Vinyl chloride	U		0.118	0.500	1	07/25/2019 00:05	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 00:05	WG1317007
(S) Toluene-d8	106			80.0-120		07/25/2019 00:05	WG1317007
(S) 4-Bromofluorobenzene	98.4			77.0-126		07/25/2019 00:05	WG1317007
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 00:05	WG1317007

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

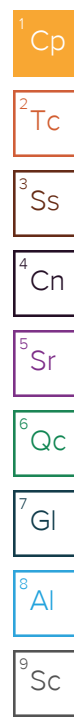
L1121210-08 WG1317007: PCE detection likely from instrument contamination/carryover, no sample remaining for re-analysis.

JC 8/6/19



ANALYTICAL REPORT

July 31, 2019



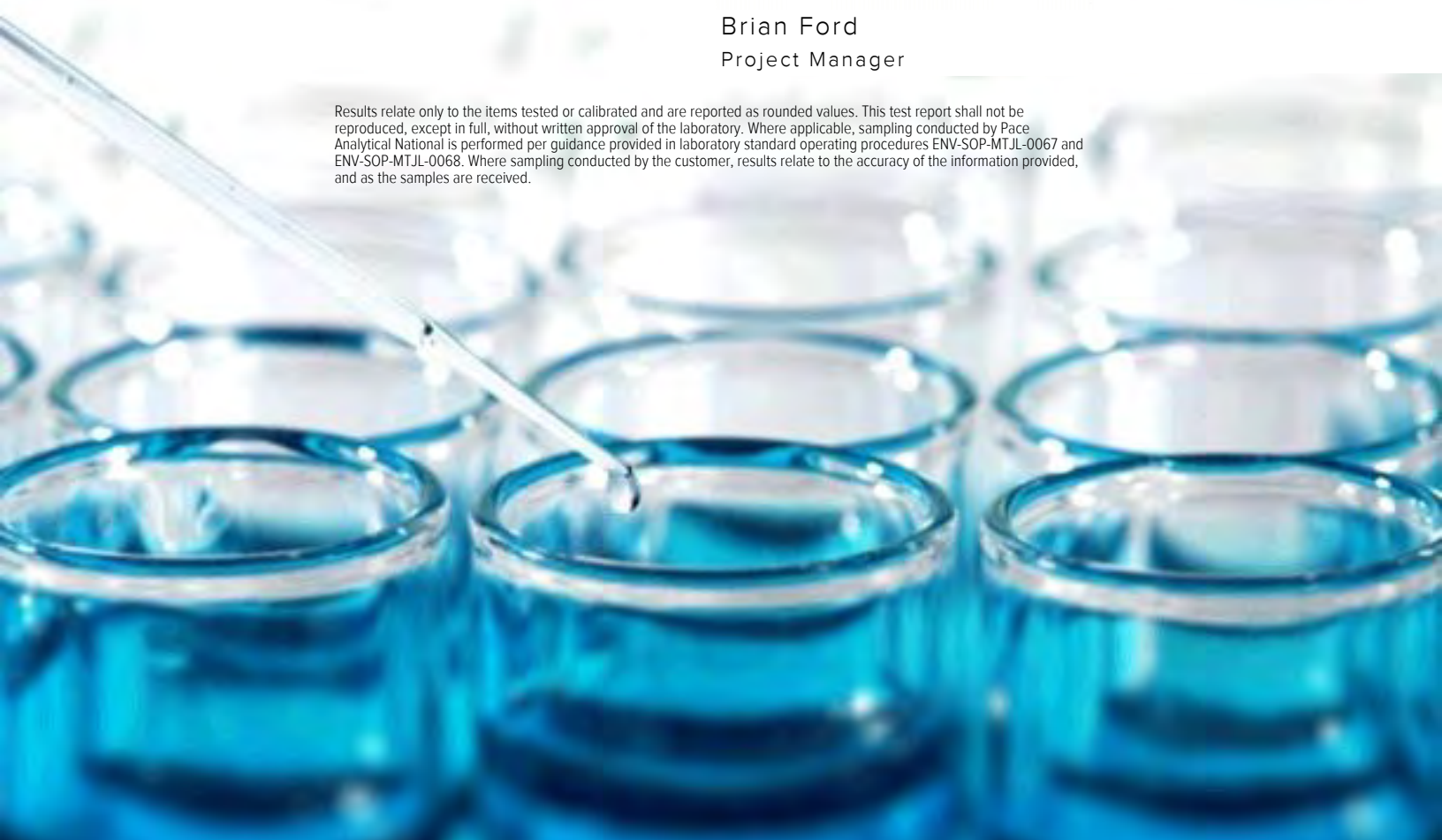
PES Environmental, Inc.- WA

Sample Delivery Group: L1121576
 Samples Received: 07/24/2019
 Project Number: 1413.001.05.601
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-160-072319 L1121576-01 GW

Collected by Ben Hecht
Collected date/time 07/23/19 06:25
Received date/time 07/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317887	1	07/26/19 20:29	07/26/19 20:29	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1316545	1	07/24/19 15:35	07/24/19 15:35	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1317639	1	07/25/19 17:42	07/25/19 17:42	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1317876	1	07/27/19 12:36	07/28/19 19:27	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1318107	1	07/26/19 16:10	07/26/19 16:10	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 12:43	07/26/19 12:43	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 14:58	07/25/19 14:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319848	1	07/30/19 19:52	07/30/19 19:52	DWR	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

W-MW-01-072319 L1121576-02 GW

Collected by Ben Hecht
Collected date/time 07/23/19 09:25
Received date/time 07/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317887	1	07/26/19 20:43	07/26/19 20:43	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1316545	1	07/24/19 15:51	07/24/19 15:51	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1317639	1	07/25/19 18:17	07/25/19 18:17	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1317876	1	07/27/19 12:36	07/28/19 19:50	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1318107	1	07/26/19 16:34	07/26/19 16:34	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 12:54	07/26/19 12:54	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 15:20	07/25/19 15:20	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319848	1	07/30/19 20:14	07/30/19 20:14	DWR	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

MW-155-072319 L1121576-03 GW

Collected by Ben Hecht
Collected date/time 07/23/19 09:35
Received date/time 07/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1318107	1	07/26/19 16:58	07/26/19 16:58	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 15:41	07/25/19 15:41	BMB	Mt. Juliet, TN

W-MW-02 L1121576-04 GW

Collected by Ben Hecht
Collected date/time 07/23/19 11:50
Received date/time 07/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1317887	1	07/26/19 20:50	07/26/19 20:50	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1316545	1	07/24/19 16:08	07/24/19 16:08	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1317639	1	07/25/19 18:33	07/25/19 18:33	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1317876	1	07/27/19 12:36	07/28/19 19:54	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1318107	1	07/26/19 17:22	07/26/19 17:22	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1317907	1	07/26/19 12:57	07/26/19 12:57	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1318268	10	07/26/19 15:08	07/26/19 15:08	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317389	1	07/25/19 16:03	07/25/19 16:03	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1319848	1	07/30/19 20:36	07/30/19 20:36	DWR	Mt. Juliet, TN

TRIP-072319 L1121576-05 GW

Collected by Ben Hecht
Collected date/time 07/23/19 13:25
Received date/time 07/24/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1318530	1	07/27/19 11:30	07/27/19 11:30	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1317007	1	07/25/19 00:27	07/25/19 00:27	ACG	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	182000		2710	20000	1	07/26/2019 20:29	WG1317887

Sample Narrative:

L1121576-01 WG1317887: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	8280		51.9	1000	1	07/24/2019 15:35	WG1316545
Nitrate	U		22.7	100	1	07/24/2019 15:35	WG1316545
Sulfate	2640	J	77.4	5000	1	07/24/2019 15:35	WG1316545

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1950	B P1	102	1000	1	07/25/2019 17:42	WG1317639

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2680		15.0	100	1	07/28/2019 19:27	WG1317876
Manganese	408	V	0.250	5.00	1	07/28/2019 19:27	WG1317876

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 16:10	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/26/2019 16:10	WG1318107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	535		0.287	0.678	1	07/26/2019 12:43	WG1317907
Ethane	U		0.296	1.29	1	07/26/2019 12:43	WG1317907
Ethene	U		0.422	1.27	1	07/26/2019 12:43	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.98	J	1.05	25.0	1	07/25/2019 14:58	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 14:58	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 14:58	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 14:58	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 14:58	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 14:58	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 14:58	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 14:58	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 14:58	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 14:58	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 14:58	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 14:58	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 14:58	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/23/19 06:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 14:58	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 14:58	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 14:58	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 14:58	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 14:58	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 14:58	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 14:58	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 14:58	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 14:58	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 14:58	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 14:58	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 14:58	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 14:58	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 14:58	WG1317389
cis-1,2-Dichloroethene	0.217	U	0.0933	0.500	1	07/30/2019 19:52	WG1319848
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 14:58	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 14:58	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 14:58	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 14:58	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 14:58	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 14:58	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 14:58	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 14:58	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 14:58	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 14:58	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 14:58	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 14:58	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 14:58	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 14:58	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 14:58	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 14:58	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 14:58	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 14:58	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 14:58	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 14:58	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 14:58	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 14:58	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 14:58	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 14:58	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 14:58	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 19:52	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 14:58	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 14:58	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 14:58	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 14:58	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 14:58	WG1317389
Trichloroethene	U		0.153	0.500	1	07/30/2019 19:52	WG1319848
Trichlorofluoromethane	U	U	0.130	2.50	1	07/25/2019 14:58	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 14:58	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 14:58	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 14:58	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 14:58	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/23/19 06:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 14:58	WG1317389
Vinyl chloride	0.326	↓	0.118	0.500	1	07/30/2019 19:52	WG1319848
Xylenes, Total	U		0.316	1.50	1	07/25/2019 14:58	WG1317389
(S) Toluene-d8	107			80.0-120		07/25/2019 14:58	WG1317389
(S) Toluene-d8	107			80.0-120		07/30/2019 19:52	WG1319848
(S) 4-Bromofluorobenzene	101			77.0-126		07/25/2019 14:58	WG1317389
(S) 4-Bromofluorobenzene	101			77.0-126		07/30/2019 19:52	WG1319848
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/25/2019 14:58	WG1317389
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/30/2019 19:52	WG1319848

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	242000		2710	20000	1	07/26/2019 20:43	WG1317887

Sample Narrative:

L1121576-02 WG1317887: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	33200		51.9	1000	1	07/24/2019 15:51	WG1316545
Nitrate	U		22.7	100	1	07/24/2019 15:51	WG1316545
Sulfate	78900		77.4	5000	1	07/24/2019 15:51	WG1316545

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2730		102	1000	1	07/25/2019 18:17	WG1317639

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	614		15.0	100	1	07/28/2019 19:50	WG1317876
Manganese	323		0.250	5.00	1	07/28/2019 19:50	WG1317876

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 16:34	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/26/2019 16:34	WG1318107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	327		0.287	0.678	1	07/26/2019 12:54	WG1317907
Ethane	3.96		0.296	1.29	1	07/26/2019 12:54	WG1317907
Ethene	7.04		0.422	1.27	1	07/26/2019 12:54	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/25/2019 15:20	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 15:20	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 15:20	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 15:20	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 15:20	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 15:20	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 15:20	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 15:20	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 15:20	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 15:20	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 15:20	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 15:20	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 15:20	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/23/19 09:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 15:20	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 15:20	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 15:20	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 15:20	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 15:20	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 15:20	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 15:20	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 15:20	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 15:20	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 15:20	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 15:20	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 15:20	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 15:20	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 15:20	WG1317389
cis-1,2-Dichloroethene	0.547		0.0933	0.500	1	07/30/2019 20:14	WG1319848
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 15:20	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 15:20	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 15:20	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 15:20	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 15:20	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 15:20	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 15:20	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 15:20	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 15:20	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 15:20	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 15:20	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 15:20	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 15:20	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 15:20	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 15:20	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 15:20	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 15:20	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 15:20	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 15:20	WG1317389
Naphthalene	0.211	U	0.174	2.50	1	07/25/2019 15:20	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 15:20	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 15:20	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 15:20	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 15:20	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 15:20	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 20:14	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 15:20	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 15:20	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 15:20	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 15:20	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 15:20	WG1317389
Trichloroethene	0.304	U	0.153	0.500	1	07/30/2019 20:14	WG1319848
Trichlorofluoromethane	U	UO	0.130	2.50	1	07/25/2019 15:20	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 15:20	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 15:20	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 15:20	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 15:20	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/23/19 09:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 15:20	WG1317389
Vinyl chloride	9.00		0.118	0.500	1	07/25/2019 15:20	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 15:20	WG1317389
(S) Toluene-d8	106			80.0-120		07/25/2019 15:20	WG1317389
(S) Toluene-d8	108			80.0-120		07/30/2019 20:14	WG1319848
(S) 4-Bromofluorobenzene	100			77.0-126		07/25/2019 15:20	WG1317389
(S) 4-Bromofluorobenzene	102			77.0-126		07/30/2019 20:14	WG1319848
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/25/2019 15:20	WG1317389
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/30/2019 20:14	WG1319848

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 16:58	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/26/2019 16:58	WG1318107

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.69	J	1.05	25.0	1	07/25/2019 15:41	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 15:41	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 15:41	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 15:41	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 15:41	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 15:41	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 15:41	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 15:41	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 15:41	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 15:41	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 15:41	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 15:41	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 15:41	WG1317389
Chlorobenzene	U		0.140	0.500	1	07/25/2019 15:41	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 15:41	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 15:41	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 15:41	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 15:41	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 15:41	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 15:41	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 15:41	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 15:41	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 15:41	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 15:41	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 15:41	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 15:41	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 15:41	WG1317389
cis-1,2-Dichloroethene	12.1		0.0933	0.500	1	07/25/2019 15:41	WG1317389
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 15:41	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 15:41	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 15:41	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 15:41	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 15:41	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 15:41	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 15:41	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 15:41	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 15:41	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 15:41	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 15:41	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 15:41	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 15:41	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 15:41	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 15:41	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 15:41	WG1317389



Collected date/time: 07/23/19 09:35

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 15:41	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 15:41	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 15:41	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 15:41	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 15:41	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 15:41	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 15:41	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 15:41	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 15:41	WG1317389
Tetrachloroethene	92.7		0.199	0.500	1	07/25/2019 15:41	WG1317389
Toluene	U		0.412	0.500	1	07/25/2019 15:41	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 15:41	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 15:41	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 15:41	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 15:41	WG1317389
Trichloroethene	19.9		0.153	0.500	1	07/25/2019 15:41	WG1317389
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/25/2019 15:41	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 15:41	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 15:41	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 15:41	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 15:41	WG1317389
Vinyl acetate	U		0.645	5.00	1	07/25/2019 15:41	WG1317389
Vinyl chloride	0.350	<u>J</u>	0.118	0.500	1	07/25/2019 15:41	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 15:41	WG1317389
(S) Toluene-d8	107			80.0-120		07/25/2019 15:41	WG1317389
(S) 4-Bromofluorobenzene	100			77.0-126		07/25/2019 15:41	WG1317389
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 15:41	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	965000		2710	20000	1	07/26/2019 20:50	WG1317887

Sample Narrative:

L1121576-04 WG1317887: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	98400		51.9	1000	1	07/24/2019 16:08	WG1316545
Nitrate	U		22.7	100	1	07/24/2019 16:08	WG1316545
Sulfate	3240	J	77.4	5000	1	07/24/2019 16:08	WG1316545

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	43400		102	1000	1	07/25/2019 18:33	WG1317639

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	13600		15.0	100	1	07/28/2019 19:54	WG1317876
Manganese	3470		0.250	5.00	1	07/28/2019 19:54	WG1317876

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 17:22	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/26/2019 17:22	WG1318107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	25700		2.87	6.78	10	07/26/2019 15:08	WG1318268
Ethane	U		0.296	1.29	1	07/26/2019 12:57	WG1317907
Ethene	15.0		0.422	1.27	1	07/26/2019 12:57	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/25/2019 16:03	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 16:03	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 16:03	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 16:03	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 16:03	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 16:03	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 16:03	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 16:03	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 16:03	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 16:03	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 16:03	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 16:03	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 16:03	WG1317389

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 07/23/19 11:50

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 16:03	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 16:03	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 16:03	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 16:03	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 16:03	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 16:03	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 16:03	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 16:03	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 16:03	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 16:03	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 16:03	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 16:03	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 16:03	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 16:03	WG1317389
cis-1,2-Dichloroethene	3.30		0.0933	0.500	1	07/30/2019 20:36	WG1319848
trans-1,2-Dichloroethene	0.386	<u>I</u>	0.152	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 16:03	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 16:03	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 16:03	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 16:03	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 16:03	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 16:03	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 16:03	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 16:03	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 16:03	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 16:03	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 16:03	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 16:03	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 16:03	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 16:03	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 16:03	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 16:03	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 16:03	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 16:03	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 16:03	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 16:03	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 16:03	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 16:03	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 16:03	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 16:03	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 16:03	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 20:36	WG1319848
Toluene	1.35		0.412	0.500	1	07/25/2019 16:03	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 16:03	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 16:03	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 16:03	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 16:03	WG1317389
Trichloroethene	U		0.153	0.500	1	07/30/2019 20:36	WG1319848
Trichlorofluoromethane	U	<u>JO</u>	0.130	2.50	1	07/25/2019 16:03	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 16:03	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 16:03	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 16:03	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 16:03	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 07/23/19 11:50

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 16:03	WG1317389
Vinyl chloride	6.79		0.118	0.500	1	07/25/2019 16:03	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 16:03	WG1317389
(S) Toluene-d8	109			80.0-120		07/25/2019 16:03	WG1317389
(S) Toluene-d8	108			80.0-120		07/30/2019 20:36	WG1319848
(S) 4-Bromofluorobenzene	102			77.0-126		07/25/2019 16:03	WG1317389
(S) 4-Bromofluorobenzene	99.2			77.0-126		07/30/2019 20:36	WG1319848
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/25/2019 16:03	WG1317389
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/30/2019 20:36	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 07/23/19 13:25

L1121576

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/27/2019 11:30	WG1318530
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/27/2019 11:30	WG1318530

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.73	J	1.05	25.0	1	07/25/2019 00:27	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 00:27	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 00:27	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 00:27	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 00:27	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 00:27	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 00:27	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 00:27	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 00:27	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 00:27	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 00:27	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 00:27	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 00:27	WG1317007
Chlorobenzene	U		0.140	0.500	1	07/25/2019 00:27	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 00:27	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 00:27	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 00:27	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 00:27	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 00:27	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 00:27	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 00:27	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 00:27	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 00:27	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 00:27	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 00:27	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 00:27	WG1317007
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 00:27	WG1317007
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/25/2019 00:27	WG1317007
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 00:27	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 00:27	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 00:27	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 00:27	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 00:27	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 00:27	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 00:27	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 00:27	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 00:27	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 00:27	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 00:27	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 00:27	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 00:27	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 00:27	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 00:27	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 00:27	WG1317007



Collected date/time: 07/23/19 13:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 00:27	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 00:27	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 00:27	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 00:27	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 00:27	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 00:27	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 00:27	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 00:27	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 00:27	WG1317007
Tetrachloroethene	1.03	<u>B</u>	0.199	0.500	1	07/25/2019 00:27	WG1317007
Toluene	U		0.412	0.500	1	07/25/2019 00:27	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 00:27	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 00:27	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 00:27	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 00:27	WG1317007
Trichloroethene	U		0.153	0.500	1	07/25/2019 00:27	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 00:27	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 00:27	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 00:27	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 00:27	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 00:27	WG1317007
Vinyl acetate	U		0.645	5.00	1	07/25/2019 00:27	WG1317007
Vinyl chloride	U		0.118	0.500	1	07/25/2019 00:27	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 00:27	WG1317007
(S) Toluene-d8	107			80.0-120		07/25/2019 00:27	WG1317007
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 00:27	WG1317007
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/25/2019 00:27	WG1317007

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1121576-05 WG1317007: PCE detection is likely from instrument contamination/carryover, no sample remaining for re-analysis

Method Blank (MB)

(MB) R3435128-1 07/26/19 18:51

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	3080	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1121548-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121548-01 07/26/19 19:14 • (DUP) R3435128-2 07/26/19 19:21

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	538000	531000	1	1.28		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1121576-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121576-01 07/26/19 20:29 • (DUP) R3435128-4 07/26/19 20:35

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	182000	179000	1	1.67		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3435128-3 07/26/19 20:05

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	102000	102	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3433985-1 07/24/19 11:11

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1121543-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1121543-10 07/24/19 12:51 • (DUP) R3433985-3 07/24/19 13:07

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	1420	1270	1	10.7			15
Nitrate	271	375	1	32.5	P1		15
Sulfate	17800	18900	1	6.04			15

L1121584-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1121584-03 07/24/19 18:19 • (DUP) R3433985-6 07/24/19 18:35

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	2560	2540	1	0.835			15
Nitrate	2460	2490	1	1.24			15
Sulfate	38400	38200	1	0.367			15

Laboratory Control Sample (LCS)

(LCS) R3433985-2 07/24/19 11:28

Analyte	Spike Amount		LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	ug/l		%	%	
Chloride	40000	39000	97.5	80.0-120		
Nitrate	8000	8030	100	80.0-120		
Sulfate	40000	38900	97.3	80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1121543-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	1420	51200	51000	99.5	99.2	1	80.0-120	1	1	0.336	15
Nitrate	5000	271	5240	5240	99.5	99.3	1	80.0-120	1	1	0.160	15
Sulfate	50000	17800	70400	70300	105	105	1	80.0-120	1	1	0.143	15

L1121584-03 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	2560	52600	100	1	80.0-120	1
Nitrate	5000	2460	7670	104	1	80.0-120	1
Sulfate	50000	38400	89600	103	1	80.0-120	1

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3434554-1	07/25/19 16:49							
MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL					
Analyte	ug/l	ug/l	ug/l					
TOC (Total Organic Carbon)	195	<u>1</u>	102	1000				

L1121576-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121576-01	07/25/19 17:42	(DUP) R3434554-3	07/25/19 18:03					
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits			
Analyte	ug/l	ug/l	%		%			
TOC (Total Organic Carbon)	1950	1590	1	20.2	<u>P1</u>	20		

L1122111-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1122111-06	07/26/19 02:07	(DUP) R3434554-8	07/26/19 02:25					
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits			
Analyte	ug/l	ug/l	%		%			
TOC (Total Organic Carbon)	1460	1360	1	6.82		20		

L1122111-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1122111-02	07/26/19 09:39	(DUP) R3434554-10	07/26/19 13:22					
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits			
Analyte	ug/l	ug/l	%		%			
TOC (Total Organic Carbon)	5150	5710	1	10.3		20		

Laboratory Control Sample (LCS)

(LCS) R3434554-2	07/25/19 17:19							
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>				
Analyte	ug/l	ug/l	%		%			
TOC (Total Organic Carbon)	75000	74400	99.3	85.0-115				

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1121950-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1121950-01 07/25/19 19:52 • (MS) R3434554-4 07/25/19 21:11 • (MSD) R3434554-5 07/25/19 21:27

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	ND	49000	49100	97.3	97.4	1	80.0-120			0.122	20

L1122087-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1122087-04 07/25/19 23:03 • (MS) R3434554-6 07/26/19 00:24 • (MSD) R3434554-7 07/26/19 00:41

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
TOC (Total Organic Carbon)	50000	9630	61000	60400	103	101	1	80.0-120			1.12	20

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Metals (ICPMS) by Method 6020B

[L1121576-01.02.04](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3435097-1 07/28/19 19:13				
Analyte	ug/l	ug/l	ug/l	ug/l
Iron	U		15.0	100
Manganese	U		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
(LCS) R3435097-2 07/28/19 19:18 • (LCSD) R3435097-3 07/28/19 19:22										
Analyte	ug/l	ug/l	ug/l	%	%	%			%	%
Iron	5000	5010	4980	100	99.6	80.0-120			0.663	20
Manganese	50.0	49.2	49.0	98.4	98.0	80.0-120			0.438	20

L1121576-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
(OS) L1121576-01 07/28/19 19:27 • (MS) R3435097-5 07/28/19 19:36 • (MSD) R3435097-6 07/28/19 19:41												
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Iron	5000	2680	7350	7540	93.4	97.1	1	75.0-125			2.47	20
Manganese	50.0	408	438	449	60.7	83.6	1	75.0-125	V		2.58	20

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1 Cp
2 Tc
3 Ss
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6 Qc
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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1121576-01.02.03.04](#)

Method Blank (MB)

(MB) R3435342-3 07/26/19 11:53

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) <i>a,a</i> -Trifluorotoluene(FID)	110			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3435342-2 07/26/19 10:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5160	93.8	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			94.5	78.0-120	

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1121576-05](#)

Method Blank (MB)

(MB) R3435720-3 07/27/19 10:48

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>o,a,o</i> -Trifluorotoluene(FID)	110			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3435720-2 07/27/19 09:54

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5220	95.0	70.0-124	
^(S) <i>o,a,o</i> -Trifluorotoluene(FID)			99.4	78.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1121576-01.02.04](#)

Method Blank (MB)

(MB) R3434651-1 07/26/19 10:21

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1121638-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1121638-01 07/26/19 11:03 • (DUP) R3434651-2 07/26/19 11:42

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	%		ug/l	%	%	%	
Methane	ND	0.000	1	0.000				20
Ethane	ND	0.000	1	0.000				20
Ethene	ND	0.000	1	0.000				20

L1121358-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1121358-06 07/26/19 12:40 • (DUP) R3434651-3 07/26/19 13:01

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier		DUP RPD Limits
	ug/l	%		ug/l	%	%	%	
Methane	ND	0.000	1	0.000				20
Ethane	ND	0.000	1	0.000				20
Ethene	ND	0.000	1	0.000				20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434651-4 07/26/19 13:04 • (LCSD) R3434651-5 07/26/19 13:07

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		LCS Qualifier		LCSD Qualifier		RPD		RPD Limits	
	ug/l	%	ug/l	%	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Methane	67.8		72.5		72.0		107		106		85.0-115		0.736		20		0.736		20	
Ethane	129		118		121		91.7		93.7		85.0-115		2.15		20		2.15		20	
Ethene	127		118		120		92.8		94.3		85.0-115		1.55		20		1.55		20	

1 Cp
2 Tc
3 Ss
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Volatile Organic Compounds (GC) by Method RSK175

[L1121576-04](#)

Method Blank (MB)

(MB) R3434768-1 07/26/19 15:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3434768-2 07/26/19 15:27 • (LCSD) R3434768-3 07/26/19 15:35

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	73.6	72.2	109	106	85.0-115			1.94	20

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121576-05](#)

Method Blank (MB)

(MB) R3434112-2 07/24/19 18:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121576-05](#)

Method Blank (MB)

(MB) R3434112-2 07/24/19 18:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.226	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethane	2.04		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	105			70.0-130

1 Cp
2 Tc
3 Ss
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Laboratory Control Sample (LCS)

(LCS) R3434112-1 07/24/19 09:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	135	108	19.0-160	
Acrylonitrile	125	140	112	55.0-149	
Benzene	25.0	25.0	99.9	70.0-123	
Bromobenzene	25.0	23.5	94.1	73.0-121	
Bromodichloromethane	25.0	26.7	107	75.0-120	
Bromochloromethane	25.0	26.5	106	76.0-122	
Bromoform	25.0	24.5	97.9	68.0-132	
Bromomethane	25.0	26.2	105	10.0-160	
n-Butylbenzene	25.0	27.5	110	73.0-125	
sec-Butylbenzene	25.0	26.9	108	75.0-125	
tert-Butylbenzene	25.0	26.8	107	76.0-124	
Carbon disulfide	25.0	25.8	103	61.0-128	
Carbon tetrachloride	25.0	29.1	116	68.0-126	
Chlorobenzene	25.0	25.5	102	80.0-121	
Chlorodibromomethane	25.0	27.5	110	77.0-125	
Chloroethane	25.0	25.6	102	47.0-150	
Chloroform	25.0	24.9	99.6	73.0-120	
Chloromethane	25.0	23.7	94.8	41.0-142	
2-Chlorotoluene	25.0	24.7	98.9	76.0-123	
4-Chlorotoluene	25.0	25.0	99.9	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.5	97.9	58.0-134	
1,2-Dibromoethane	25.0	27.4	110	80.0-122	
Dibromomethane	25.0	26.8	107	80.0-120	
1,2-Dichlorobenzene	25.0	25.1	100	79.0-121	
1,3-Dichlorobenzene	25.0	25.2	101	79.0-120	
1,4-Dichlorobenzene	25.0	25.0	100	79.0-120	
Dichlorodifluoromethane	25.0	25.7	103	51.0-149	
1,1-Dichloroethane	25.0	25.7	103	70.0-126	
1,2-Dichloroethane	25.0	26.3	105	70.0-128	
1,1-Dichloroethene	25.0	26.4	105	71.0-124	
cis-1,2-Dichloroethene	25.0	25.1	100	73.0-120	
trans-1,2-Dichloroethene	25.0	25.4	102	73.0-120	
1,2-Dichloropropane	25.0	25.9	104	77.0-125	
1,1-Dichloropropene	25.0	26.1	104	74.0-126	
1,3-Dichloropropene	25.0	26.0	104	80.0-120	
cis-1,3-Dichloropropene	25.0	26.7	107	80.0-123	
trans-1,3-Dichloropropene	25.0	26.6	106	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	21.5	86.1	33.0-144	
2,2-Dichloropropane	25.0	27.3	109	58.0-130	
Di-isopropyl ether	25.0	25.9	104	58.0-138	

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1 Cp
2 Tc
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Laboratory Control Sample (LCS)

(LCS) R3434112-1 07/24/19 09:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.1	101	79.0-123	¹ Cp
Hexachloro-1,3-butadiene	25.0	27.6	110	54.0-138	³ Ss
2-Hexanone	125	135	108	67.0-149	² Tc
n-Hexane	25.0	29.1	116	57.0-133	⁴ Cn
Iodomethane	125	125	99.9	33.0-147	
Isopropylbenzene	25.0	26.8	107	76.0-127	
p-Isopropyltoluene	25.0	27.3	109	76.0-125	
2-Butanone (MEK)	125	134	107	44.0-160	
Methylene Chloride	25.0	25.5	102	67.0-120	⁵ Sr
4-Methyl-2-pentanone (MIBK)	125	127	102	68.0-142	⁶ Qc
Methyl tert-butyl ether	25.0	26.5	106	68.0-125	
Naphthalene	25.0	25.1	100	54.0-135	⁷ Gl
n-Propylbenzene	25.0	25.8	103	77.0-124	
Styrene	25.0	27.1	108	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	27.4	110	75.0-125	⁸ Al
1,1,2,2-Tetrachloroethane	25.0	26.1	104	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	24.4	97.5	69.0-132	
Tetrachloroethene	25.0	29.8	119	72.0-132	
Toluene	25.0	24.8	99.1	79.0-120	
1,2,3-Trichlorobenzene	25.0	25.3	101	50.0-138	
1,2,4-Trichlorobenzene	25.0	26.4	106	57.0-137	
1,1,1-Trichloroethane	25.0	26.9	108	73.0-124	
1,1,2-Trichloroethane	25.0	26.5	106	80.0-120	
Trichloroethene	25.0	24.2	96.8	78.0-124	
Trichlorofluoromethane	25.0	21.6	86.3	59.0-147	
1,2,3-Trichloropropane	25.0	25.8	103	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.5	102	76.0-121	
1,2,3-Trimethylbenzene	25.0	25.3	101	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.5	98.2	76.0-122	
Vinyl acetate	125	147	118	11.0-160	
Vinyl chloride	25.0	26.9	108	67.0-131	
Xylenes, Total	75.0	75.9	101	79.0-123	
<i>(S) Toluene-d8</i>			106	80.0-120	
<i>(S) 4-Bromofluorobenzene</i>			105	77.0-126	
<i>(S) 1,2-Dichloroethane-d4</i>			104	70.0-130	⁹ Sc

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Method Blank (MB)

(MB) R3435471-2 07/25/19 10:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Method Blank (MB)

(MB) R3435471-2 07/25/19 10:28

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	0.909		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3,4-Tetramethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	108			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	104			70.0-130

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2 Tc
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Laboratory Control Sample (LCS)

(LCS) R343547-1 07/25/19 09:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	135	108	19.0-160	
Acrylonitrile	125	141	113	55.0-149	
Benzene	25.0	24.9	99.6	70.0-123	
Bromobenzene	25.0	24.1	96.2	73.0-121	
Bromodichloromethane	25.0	26.1	105	75.0-120	
Bromochloromethane	25.0	26.5	106	76.0-122	
Bromoform	25.0	24.2	96.8	68.0-132	
Bromomethane	25.0	26.5	106	10.0-160	
n-Butylbenzene	25.0	28.1	112	73.0-125	
sec-Butylbenzene	25.0	27.0	108	75.0-125	
tert-Butylbenzene	25.0	27.1	108	76.0-124	
Carbon disulfide	25.0	25.7	103	61.0-128	
Carbon tetrachloride	25.0	29.5	118	68.0-126	
Chlorobenzene	25.0	25.5	102	80.0-121	
Chlorodibromomethane	25.0	27.3	109	77.0-125	
Chloroethane	25.0	25.9	103	47.0-150	
Chloroform	25.0	24.7	98.9	73.0-120	
Chloromethane	25.0	23.3	93.2	41.0-142	
2-Chlorotoluene	25.0	25.4	101	76.0-123	
4-Chlorotoluene	25.0	25.4	101	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	25.5	102	58.0-134	
1,2-Dibromoethane	25.0	26.5	106	80.0-122	
Dibromomethane	25.0	26.6	107	80.0-120	
1,2-Dichlorobenzene	25.0	25.4	101	79.0-121	
1,3-Dichlorobenzene	25.0	25.4	102	79.0-120	
1,4-Dichlorobenzene	25.0	24.9	99.4	79.0-120	
Dichlorodifluoromethane	25.0	25.3	101	51.0-149	
1,1-Dichloroethane	25.0	26.2	105	70.0-126	
1,2-Dichloroethane	25.0	25.7	103	70.0-128	
1,1-Dichloroethene	25.0	26.2	105	71.0-124	
cis-1,2-Dichloroethene	25.0	25.1	100	73.0-120	
trans-1,2-Dichloroethene	25.0	25.9	103	73.0-120	
1,2-Dichloropropane	25.0	25.7	103	77.0-125	
1,1-Dichloropropene	25.0	26.3	105	74.0-126	
1,3-Dichloropropene	25.0	25.9	104	80.0-120	
cis-1,3-Dichloropropene	25.0	27.0	108	80.0-123	
trans-1,3-Dichloropropene	25.0	26.3	105	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	21.3	85.0	33.0-144	
2,2-Dichloropropane	25.0	27.5	110	58.0-130	
Di-isopropyl ether	25.0	25.8	103	58.0-138	

Public Review Draft

1 Cp
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ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.001.05.601

SDG:

L1121576

DATE/TIME:

07/31/19 16:13

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121576-01.02.03.04](#)

Laboratory Control Sample (LCS)

(LCS) R343547-1 07/25/19 09:44

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.1	100	79.0-123	
Hexachloro-1,3-butadiene	25.0	27.9	112	54.0-138	
2-Hexanone	125	135	108	67.0-149	
n-Hexane	25.0	30.0	120	57.0-133	
Iodomethane	125	125	99.9	33.0-147	
Isopropylbenzene	25.0	26.6	106	76.0-127	
p-Isopropyltoluene	25.0	27.9	112	76.0-125	
2-Butanone (MEK)	125	131	105	44.0-160	
Methylene Chloride	25.0	26.5	106	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	125	100	68.0-142	
Methyl tert-butyl ether	25.0	26.3	105	68.0-125	
Naphthalene	25.0	25.9	103	54.0-135	
n-Propylbenzene	25.0	26.4	105	77.0-124	
Styrene	25.0	26.8	107	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	27.1	108	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	27.1	108	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	25.0	100	69.0-132	
Tetrachloroethene	25.0	27.3	109	72.0-132	
Toluene	25.0	24.4	97.6	79.0-120	
1,2,3-Trichlorobenzene	25.0	25.8	103	50.0-138	
1,2,4-Trichlorobenzene	25.0	26.7	107	57.0-137	
1,1,1-Trichloroethane	25.0	26.9	108	73.0-124	
1,1,2-Trichloroethane	25.0	25.8	103	80.0-120	
Trichloroethene	25.0	23.8	95.1	78.0-124	
Trichlorofluoromethane	25.0	21.5	86.0	59.0-147	
1,2,3-Trichloropropane	25.0	25.8	103	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.7	103	76.0-121	
1,2,3-Trimethylbenzene	25.0	25.6	102	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.9	99.6	76.0-122	
Vinyl acetate	125	149	119	11.0-160	
Vinyl chloride	25.0	27.0	108	67.0-131	
Xylenes, Total	75.0	74.9	99.9	79.0-123	
(S) Toluene-d8			105	80.0-120	
(S) 4-Bromofluorobenzene			104	77.0-126	
(S) 1,2-Dichloroethane-d4			104	70.0-130	

1 Cp
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1121576-01.02.04](#)

Method Blank (MB)

(MB) R3435761-3 07/30/19 10:31

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	106			80.0-120
(S) 4-Bromofluorobenzene	103			77.0-126
(S) 1,2-Dichloroethane-d4	107			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3435761-1 07/30/19 09:25 • (LCSD) R3435761-2 07/30/19 09:47

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	25.0	25.1	26.3	100	105	73.0-120			4.61	20
Tetrachloroethene	25.0	27.3	28.6	109	114	72.0-132			4.40	20
Trichloroethene	25.0	25.4	25.7	102	103	78.0-124			1.25	20
Vinyl chloride	25.0	28.5	29.1	114	117	67.0-131			2.07	20
(S) Toluene-d8				108	105	80.0-120				
(S) 4-Bromofluorobenzene				104	105	77.0-126				
(S) 1,2-Dichloroethane-d4				106	108	70.0-130				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
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Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

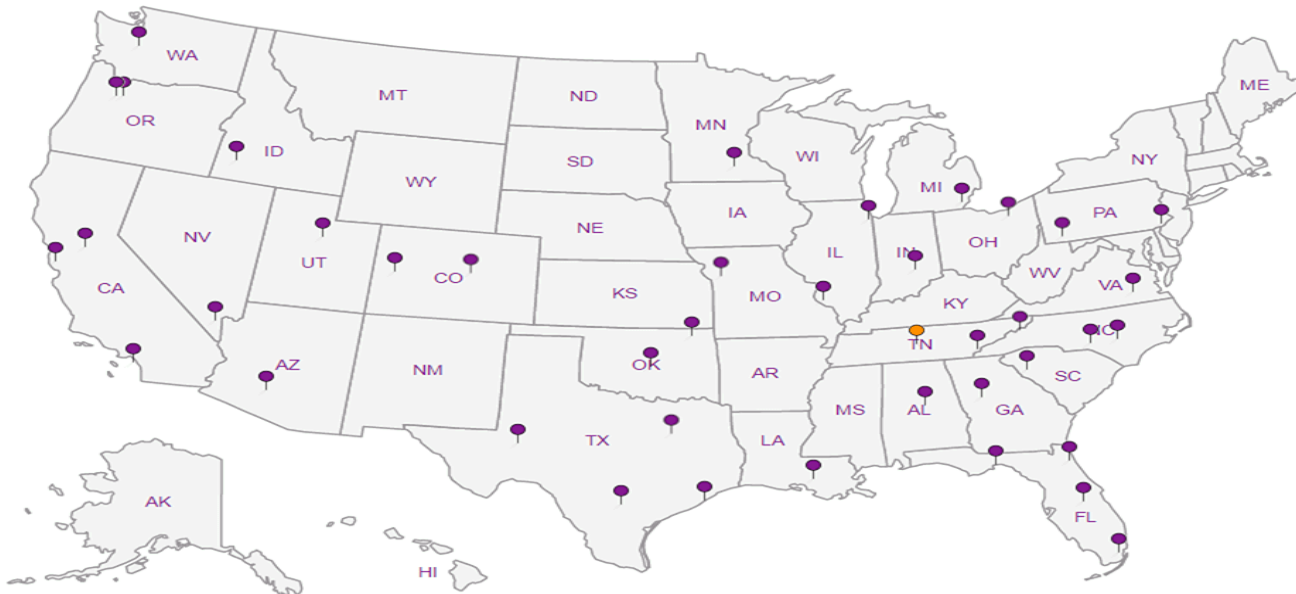
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

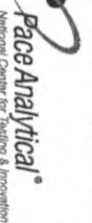
PES Environmental, Inc. - WA
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Billing Information:
Attn: Accounts Payable
 1215 Fourth Ave., Ste. 1350
 Seattle, WA 98161

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com; kuniko@pesenv.com
 bhaldeman@pesenv.com; kspringstead@pesenv.com

13065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859



Project: **American Linen**

City/State Collected: **Seattle, WA**

Client Project #: **1413.001.05.601**

Lab Project #: **PESENVSWA-ALP**

Phone: **206-529-3980**

P.O. #

Fax: **206-529-3985**

Quote #

Collected by (print): **Ben Hecht**

Site/Facility ID # **American Linen**

Collected by (signature): *[Signature]*

Rush? (Lab MUST Be Notified)

Immediately Packed on Ice N Y

Date Results Needed **STAT**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Date Results Needed	
							Same Day	Five Day
							Next Day	5 Day (Rad Only)
							Two Day	10 Day (Rad Only)
							Three Day	

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MMW-160-072319	Grab	GW	125	7/23/19	625	12	*NO3, CI, SO4* 125mlHDPE-NoPres
W-MMW-01-072319		GW	75	7/23/19	925	12	Alkalinity 125mlHDPE-NoPres
MMW-155-072319		GW	25	7/23/19	935	6	EEM RSK175LL 40mlAmb-HCl
W-MMW-02		GW	75	7/23/19	150	12	NWTPHGX 40mlAmb HCl
TRIP-072319		GW	-	7/23/19	1325	1	TOC 250mlAmb-HCl
		GW					Total Fe Mn 6020 250mlHDPE-HNO3
		GW					VOCs 8260LLC 40mlAmb-HCl

Remarks: *Nitrate has a 48 hour holding time.
 TIR QALAC; Bill PES; Email OK

Tracking #	Received by (Signature)	Temp (°C)	Bottles Received
1082-5988 SLOID	<i>[Signature]</i>	3.7 ± 1.5 °C	42

Sample Receipt Checklist	NP	NY	N
COC Seal Present/Intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC Signed/Accurate:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bottles arrive intact:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Correct bottles used:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sufficient volume sent:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
If Applicable	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOA zero Headpace:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Preservation Correct/Checked:	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

RAD SCREEN: <0.5 mR/hr

Table #	Actnum	Template	Prelogin	TSR	P8	Shipped Via	FedEx Ground	Remarks	Sample # (lab only)
D204	PESENVSWA	T152679	P718645	Brian Ford	7-5-19	F5			

Chain of Custody	Page	of

Relinquished by: (Signature)	Date	Time	Received for lab by: (Signature)	Date	Time	Hold:	Condition
<i>[Signature]</i>	7-23-19	1400	<i>[Signature]</i>	7-24-19	845		NCF / <input checked="" type="checkbox"/>

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Hold:	Condition
<i>[Signature]</i>			<i>[Signature]</i>				

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Hold:	Condition
<i>[Signature]</i>			<i>[Signature]</i>				

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Hold:	Condition
<i>[Signature]</i>			<i>[Signature]</i>				

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Hold:	Condition
<i>[Signature]</i>			<i>[Signature]</i>				

Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Hold:	Condition
<i>[Signature]</i>			<i>[Signature]</i>				



Collected date/time: 07/23/19 06:25

L1121576

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	182000		2710	20000	1	07/26/2019 20:29	WG1317887

Sample Narrative:

L1121576-01 WG1317887: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	8280		51.9	1000	1	07/24/2019 15:35	WG1316545
Nitrate	U		22.7	100	1	07/24/2019 15:35	WG1316545
Sulfate	2640	J J	77.4	5000	1	07/24/2019 15:35	WG1316545

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1950	B P1	102	1000	1	07/25/2019 17:42	WG1317639

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2680		15.0	100	1	07/28/2019 19:27	WG1317876
Manganese	408	V	0.250	5.00	1	07/28/2019 19:27	WG1317876

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 16:10	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/26/2019 16:10	WG1318107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	535		0.287	0.678	1	07/26/2019 12:43	WG1317907
Ethane	U		0.296	1.29	1	07/26/2019 12:43	WG1317907
Ethene	U		0.422	1.27	1	07/26/2019 12:43	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.98	U J	1.05	25.0	1	07/25/2019 14:58	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 14:58	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 14:58	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 14:58	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 14:58	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 14:58	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 14:58	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 14:58	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 14:58	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 14:58	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 14:58	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 14:58	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 14:58	WG1317389

1 Cp
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JC 8/7/19



Collected date/time: 07/23/19 06:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 14:58	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 14:58	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 14:58	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 14:58	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 14:58	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 14:58	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 14:58	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 14:58	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 14:58	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 14:58	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 14:58	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 14:58	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 14:58	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 14:58	WG1317389
cis-1,2-Dichloroethene	0.217	J U	0.0933	0.500	1	07/30/2019 19:52	WG1319848
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 14:58	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 14:58	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 14:58	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 14:58	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 14:58	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 14:58	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 14:58	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 14:58	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 14:58	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 14:58	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 14:58	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 14:58	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 14:58	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 14:58	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 14:58	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 14:58	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 14:58	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 14:58	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 14:58	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 14:58	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 14:58	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 14:58	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 14:58	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 14:58	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 14:58	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 14:58	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 19:52	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 14:58	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 14:58	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 14:58	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 14:58	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 14:58	WG1317389
Trichloroethene	U		0.153	0.500	1	07/30/2019 19:52	WG1319848
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/25/2019 14:58	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 14:58	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 14:58	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 14:58	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 14:58	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/7/19



Collected date/time: 07/23/19 06:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 14:58	WG1317389
Vinyl chloride	0.326	J ↓	0.118	0.500	1	07/30/2019 19:52	WG1319848
Xylenes, Total	U		0.316	1.50	1	07/25/2019 14:58	WG1317389
(S) Toluene-d8	107			80.0-120		07/25/2019 14:58	WG1317389
(S) Toluene-d8	107			80.0-120		07/30/2019 19:52	WG1319848
(S) 4-Bromofluorobenzene	101			77.0-126		07/25/2019 14:58	WG1317389
(S) 4-Bromofluorobenzene	101			77.0-126		07/30/2019 19:52	WG1319848
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/25/2019 14:58	WG1317389
(S) 1,2-Dichloroethane-d4	107			70.0-130		07/30/2019 19:52	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/7/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	242000		2710	20000	1	07/26/2019 20:43	WG1317887

Sample Narrative:

L1121576-02 WG1317887: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	33200		51.9	1000	1	07/24/2019 15:51	WG1316545
Nitrate	U		22.7	100	1	07/24/2019 15:51	WG1316545
Sulfate	78900		77.4	5000	1	07/24/2019 15:51	WG1316545

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2730		102	1000	1	07/25/2019 18:17	WG1317639

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	614		15.0	100	1	07/28/2019 19:50	WG1317876
Manganese	323		0.250	5.00	1	07/28/2019 19:50	WG1317876

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 16:34	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		07/26/2019 16:34	WG1318107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	327		0.287	0.678	1	07/26/2019 12:54	WG1317907
Ethane	3.96		0.296	1.29	1	07/26/2019 12:54	WG1317907
Ethene	7.04		0.422	1.27	1	07/26/2019 12:54	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/25/2019 15:20	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 15:20	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 15:20	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 15:20	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 15:20	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 15:20	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 15:20	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 15:20	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 15:20	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 15:20	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 15:20	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 15:20	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 15:20	WG1317389

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/7/19



Collected date/time: 07/23/19 09:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 15:20	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 15:20	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 15:20	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 15:20	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 15:20	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 15:20	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 15:20	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 15:20	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 15:20	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 15:20	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 15:20	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 15:20	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 15:20	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 15:20	WG1317389
cis-1,2-Dichloroethene	0.547		0.0933	0.500	1	07/30/2019 20:14	WG1319848
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 15:20	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 15:20	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 15:20	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 15:20	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 15:20	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 15:20	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 15:20	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 15:20	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 15:20	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 15:20	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 15:20	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 15:20	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 15:20	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 15:20	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 15:20	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 15:20	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 15:20	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 15:20	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 15:20	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 15:20	WG1317389
Naphthalene	0.211	J U	0.174	2.50	1	07/25/2019 15:20	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 15:20	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 15:20	WG1317389
1,1,1-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 15:20	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 15:20	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 15:20	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 20:14	WG1319848
Toluene	U		0.412	0.500	1	07/25/2019 15:20	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 15:20	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 15:20	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 15:20	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 15:20	WG1317389
Trichloroethene	0.304	J U	0.153	0.500	1	07/30/2019 20:14	WG1319848
Trichlorofluoromethane	U	UJ UO	0.130	2.50	1	07/25/2019 15:20	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 15:20	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 15:20	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 15:20	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 15:20	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/7/19



Collected date/time: 07/23/19 09:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 15:20	WG1317389
Vinyl chloride	9.00		0.118	0.500	1	07/25/2019 15:20	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 15:20	WG1317389
(S) Toluene-d8	106			80.0-120		07/25/2019 15:20	WG1317389
(S) Toluene-d8	108			80.0-120		07/30/2019 20:14	WG1319848
(S) 4-Bromofluorobenzene	100			77.0-126		07/25/2019 15:20	WG1317389
(S) 4-Bromofluorobenzene	102			77.0-126		07/30/2019 20:14	WG1319848
(S) 1,2-Dichloroethane-d4	106			70.0-130		07/25/2019 15:20	WG1317389
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/30/2019 20:14	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/7/19



Collected date/time: 07/23/19 09:35

L1121576

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 16:58	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/26/2019 16:58	WG1318107

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.69	U J	1.05	25.0	1	07/25/2019 15:41	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 15:41	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 15:41	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 15:41	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 15:41	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 15:41	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 15:41	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 15:41	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 15:41	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 15:41	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 15:41	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 15:41	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 15:41	WG1317389
Chlorobenzene	U		0.140	0.500	1	07/25/2019 15:41	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 15:41	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 15:41	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 15:41	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 15:41	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 15:41	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 15:41	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 15:41	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 15:41	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 15:41	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 15:41	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 15:41	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 15:41	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 15:41	WG1317389
cis-1,2-Dichloroethene	12.1		0.0933	0.500	1	07/25/2019 15:41	WG1317389
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 15:41	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 15:41	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 15:41	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 15:41	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 15:41	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 15:41	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 15:41	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 15:41	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 15:41	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 15:41	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 15:41	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 15:41	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 15:41	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 15:41	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 15:41	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 15:41	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 15:41	WG1317389

JC 8/7/19



Collected date/time: 07/23/19 09:35

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 15:41	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 15:41	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 15:41	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 15:41	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 15:41	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 15:41	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 15:41	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 15:41	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 15:41	WG1317389
Tetrachloroethene	92.7		0.199	0.500	1	07/25/2019 15:41	WG1317389
Toluene	U		0.412	0.500	1	07/25/2019 15:41	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 15:41	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 15:41	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 15:41	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 15:41	WG1317389
Trichloroethene	19.9		0.153	0.500	1	07/25/2019 15:41	WG1317389
Trichlorofluoromethane	U	UJ JO	0.130	2.50	1	07/25/2019 15:41	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 15:41	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 15:41	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 15:41	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 15:41	WG1317389
Vinyl acetate	U		0.645	5.00	1	07/25/2019 15:41	WG1317389
Vinyl chloride	0.350	J J	0.118	0.500	1	07/25/2019 15:41	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 15:41	WG1317389
(S) Toluene-d8	107			80.0-120		07/25/2019 15:41	WG1317389
(S) 4-Bromofluorobenzene	100			77.0-126		07/25/2019 15:41	WG1317389
(S) 1,2-Dichloroethane-d4	105			70.0-130		07/25/2019 15:41	WG1317389

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/7/19



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	965000		2710	20000	1	07/26/2019 20:50	WG1317887

Sample Narrative:

L1121576-04 WG1317887: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	98400		51.9	1000	1	07/24/2019 16:08	WG1316545
Nitrate	U		22.7	100	1	07/24/2019 16:08	WG1316545
Sulfate	3240	J	77.4	5000	1	07/24/2019 16:08	WG1316545

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	43400		102	1000	1	07/25/2019 18:33	WG1317639

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	13600		15.0	100	1	07/28/2019 19:54	WG1317876
Manganese	3470		0.250	5.00	1	07/28/2019 19:54	WG1317876

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/26/2019 17:22	WG1318107
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/26/2019 17:22	WG1318107

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	25700		2.87	6.78	10	07/26/2019 15:08	WG1318268
Ethane	U		0.296	1.29	1	07/26/2019 12:57	WG1317907
Ethene	15.0		0.422	1.27	1	07/26/2019 12:57	WG1317907

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	07/25/2019 16:03	WG1317389
Acrylonitrile	U		0.873	5.00	1	07/25/2019 16:03	WG1317389
Benzene	U		0.0896	0.500	1	07/25/2019 16:03	WG1317389
Bromobenzene	U		0.133	0.500	1	07/25/2019 16:03	WG1317389
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 16:03	WG1317389
Bromochloromethane	U		0.145	0.500	1	07/25/2019 16:03	WG1317389
Bromoform	U		0.186	0.500	1	07/25/2019 16:03	WG1317389
Bromomethane	U		0.157	2.50	1	07/25/2019 16:03	WG1317389
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 16:03	WG1317389
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 16:03	WG1317389
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 16:03	WG1317389
Carbon disulfide	U		0.101	0.500	1	07/25/2019 16:03	WG1317389
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 16:03	WG1317389

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

JC 8/7/19



Collected date/time: 07/23/19 11:50

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	07/25/2019 16:03	WG1317389
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 16:03	WG1317389
Chloroethane	U		0.141	2.50	1	07/25/2019 16:03	WG1317389
Chloroform	U		0.0860	0.500	1	07/25/2019 16:03	WG1317389
Chloromethane	U		0.153	1.25	1	07/25/2019 16:03	WG1317389
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 16:03	WG1317389
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 16:03	WG1317389
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 16:03	WG1317389
Dibromomethane	U		0.117	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 16:03	WG1317389
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 16:03	WG1317389
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 16:03	WG1317389
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 16:03	WG1317389
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 16:03	WG1317389
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 16:03	WG1317389
cis-1,2-Dichloroethene	3.30		0.0933	0.500	1	07/30/2019 20:36	WG1319848
trans-1,2-Dichloroethene	0.386	J	0.152	0.500	1	07/25/2019 16:03	WG1317389
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 16:03	WG1317389
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 16:03	WG1317389
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 16:03	WG1317389
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 16:03	WG1317389
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 16:03	WG1317389
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 16:03	WG1317389
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 16:03	WG1317389
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 16:03	WG1317389
Ethylbenzene	U		0.158	0.500	1	07/25/2019 16:03	WG1317389
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 16:03	WG1317389
2-Hexanone	U		0.757	5.00	1	07/25/2019 16:03	WG1317389
n-Hexane	U		0.305	5.00	1	07/25/2019 16:03	WG1317389
Iodomethane	U		0.377	10.0	1	07/25/2019 16:03	WG1317389
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 16:03	WG1317389
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 16:03	WG1317389
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 16:03	WG1317389
Methylene Chloride	U		1.07	2.50	1	07/25/2019 16:03	WG1317389
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 16:03	WG1317389
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 16:03	WG1317389
Naphthalene	U		0.174	2.50	1	07/25/2019 16:03	WG1317389
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 16:03	WG1317389
Styrene	U		0.117	0.500	1	07/25/2019 16:03	WG1317389
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 16:03	WG1317389
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 16:03	WG1317389
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 16:03	WG1317389
Tetrachloroethene	U		0.199	0.500	1	07/30/2019 20:36	WG1319848
Toluene	1.35		0.412	0.500	1	07/25/2019 16:03	WG1317389
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 16:03	WG1317389
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 16:03	WG1317389
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 16:03	WG1317389
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 16:03	WG1317389
Trichloroethene	U		0.153	0.500	1	07/30/2019 20:36	WG1319848
Trichlorofluoromethane	U	UJ	0.130	2.50	1	07/25/2019 16:03	WG1317389
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 16:03	WG1317389
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 16:03	WG1317389
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 16:03	WG1317389
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 16:03	WG1317389

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

JC 8/7/19



Collected date/time: 07/23/19 11:50

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	07/25/2019 16:03	WG1317389
Vinyl chloride	6.79		0.118	0.500	1	07/25/2019 16:03	WG1317389
Xylenes, Total	U		0.316	1.50	1	07/25/2019 16:03	WG1317389
(S) Toluene-d8	109			80.0-120		07/25/2019 16:03	WG1317389
(S) Toluene-d8	108			80.0-120		07/30/2019 20:36	WG1319848
(S) 4-Bromofluorobenzene	102			77.0-126		07/25/2019 16:03	WG1317389
(S) 4-Bromofluorobenzene	99.2			77.0-126		07/30/2019 20:36	WG1319848
(S) 1,2-Dichloroethane-d4	104			70.0-130		07/25/2019 16:03	WG1317389
(S) 1,2-Dichloroethane-d4	102			70.0-130		07/30/2019 20:36	WG1319848

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

JC 8/7/19



Collected date/time: 07/23/19 13:25

L1121576

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	07/27/2019 11:30	WG1318530
(S) a,a,a-Trifluorotoluene(FID)	110			78.0-120		07/27/2019 11:30	WG1318530

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.73	J	1.05	25.0	1	07/25/2019 00:27	WG1317007
Acrylonitrile	U		0.873	5.00	1	07/25/2019 00:27	WG1317007
Benzene	U		0.0896	0.500	1	07/25/2019 00:27	WG1317007
Bromobenzene	U		0.133	0.500	1	07/25/2019 00:27	WG1317007
Bromodichloromethane	U		0.0800	0.500	1	07/25/2019 00:27	WG1317007
Bromochloromethane	U		0.145	0.500	1	07/25/2019 00:27	WG1317007
Bromoform	U		0.186	0.500	1	07/25/2019 00:27	WG1317007
Bromomethane	U		0.157	2.50	1	07/25/2019 00:27	WG1317007
n-Butylbenzene	U		0.143	0.500	1	07/25/2019 00:27	WG1317007
sec-Butylbenzene	U		0.134	0.500	1	07/25/2019 00:27	WG1317007
tert-Butylbenzene	U		0.183	0.500	1	07/25/2019 00:27	WG1317007
Carbon disulfide	U		0.101	0.500	1	07/25/2019 00:27	WG1317007
Carbon tetrachloride	U		0.159	0.500	1	07/25/2019 00:27	WG1317007
Chlorobenzene	U		0.140	0.500	1	07/25/2019 00:27	WG1317007
Chlorodibromomethane	U		0.128	0.500	1	07/25/2019 00:27	WG1317007
Chloroethane	U		0.141	2.50	1	07/25/2019 00:27	WG1317007
Chloroform	U		0.0860	0.500	1	07/25/2019 00:27	WG1317007
Chloromethane	U		0.153	1.25	1	07/25/2019 00:27	WG1317007
2-Chlorotoluene	U		0.111	0.500	1	07/25/2019 00:27	WG1317007
4-Chlorotoluene	U		0.0972	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	07/25/2019 00:27	WG1317007
1,2-Dibromoethane	U		0.193	0.500	1	07/25/2019 00:27	WG1317007
Dibromomethane	U		0.117	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dichlorobenzene	U		0.101	0.500	1	07/25/2019 00:27	WG1317007
1,3-Dichlorobenzene	U		0.130	0.500	1	07/25/2019 00:27	WG1317007
1,4-Dichlorobenzene	U		0.121	0.500	1	07/25/2019 00:27	WG1317007
Dichlorodifluoromethane	U		0.127	2.50	1	07/25/2019 00:27	WG1317007
1,1-Dichloroethane	U		0.114	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dichloroethane	U		0.108	0.500	1	07/25/2019 00:27	WG1317007
1,1-Dichloroethene	U		0.188	0.500	1	07/25/2019 00:27	WG1317007
cis-1,2-Dichloroethene	U		0.0933	0.500	1	07/25/2019 00:27	WG1317007
trans-1,2-Dichloroethene	U		0.152	0.500	1	07/25/2019 00:27	WG1317007
1,2-Dichloropropane	U		0.190	0.500	1	07/25/2019 00:27	WG1317007
1,1-Dichloropropene	U		0.128	0.500	1	07/25/2019 00:27	WG1317007
1,3-Dichloropropane	U		0.147	1.00	1	07/25/2019 00:27	WG1317007
cis-1,3-Dichloropropene	U		0.0976	0.500	1	07/25/2019 00:27	WG1317007
trans-1,3-Dichloropropene	U		0.222	0.500	1	07/25/2019 00:27	WG1317007
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	07/25/2019 00:27	WG1317007
2,2-Dichloropropane	U		0.0929	0.500	1	07/25/2019 00:27	WG1317007
Di-isopropyl ether	U		0.0924	0.500	1	07/25/2019 00:27	WG1317007
Ethylbenzene	U		0.158	0.500	1	07/25/2019 00:27	WG1317007
Hexachloro-1,3-butadiene	U		0.157	1.00	1	07/25/2019 00:27	WG1317007
2-Hexanone	U		0.757	5.00	1	07/25/2019 00:27	WG1317007
n-Hexane	U		0.305	5.00	1	07/25/2019 00:27	WG1317007
Iodomethane	U		0.377	10.0	1	07/25/2019 00:27	WG1317007
Isopropylbenzene	U		0.126	0.500	1	07/25/2019 00:27	WG1317007
p-Isopropyltoluene	U		0.138	0.500	1	07/25/2019 00:27	WG1317007
2-Butanone (MEK)	U		1.28	5.00	1	07/25/2019 00:27	WG1317007



Collected date/time: 07/23/19 13:25

L1121576

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	07/25/2019 00:27	WG1317007
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	07/25/2019 00:27	WG1317007
Methyl tert-butyl ether	U		0.102	0.500	1	07/25/2019 00:27	WG1317007
Naphthalene	U		0.174	2.50	1	07/25/2019 00:27	WG1317007
n-Propylbenzene	U		0.162	0.500	1	07/25/2019 00:27	WG1317007
Styrene	U		0.117	0.500	1	07/25/2019 00:27	WG1317007
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	07/25/2019 00:27	WG1317007
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	07/25/2019 00:27	WG1317007
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	07/25/2019 00:27	WG1317007
Tetrachloroethene	1.03	<u>B</u>	0.199	0.500	1	07/25/2019 00:27	WG1317007
Toluene	U		0.412	0.500	1	07/25/2019 00:27	WG1317007
1,2,3-Trichlorobenzene	U		0.164	0.500	1	07/25/2019 00:27	WG1317007
1,2,4-Trichlorobenzene	U		0.355	0.500	1	07/25/2019 00:27	WG1317007
1,1,1-Trichloroethane	U		0.0940	0.500	1	07/25/2019 00:27	WG1317007
1,1,2-Trichloroethane	U		0.186	0.500	1	07/25/2019 00:27	WG1317007
Trichloroethene	U		0.153	0.500	1	07/25/2019 00:27	WG1317007
Trichlorofluoromethane	U		0.130	2.50	1	07/25/2019 00:27	WG1317007
1,2,3-Trichloropropane	U		0.247	2.50	1	07/25/2019 00:27	WG1317007
1,2,4-Trimethylbenzene	U		0.123	0.500	1	07/25/2019 00:27	WG1317007
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	07/25/2019 00:27	WG1317007
1,3,5-Trimethylbenzene	U		0.124	0.500	1	07/25/2019 00:27	WG1317007
Vinyl acetate	U		0.645	5.00	1	07/25/2019 00:27	WG1317007
Vinyl chloride	U		0.118	0.500	1	07/25/2019 00:27	WG1317007
Xylenes, Total	U		0.316	1.50	1	07/25/2019 00:27	WG1317007
(S) Toluene-d8	107			80.0-120		07/25/2019 00:27	WG1317007
(S) 4-Bromofluorobenzene	104			77.0-126		07/25/2019 00:27	WG1317007
(S) 1,2-Dichloroethane-d4	108			70.0-130		07/25/2019 00:27	WG1317007

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1121576-05 WG1317007: PCE detection is likely from instrument contamination/carryover, no sample remaining for re-analysis



ANALYTICAL REPORT

October 21, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

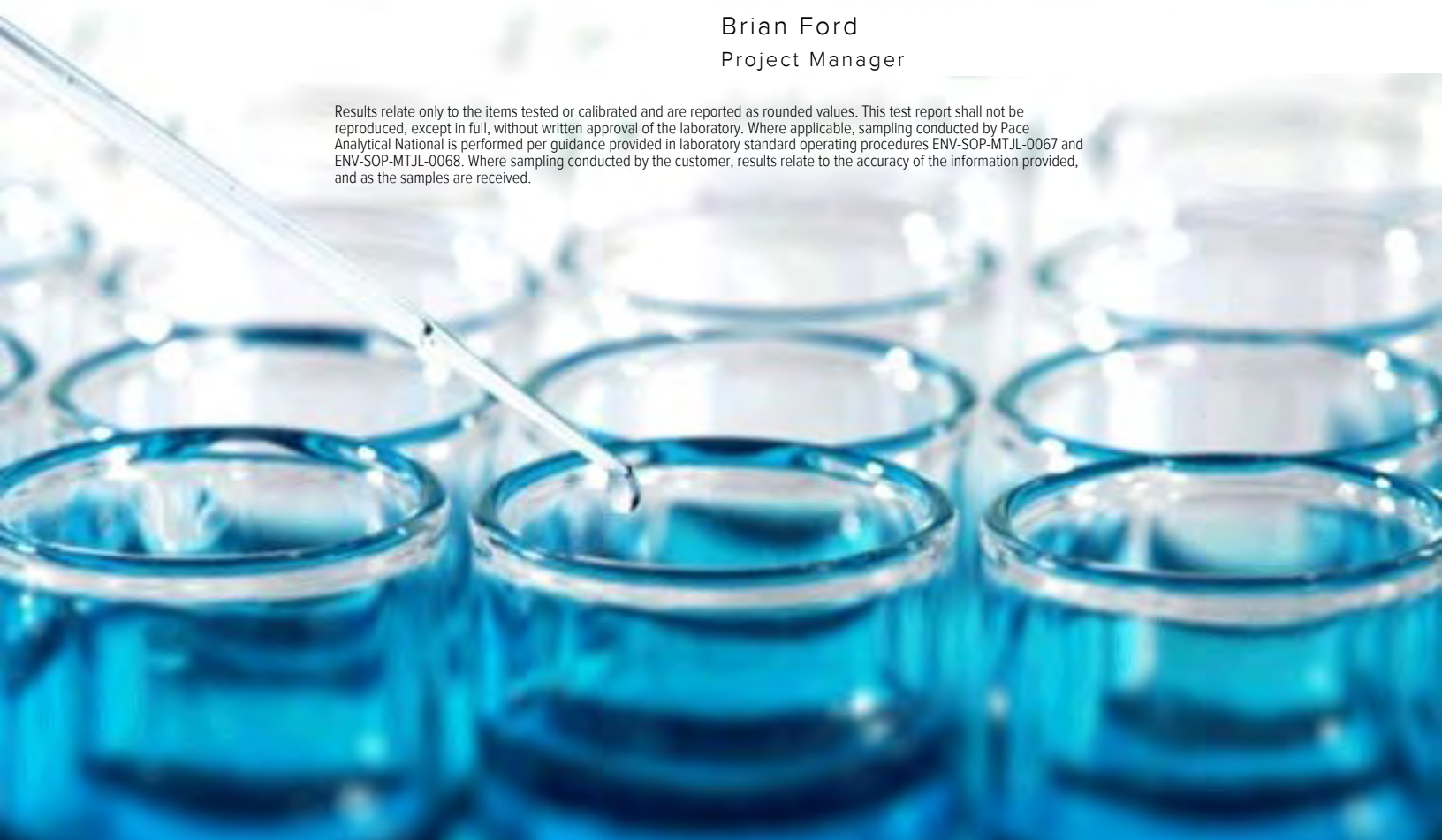
PES Environmental, Inc.- WA

Sample Delivery Group: L1146788
 Samples Received: 10/05/2019
 Project Number: 1413.001.02.501E
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-316-100219 L1146788-01 GW

Collected by Ben Hecht
Collected date/time 10/02/19 09:50
Received date/time 10/05/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 15:01	10/13/19 15:01	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 16:50	10/05/19 16:50	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 13:15	10/11/19 13:15	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	5	10/08/19 09:49	10/09/19 10:59	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:27	10/10/19 14:27	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 02:55	10/15/19 02:55	JHH	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

MW-324-100219 L1146788-02 GW

Collected by Ben Hecht
Collected date/time 10/02/19 12:15
Received date/time 10/05/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 15:08	10/13/19 15:08	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 18:29	10/05/19 18:29	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 13:39	10/11/19 13:39	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	5	10/08/19 09:49	10/09/19 11:02	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:31	10/10/19 14:31	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 03:16	10/15/19 03:16	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1363245	50	10/15/19 16:28	10/15/19 16:28	ACG	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-328-100219 L1146788-03 GW

Collected by Ben Hecht
Collected date/time 10/02/19 14:15
Received date/time 10/05/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 15:16	10/13/19 15:16	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 18:45	10/05/19 18:45	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 14:02	10/11/19 14:02	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	10	10/08/19 09:49	10/09/19 11:06	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:33	10/10/19 14:33	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1361193	10	10/11/19 09:50	10/11/19 09:50	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 03:36	10/15/19 03:36	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1363245	1	10/15/19 16:48	10/15/19 16:48	ACG	Mt. Juliet, TN

MW-327-100219 L1146788-04 GW

Collected by Ben Hecht
Collected date/time 10/02/19 16:10
Received date/time 10/05/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 15:24	10/13/19 15:24	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 19:01	10/05/19 19:01	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 14:25	10/11/19 14:25	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	10	10/08/19 09:49	10/09/19 11:09	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:37	10/10/19 14:37	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1361193	10	10/11/19 09:56	10/11/19 09:56	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 03:57	10/15/19 03:57	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1363245	1	10/15/19 17:07	10/15/19 17:07	JHH	Mt. Juliet, TN

MW-316-100319 L1146788-05 GW

Collected by Ben Hecht
Collected date/time 10/03/19 08:15
Received date/time 10/05/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 19:18	10/05/19 19:18	ELN	Mt. Juliet, TN



				Collected by	Collected date/time	Received date/time
MW-315-100319 L1146788-06 GW				Ben Hecht	10/03/19 09:20	10/05/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 15:30	10/13/19 15:30	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 19:34	10/05/19 19:34	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 15:14	10/11/19 15:14	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	1	10/08/19 09:49	10/09/19 00:25	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	5	10/08/19 09:49	10/09/19 11:13	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:40	10/10/19 14:40	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 04:18	10/15/19 04:18	JHH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1363245	1	10/15/19 17:27	10/15/19 17:27	JHH	Mt. Juliet, TN

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc

				Collected by	Collected date/time	Received date/time
MW-915-100319 L1146788-07 GW				Ben Hecht	10/03/19 10:10	10/05/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 15:38	10/13/19 15:38	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 19:51	10/05/19 19:51	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 15:37	10/11/19 15:37	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	20	10/08/19 09:49	10/09/19 11:17	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:44	10/10/19 14:44	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 04:39	10/15/19 04:39	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW-325-100319 L1146788-08 GW				Ben Hecht	10/03/19 11:15	10/05/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 15:53	10/13/19 15:53	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 20:07	10/05/19 20:07	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	5	10/07/19 10:06	10/07/19 10:06	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 17:36	10/11/19 17:36	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	1	10/08/19 09:49	10/09/19 00:43	JPD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	5	10/08/19 09:49	10/09/19 11:20	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:46	10/10/19 14:46	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 04:59	10/15/19 04:59	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW-326-100319 L1146788-09 GW				Ben Hecht	10/03/19 12:30	10/05/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 16:00	10/13/19 16:00	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 20:56	10/05/19 20:56	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 17:55	10/11/19 17:55	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	5	10/08/19 09:49	10/09/19 11:24	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:49	10/10/19 14:49	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 05:20	10/15/19 05:20	JHH	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
MW-329-100319 L1146788-10 GW				Ben Hecht	10/03/19 14:35	10/05/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1362246	1	10/13/19 16:07	10/13/19 16:07	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1357983	1	10/05/19 14:53	10/05/19 14:53	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1361291	1	10/11/19 18:16	10/11/19 18:16	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1358528	20	10/08/19 09:49	10/09/19 11:28	JPD	Mt. Juliet, TN



MW-329-100319 L1146788-10 GW

Collected by Ben Hecht
 Collected date/time 10/03/19 14:35
 Received date/time 10/05/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG1360431	1	10/10/19 14:51	10/10/19 14:51	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 05:41	10/15/19 05:41	JHH	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

TRIP BLANK L1146788-11 GW

Collected by Ben Hecht
 Collected date/time 10/03/19 00:00
 Received date/time 10/05/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1362918	1	10/15/19 01:32	10/15/19 01:32	JHH	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

VOC pH outside of method requirement.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1146788-03	MW-328-100219	8260C

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	384000		2710	20000	1	10/13/2019 15:01	WG1362246

Sample Narrative:

L1146788-01 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	16900		51.9	1000	1	10/05/2019 16:50	WG1357983
Sulfate	41800		77.4	5000	1	10/05/2019 16:50	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3780	<u>B</u>	102	1000	1	10/11/2019 13:15	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2580		75.0	500	5	10/09/2019 10:59	WG1358528
Manganese	328		1.25	25.0	5	10/09/2019 10:59	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	143		0.287	0.678	1	10/10/2019 14:27	WG1360431
Ethane	U		0.296	1.29	1	10/10/2019 14:27	WG1360431
Ethene	U		0.422	1.27	1	10/10/2019 14:27	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.73	<u>J JO</u>	1.05	25.0	1	10/15/2019 02:55	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 02:55	WG1362918
Benzene	U		0.0896	0.500	1	10/15/2019 02:55	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 02:55	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 02:55	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 02:55	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 02:55	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 02:55	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 02:55	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 02:55	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 02:55	WG1362918
Carbon disulfide	0.485	<u>J</u>	0.101	0.500	1	10/15/2019 02:55	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 02:55	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 02:55	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 02:55	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 02:55	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 02:55	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 02:55	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 02:55	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 02:55	WG1362918
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 02:55	WG1362918

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/02/19 09:50

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 02:55	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 02:55	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 02:55	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 02:55	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 02:55	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 02:55	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 02:55	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 02:55	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 02:55	WG1362918
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/15/2019 02:55	WG1362918
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 02:55	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 02:55	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 02:55	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 02:55	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 02:55	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 02:55	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 02:55	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 02:55	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 02:55	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 02:55	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 02:55	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 02:55	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 02:55	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 02:55	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 02:55	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 02:55	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 02:55	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 02:55	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 02:55	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 02:55	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 02:55	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 02:55	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 02:55	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 02:55	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 02:55	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 02:55	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 02:55	WG1362918
Toluene	0.570		0.412	0.500	1	10/15/2019 02:55	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 02:55	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 02:55	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 02:55	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 02:55	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 02:55	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 02:55	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 02:55	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 02:55	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 02:55	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 02:55	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 02:55	WG1362918
Vinyl chloride	U		0.118	0.500	1	10/15/2019 02:55	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 02:55	WG1362918
(S) Toluene-d8	102			80.0-120		10/15/2019 02:55	WG1362918
(S) 4-Bromofluorobenzene	102			77.0-126		10/15/2019 02:55	WG1362918
(S) 1,2-Dichloroethane-d4	109			70.0-130		10/15/2019 02:55	WG1362918

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	587000		2710	20000	1	10/13/2019 15:08	WG1362246

Sample Narrative:

L1146788-02 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	20100		51.9	1000	1	10/05/2019 18:29	WG1357983
Nitrate	U	T8	22.7	100	1	10/05/2019 18:29	WG1357983
Sulfate	93100		77.4	5000	1	10/05/2019 18:29	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	13100		102	1000	1	10/11/2019 13:39	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5740		75.0	500	5	10/09/2019 11:02	WG1358528
Manganese	374		1.25	25.0	5	10/09/2019 11:02	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	3340		0.287	0.678	1	10/10/2019 14:31	WG1360431
Ethane	13.4		0.296	1.29	1	10/10/2019 14:31	WG1360431
Ethene	22.4		0.422	1.27	1	10/10/2019 14:31	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	6.39	J JO	1.05	25.0	1	10/15/2019 03:16	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 03:16	WG1362918
Benzene	0.401	J	0.0896	0.500	1	10/15/2019 03:16	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 03:16	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 03:16	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 03:16	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 03:16	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 03:16	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 03:16	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 03:16	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 03:16	WG1362918
Carbon disulfide	5.63		0.101	0.500	1	10/15/2019 03:16	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 03:16	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 03:16	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 03:16	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 03:16	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 03:16	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 03:16	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 03:16	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 03:16	WG1362918

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/02/19 12:15

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 03:16	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 03:16	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 03:16	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 03:16	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 03:16	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 03:16	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 03:16	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 03:16	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 03:16	WG1362918
1,1-Dichloroethene	1.53		0.188	0.500	1	10/15/2019 03:16	WG1362918
cis-1,2-Dichloroethene	1550		4.67	25.0	50	10/15/2019 16:28	WG1363245
trans-1,2-Dichloroethene	3.21		0.152	0.500	1	10/15/2019 03:16	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 03:16	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 03:16	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 03:16	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 03:16	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 03:16	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 03:16	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 03:16	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 03:16	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 03:16	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 03:16	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 03:16	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 03:16	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 03:16	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 03:16	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 03:16	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 03:16	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 03:16	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 03:16	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 03:16	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 03:16	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 03:16	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 03:16	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 03:16	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 03:16	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 03:16	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 03:16	WG1362918
Toluene	5.45		0.412	0.500	1	10/15/2019 03:16	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 03:16	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 03:16	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 03:16	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 03:16	WG1362918
Trichloroethene	0.642		0.153	0.500	1	10/15/2019 03:16	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 03:16	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 03:16	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 03:16	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 03:16	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 03:16	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 03:16	WG1362918
Vinyl chloride	61.9		0.118	0.500	1	10/15/2019 03:16	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 03:16	WG1362918
(S) Toluene-d8	101			80.0-120		10/15/2019 03:16	WG1362918
(S) Toluene-d8	94.7			80.0-120		10/15/2019 16:28	WG1363245
(S) 4-Bromofluorobenzene	104			77.0-126		10/15/2019 03:16	WG1362918
(S) 4-Bromofluorobenzene	91.6			77.0-126		10/15/2019 16:28	WG1363245

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	105			70.0-130		10/15/2019 03:16	WG1362918
(S) 1,2-Dichloroethane-d4	84.0			70.0-130		10/15/2019 16:28	WG1363245

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	683000		2710	20000	1	10/13/2019 15:16	WG1362246

Sample Narrative:

L1146788-03 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	17700		51.9	1000	1	10/05/2019 18:45	WG1357983
Nitrate	U	T8	22.7	100	1	10/05/2019 18:45	WG1357983
Sulfate	787	J	77.4	5000	1	10/05/2019 18:45	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8750		102	1000	1	10/11/2019 14:02	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	20300		150	1000	10	10/09/2019 11:06	WG1358528
Manganese	755		2.50	50.0	10	10/09/2019 11:06	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	23700		2.87	6.78	10	10/11/2019 09:50	WG1361193
Ethane	U		0.296	1.29	1	10/10/2019 14:33	WG1360431
Ethene	36.8		0.422	1.27	1	10/10/2019 14:33	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.16	J JO	1.05	25.0	1	10/15/2019 03:36	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 03:36	WG1362918
Benzene	17.0		0.0896	0.500	1	10/15/2019 03:36	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 03:36	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 03:36	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 03:36	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 03:36	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 03:36	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 03:36	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 03:36	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 03:36	WG1362918
Carbon disulfide	U		0.101	0.500	1	10/15/2019 03:36	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 03:36	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 03:36	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 03:36	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 03:36	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 03:36	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 03:36	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 03:36	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 03:36	WG1362918

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/02/19 14:15

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 03:36	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 03:36	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 03:36	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 03:36	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 03:36	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 03:36	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 03:36	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 03:36	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 03:36	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 03:36	WG1362918
cis-1,2-Dichloroethene	1.26		0.0933	0.500	1	10/15/2019 16:48	WG1363245
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 03:36	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 03:36	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 03:36	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 03:36	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 03:36	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 03:36	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 03:36	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 03:36	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 03:36	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 03:36	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 03:36	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 03:36	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 03:36	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 03:36	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 03:36	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 03:36	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 03:36	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 03:36	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 03:36	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 03:36	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 03:36	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 03:36	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 03:36	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 03:36	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 03:36	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 03:36	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 03:36	WG1362918
Toluene	0.535		0.412	0.500	1	10/15/2019 03:36	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 03:36	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 03:36	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 03:36	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 03:36	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 03:36	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 03:36	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 03:36	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 03:36	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 03:36	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 03:36	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 03:36	WG1362918
Vinyl chloride	23.3		0.118	0.500	1	10/15/2019 03:36	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 03:36	WG1362918
(S) Toluene-d8	103			80.0-120		10/15/2019 03:36	WG1362918
(S) Toluene-d8	92.1			80.0-120		10/15/2019 16:48	WG1363245
(S) 4-Bromofluorobenzene	106			77.0-126		10/15/2019 03:36	WG1362918
(S) 4-Bromofluorobenzene	92.3			77.0-126		10/15/2019 16:48	WG1363245

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	109			70.0-130		10/15/2019 03:36	WG1362918
(S) 1,2-Dichloroethane-d4	81.8			70.0-130		10/15/2019 16:48	WG1363245

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	272000		2710	20000	1	10/13/2019 15:24	WG1362246

Sample Narrative:

L1146788-04 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	18400		51.9	1000	1	10/05/2019 19:01	WG1357983
Nitrate	U	T8	22.7	100	1	10/05/2019 19:01	WG1357983
Sulfate	U		77.4	5000	1	10/05/2019 19:01	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4410	B	102	1000	1	10/11/2019 14:25	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	12400		150	1000	10	10/09/2019 11:09	WG1358528
Manganese	822		2.50	50.0	10	10/09/2019 11:09	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	18500		2.87	6.78	10	10/11/2019 09:56	WG1361193
Ethane	U		0.296	1.29	1	10/10/2019 14:37	WG1360431
Ethene	U		0.422	1.27	1	10/10/2019 14:37	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	2.99	J JO	1.05	25.0	1	10/15/2019 03:57	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 03:57	WG1362918
Benzene	U		0.0896	0.500	1	10/15/2019 03:57	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 03:57	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 03:57	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 03:57	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 03:57	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 03:57	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 03:57	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 03:57	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 03:57	WG1362918
Carbon disulfide	U		0.101	0.500	1	10/15/2019 03:57	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 03:57	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 03:57	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 03:57	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 03:57	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 03:57	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 03:57	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 03:57	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 03:57	WG1362918

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/02/19 16:10

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 03:57	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 03:57	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 03:57	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 03:57	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 03:57	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 03:57	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 03:57	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 03:57	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 03:57	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 03:57	WG1362918
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/15/2019 17:07	WG1363245
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 03:57	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 03:57	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 03:57	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 03:57	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 03:57	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 03:57	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 03:57	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 03:57	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 03:57	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 03:57	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 03:57	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 03:57	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 03:57	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 03:57	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 03:57	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 03:57	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 03:57	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 03:57	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 03:57	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 03:57	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 03:57	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 03:57	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 03:57	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 03:57	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 03:57	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 03:57	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 03:57	WG1362918
Toluene	U		0.412	0.500	1	10/15/2019 03:57	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 03:57	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 03:57	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 03:57	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 03:57	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 03:57	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 03:57	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 03:57	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 03:57	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 03:57	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 03:57	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 03:57	WG1362918
Vinyl chloride	U		0.118	0.500	1	10/15/2019 03:57	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 03:57	WG1362918
(S) Toluene-d8	100			80.0-120		10/15/2019 03:57	WG1362918
(S) Toluene-d8	95.3			80.0-120		10/15/2019 17:07	WG1363245
(S) 4-Bromofluorobenzene	103			77.0-126		10/15/2019 03:57	WG1362918
(S) 4-Bromofluorobenzene	95.1			77.0-126		10/15/2019 17:07	WG1363245

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	108			70.0-130		10/15/2019 03:57	WG1362918
(S) 1,2-Dichloroethane-d4	85.4			70.0-130		10/15/2019 17:07	WG1363245

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Nitrate	U	<u>T8</u>	22.7	100	1	10/05/2019 19:18	WG1357983

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	325000		2710	20000	1	10/13/2019 15:30	WG1362246

Sample Narrative:

L1146788-06 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	11700		51.9	1000	1	10/05/2019 19:34	WG1357983
Nitrate	U	T8	22.7	100	1	10/05/2019 19:34	WG1357983
Sulfate	35000		77.4	5000	1	10/05/2019 19:34	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3020	B	102	1000	1	10/11/2019 15:14	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	850		15.0	100	1	10/09/2019 00:25	WG1358528
Manganese	306		1.25	25.0	5	10/09/2019 11:13	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	124		0.287	0.678	1	10/10/2019 14:40	WG1360431
Ethane	U		0.296	1.29	1	10/10/2019 14:40	WG1360431
Ethene	U		0.422	1.27	1	10/10/2019 14:40	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.36	J JO	1.05	25.0	1	10/15/2019 04:18	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 04:18	WG1362918
Benzene	U		0.0896	0.500	1	10/15/2019 04:18	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 04:18	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 04:18	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 04:18	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 04:18	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 04:18	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 04:18	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 04:18	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 04:18	WG1362918
Carbon disulfide	U		0.101	0.500	1	10/15/2019 04:18	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 04:18	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 04:18	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 04:18	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 04:18	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 04:18	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 04:18	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 04:18	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 04:18	WG1362918

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/03/19 09:20

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 04:18	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 04:18	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 04:18	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 04:18	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 04:18	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 04:18	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 04:18	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 04:18	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 04:18	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 04:18	WG1362918
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/15/2019 17:27	WG1363245
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 04:18	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 04:18	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 04:18	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 04:18	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 04:18	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 04:18	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 04:18	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 04:18	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 04:18	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 04:18	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 04:18	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 04:18	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 04:18	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 04:18	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 04:18	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 04:18	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 04:18	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 04:18	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 04:18	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 04:18	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 04:18	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 04:18	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 04:18	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 04:18	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 04:18	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 04:18	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 04:18	WG1362918
Toluene	U		0.412	0.500	1	10/15/2019 04:18	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 04:18	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 04:18	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 04:18	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 04:18	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 04:18	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 04:18	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 04:18	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 04:18	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 04:18	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 04:18	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 04:18	WG1362918
Vinyl chloride	U		0.118	0.500	1	10/15/2019 04:18	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 04:18	WG1362918
(S) Toluene-d8	101			80.0-120		10/15/2019 04:18	WG1362918
(S) Toluene-d8	95.9			80.0-120		10/15/2019 17:27	WG1363245
(S) 4-Bromofluorobenzene	103			77.0-126		10/15/2019 04:18	WG1362918
(S) 4-Bromofluorobenzene	94.3			77.0-126		10/15/2019 17:27	WG1363245

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	109			70.0-130		10/15/2019 04:18	WG1362918
(S) 1,2-Dichloroethane-d4	83.9			70.0-130		10/15/2019 17:27	WG1363245

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	589000		2710	20000	1	10/13/2019 15:38	WG1362246

Sample Narrative:

L1146788-07 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	56100		51.9	1000	1	10/05/2019 19:51	WG1357983
Nitrate	U	T8	22.7	100	1	10/05/2019 19:51	WG1357983
Sulfate	11400		77.4	5000	1	10/05/2019 19:51	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5050	B	102	1000	1	10/11/2019 15:37	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	8060		300	2000	20	10/09/2019 11:17	WG1358528
Manganese	2260		5.00	100	20	10/09/2019 11:17	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	716		0.287	0.678	1	10/10/2019 14:44	WG1360431
Ethane	23.4		0.296	1.29	1	10/10/2019 14:44	WG1360431
Ethene	U		0.422	1.27	1	10/10/2019 14:44	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.08	J JO	1.05	25.0	1	10/15/2019 04:39	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 04:39	WG1362918
Benzene	0.215	J	0.0896	0.500	1	10/15/2019 04:39	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 04:39	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 04:39	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 04:39	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 04:39	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 04:39	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 04:39	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 04:39	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 04:39	WG1362918
Carbon disulfide	U		0.101	0.500	1	10/15/2019 04:39	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 04:39	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 04:39	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 04:39	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 04:39	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 04:39	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 04:39	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 04:39	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 04:39	WG1362918

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/03/19 10:10

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 04:39	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 04:39	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 04:39	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 04:39	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 04:39	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 04:39	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 04:39	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 04:39	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 04:39	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 04:39	WG1362918
cis-1,2-Dichloroethene	9.26		0.0933	0.500	1	10/15/2019 04:39	WG1362918
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 04:39	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 04:39	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 04:39	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 04:39	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 04:39	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 04:39	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 04:39	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 04:39	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 04:39	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 04:39	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 04:39	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 04:39	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 04:39	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 04:39	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 04:39	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 04:39	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 04:39	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 04:39	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 04:39	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 04:39	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 04:39	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 04:39	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 04:39	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 04:39	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 04:39	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 04:39	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 04:39	WG1362918
Toluene	U		0.412	0.500	1	10/15/2019 04:39	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 04:39	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 04:39	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 04:39	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 04:39	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 04:39	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 04:39	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 04:39	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 04:39	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 04:39	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 04:39	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 04:39	WG1362918
Vinyl chloride	29.2		0.118	0.500	1	10/15/2019 04:39	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 04:39	WG1362918
(S) Toluene-d8	102			80.0-120		10/15/2019 04:39	WG1362918
(S) 4-Bromofluorobenzene	104			77.0-126		10/15/2019 04:39	WG1362918
(S) 1,2-Dichloroethane-d4	109			70.0-130		10/15/2019 04:39	WG1362918

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	235000		2710	20000	1	10/13/2019 15:53	WG1362246

Sample Narrative:

L1146788-08 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	21500		51.9	1000	1	10/05/2019 20:07	WG1357983
Nitrate	788	<u>T8</u>	22.7	100	1	10/05/2019 20:07	WG1357983
Sulfate	112000		387	25000	5	10/07/2019 10:06	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	3280	<u>B</u>	102	1000	1	10/11/2019 17:36	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	701		15.0	100	1	10/09/2019 00:43	WG1358528
Manganese	865		1.25	25.0	5	10/09/2019 11:20	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	31.7		0.287	0.678	1	10/10/2019 14:46	WG1360431
Ethane	U		0.296	1.29	1	10/10/2019 14:46	WG1360431
Ethene	U		0.422	1.27	1	10/10/2019 14:46	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.57	<u>J JO</u>	1.05	25.0	1	10/15/2019 04:59	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 04:59	WG1362918
Benzene	U		0.0896	0.500	1	10/15/2019 04:59	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 04:59	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 04:59	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 04:59	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 04:59	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 04:59	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 04:59	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 04:59	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 04:59	WG1362918
Carbon disulfide	U		0.101	0.500	1	10/15/2019 04:59	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 04:59	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 04:59	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 04:59	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 04:59	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 04:59	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 04:59	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 04:59	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 04:59	WG1362918

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/03/19 11:15

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 04:59	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 04:59	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 04:59	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 04:59	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 04:59	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 04:59	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 04:59	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 04:59	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 04:59	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 04:59	WG1362918
cis-1,2-Dichloroethene	0.607		0.0933	0.500	1	10/15/2019 04:59	WG1362918
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 04:59	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 04:59	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 04:59	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 04:59	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 04:59	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 04:59	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 04:59	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 04:59	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 04:59	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 04:59	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 04:59	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 04:59	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 04:59	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 04:59	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 04:59	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 04:59	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 04:59	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 04:59	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 04:59	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 04:59	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 04:59	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 04:59	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 04:59	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 04:59	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 04:59	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 04:59	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 04:59	WG1362918
Toluene	U		0.412	0.500	1	10/15/2019 04:59	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 04:59	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 04:59	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 04:59	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 04:59	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 04:59	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 04:59	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 04:59	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 04:59	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 04:59	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 04:59	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 04:59	WG1362918
Vinyl chloride	U		0.118	0.500	1	10/15/2019 04:59	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 04:59	WG1362918
(S) Toluene-d8	102			80.0-120		10/15/2019 04:59	WG1362918
(S) 4-Bromofluorobenzene	103			77.0-126		10/15/2019 04:59	WG1362918
(S) 1,2-Dichloroethane-d4	110			70.0-130		10/15/2019 04:59	WG1362918

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/03/19 12:30

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	209000		2710	20000	1	10/13/2019 16:00	WG1362246

Sample Narrative:

L1146788-09 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	17100		51.9	1000	1	10/05/2019 20:56	WG1357983
Nitrate	U	T8	22.7	100	1	10/05/2019 20:56	WG1357983
Sulfate	89700		77.4	5000	1	10/05/2019 20:56	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	12900		102	1000	1	10/11/2019 17:55	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2630		75.0	500	5	10/09/2019 11:24	WG1358528
Manganese	347		1.25	25.0	5	10/09/2019 11:24	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	99.4		0.287	0.678	1	10/10/2019 14:49	WG1360431
Ethane	25.0		0.296	1.29	1	10/10/2019 14:49	WG1360431
Ethene	8.23		0.422	1.27	1	10/10/2019 14:49	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	4.34	J JO	1.05	25.0	1	10/15/2019 05:20	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 05:20	WG1362918
Benzene	U		0.0896	0.500	1	10/15/2019 05:20	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 05:20	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 05:20	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 05:20	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 05:20	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 05:20	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 05:20	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 05:20	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 05:20	WG1362918
Carbon disulfide	4.09		0.101	0.500	1	10/15/2019 05:20	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 05:20	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 05:20	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 05:20	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 05:20	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 05:20	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 05:20	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 05:20	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 05:20	WG1362918

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/03/19 12:30

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 05:20	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 05:20	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 05:20	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 05:20	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 05:20	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 05:20	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 05:20	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 05:20	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 05:20	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 05:20	WG1362918
cis-1,2-Dichloroethene	6.87		0.0933	0.500	1	10/15/2019 05:20	WG1362918
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 05:20	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 05:20	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 05:20	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 05:20	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 05:20	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 05:20	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 05:20	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 05:20	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 05:20	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 05:20	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 05:20	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 05:20	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 05:20	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 05:20	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 05:20	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 05:20	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 05:20	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 05:20	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 05:20	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 05:20	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 05:20	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 05:20	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 05:20	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 05:20	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 05:20	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 05:20	WG1362918
Tetrachloroethene	0.769		0.199	0.500	1	10/15/2019 05:20	WG1362918
Toluene	1.31		0.412	0.500	1	10/15/2019 05:20	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 05:20	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 05:20	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 05:20	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 05:20	WG1362918
Trichloroethene	0.297	U	0.153	0.500	1	10/15/2019 05:20	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 05:20	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 05:20	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 05:20	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 05:20	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 05:20	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 05:20	WG1362918
Vinyl chloride	U		0.118	0.500	1	10/15/2019 05:20	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 05:20	WG1362918
(S) Toluene-d8	103			80.0-120		10/15/2019 05:20	WG1362918
(S) 4-Bromofluorobenzene	103			77.0-126		10/15/2019 05:20	WG1362918
(S) 1,2-Dichloroethane-d4	109			70.0-130		10/15/2019 05:20	WG1362918

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	581000		2710	20000	1	10/13/2019 16:07	WG1362246

Sample Narrative:

L1146788-10 WG1362246: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	56100		51.9	1000	1	10/05/2019 14:53	WG1357983
Nitrate	U	T8	22.7	100	1	10/05/2019 14:53	WG1357983
Sulfate	11400		77.4	5000	1	10/05/2019 14:53	WG1357983

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4820	B	102	1000	1	10/11/2019 18:16	WG1361291

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	7710		300	2000	20	10/09/2019 11:28	WG1358528
Manganese	2210		5.00	100	20	10/09/2019 11:28	WG1358528

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	591		0.287	0.678	1	10/10/2019 14:51	WG1360431
Ethane	19.9		0.296	1.29	1	10/10/2019 14:51	WG1360431
Ethene	U		0.422	1.27	1	10/10/2019 14:51	WG1360431

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.15	J JO	1.05	25.0	1	10/15/2019 05:41	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 05:41	WG1362918
Benzene	0.206	J	0.0896	0.500	1	10/15/2019 05:41	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 05:41	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 05:41	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 05:41	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 05:41	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 05:41	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 05:41	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 05:41	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 05:41	WG1362918
Carbon disulfide	U		0.101	0.500	1	10/15/2019 05:41	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 05:41	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 05:41	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 05:41	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 05:41	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 05:41	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 05:41	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 05:41	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 05:41	WG1362918

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/03/19 14:35

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 05:41	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 05:41	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 05:41	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 05:41	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 05:41	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 05:41	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 05:41	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 05:41	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 05:41	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 05:41	WG1362918
cis-1,2-Dichloroethene	9.25		0.0933	0.500	1	10/15/2019 05:41	WG1362918
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 05:41	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 05:41	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 05:41	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 05:41	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 05:41	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 05:41	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 05:41	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 05:41	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 05:41	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 05:41	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 05:41	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 05:41	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 05:41	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 05:41	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 05:41	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 05:41	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 05:41	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 05:41	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 05:41	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 05:41	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 05:41	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 05:41	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 05:41	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 05:41	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 05:41	WG1362918
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 05:41	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 05:41	WG1362918
Toluene	0.435	U	0.412	0.500	1	10/15/2019 05:41	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 05:41	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 05:41	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 05:41	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 05:41	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 05:41	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 05:41	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 05:41	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 05:41	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 05:41	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 05:41	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 05:41	WG1362918
Vinyl chloride	28.8		0.118	0.500	1	10/15/2019 05:41	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 05:41	WG1362918
(S) Toluene-d8	102			80.0-120		10/15/2019 05:41	WG1362918
(S) 4-Bromofluorobenzene	104			77.0-126		10/15/2019 05:41	WG1362918
(S) 1,2-Dichloroethane-d4	108			70.0-130		10/15/2019 05:41	WG1362918

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/03/19 00:00

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.20	J JO	1.05	25.0	1	10/15/2019 01:32	WG1362918
Acrylonitrile	U		0.873	5.00	1	10/15/2019 01:32	WG1362918
Benzene	U		0.0896	0.500	1	10/15/2019 01:32	WG1362918
Bromobenzene	U		0.133	0.500	1	10/15/2019 01:32	WG1362918
Bromodichloromethane	U		0.0800	0.500	1	10/15/2019 01:32	WG1362918
Bromochloromethane	U		0.145	0.500	1	10/15/2019 01:32	WG1362918
Bromoform	U		0.186	0.500	1	10/15/2019 01:32	WG1362918
Bromomethane	U		0.157	2.50	1	10/15/2019 01:32	WG1362918
n-Butylbenzene	U		0.143	0.500	1	10/15/2019 01:32	WG1362918
sec-Butylbenzene	U		0.134	0.500	1	10/15/2019 01:32	WG1362918
tert-Butylbenzene	U		0.183	0.500	1	10/15/2019 01:32	WG1362918
Carbon disulfide	U		0.101	0.500	1	10/15/2019 01:32	WG1362918
Carbon tetrachloride	U		0.159	0.500	1	10/15/2019 01:32	WG1362918
Chlorobenzene	U		0.140	0.500	1	10/15/2019 01:32	WG1362918
Chlorodibromomethane	U		0.128	0.500	1	10/15/2019 01:32	WG1362918
Chloroethane	U		0.141	2.50	1	10/15/2019 01:32	WG1362918
Chloroform	U		0.0860	0.500	1	10/15/2019 01:32	WG1362918
Chloromethane	U		0.153	1.25	1	10/15/2019 01:32	WG1362918
2-Chlorotoluene	U		0.111	0.500	1	10/15/2019 01:32	WG1362918
4-Chlorotoluene	U		0.0972	0.500	1	10/15/2019 01:32	WG1362918
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/15/2019 01:32	WG1362918
1,2-Dibromoethane	U		0.193	0.500	1	10/15/2019 01:32	WG1362918
Dibromomethane	U		0.117	0.500	1	10/15/2019 01:32	WG1362918
1,2-Dichlorobenzene	U		0.101	0.500	1	10/15/2019 01:32	WG1362918
1,3-Dichlorobenzene	U		0.130	0.500	1	10/15/2019 01:32	WG1362918
1,4-Dichlorobenzene	U		0.121	0.500	1	10/15/2019 01:32	WG1362918
Dichlorodifluoromethane	U		0.127	2.50	1	10/15/2019 01:32	WG1362918
1,1-Dichloroethane	U		0.114	0.500	1	10/15/2019 01:32	WG1362918
1,2-Dichloroethane	U		0.108	0.500	1	10/15/2019 01:32	WG1362918
1,1-Dichloroethene	U		0.188	0.500	1	10/15/2019 01:32	WG1362918
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/15/2019 01:32	WG1362918
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/15/2019 01:32	WG1362918
1,2-Dichloropropane	U		0.190	0.500	1	10/15/2019 01:32	WG1362918
1,1-Dichloropropene	U		0.128	0.500	1	10/15/2019 01:32	WG1362918
1,3-Dichloropropane	U		0.147	1.00	1	10/15/2019 01:32	WG1362918
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/15/2019 01:32	WG1362918
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/15/2019 01:32	WG1362918
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/15/2019 01:32	WG1362918
2,2-Dichloropropane	U		0.0929	0.500	1	10/15/2019 01:32	WG1362918
Di-isopropyl ether	U		0.0924	0.500	1	10/15/2019 01:32	WG1362918
Ethylbenzene	U		0.158	0.500	1	10/15/2019 01:32	WG1362918
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/15/2019 01:32	WG1362918
2-Hexanone	U		0.757	5.00	1	10/15/2019 01:32	WG1362918
n-Hexane	U		0.305	5.00	1	10/15/2019 01:32	WG1362918
Iodomethane	U		0.377	10.0	1	10/15/2019 01:32	WG1362918
Isopropylbenzene	U		0.126	0.500	1	10/15/2019 01:32	WG1362918
p-Isopropyltoluene	U		0.138	0.500	1	10/15/2019 01:32	WG1362918
2-Butanone (MEK)	U		1.28	5.00	1	10/15/2019 01:32	WG1362918
Methylene Chloride	U		1.07	2.50	1	10/15/2019 01:32	WG1362918
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/15/2019 01:32	WG1362918
Methyl tert-butyl ether	U		0.102	0.500	1	10/15/2019 01:32	WG1362918
Naphthalene	U		0.174	2.50	1	10/15/2019 01:32	WG1362918
n-Propylbenzene	U		0.162	0.500	1	10/15/2019 01:32	WG1362918
Styrene	U		0.117	0.500	1	10/15/2019 01:32	WG1362918
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/15/2019 01:32	WG1362918
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/15/2019 01:32	WG1362918

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/03/19 00:00

L1146788

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/15/2019 01:32	WG1362918
Tetrachloroethene	U		0.199	0.500	1	10/15/2019 01:32	WG1362918
Toluene	U		0.412	0.500	1	10/15/2019 01:32	WG1362918
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/15/2019 01:32	WG1362918
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/15/2019 01:32	WG1362918
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/15/2019 01:32	WG1362918
1,1,2-Trichloroethane	U		0.186	0.500	1	10/15/2019 01:32	WG1362918
Trichloroethene	U		0.153	0.500	1	10/15/2019 01:32	WG1362918
Trichlorofluoromethane	U		0.130	2.50	1	10/15/2019 01:32	WG1362918
1,2,3-Trichloropropane	U		0.247	2.50	1	10/15/2019 01:32	WG1362918
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/15/2019 01:32	WG1362918
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/15/2019 01:32	WG1362918
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/15/2019 01:32	WG1362918
Vinyl acetate	U		0.645	5.00	1	10/15/2019 01:32	WG1362918
Vinyl chloride	U		0.118	0.500	1	10/15/2019 01:32	WG1362918
Xylenes, Total	U		0.316	1.50	1	10/15/2019 01:32	WG1362918
(S) Toluene-d8	103			80.0-120		10/15/2019 01:32	WG1362918
(S) 4-Bromofluorobenzene	102			77.0-126		10/15/2019 01:32	WG1362918
(S) 1,2-Dichloroethane-d4	102			70.0-130		10/15/2019 01:32	WG1362918

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3460555-1 10/13/19 14:18

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	3920	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1148858-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1148858-01 10/13/19 14:37 • (DUP) R3460555-2 10/13/19 14:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	107000	102000	1	5.08		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE
DUP: Endpoint pH 4.5

L1146788-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1146788-10 10/13/19 16:07 • (DUP) R3460555-4 10/13/19 16:14

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	581000	583000	1	0.486		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3460555-3 10/13/19 15:45

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	114000	114	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc



Method Blank (MB)

(MB) R3458346-1 10/05/19 10:33

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	52.6	J	51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1146788-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1146788-01 10/05/19 16:50 • (DUP) R3458346-3 10/05/19 17:39

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	16900	16700	1	1.16			15
Nitrate	U	0.000	1	0.000			15
Sulfate	41800	41700	1	0.239			15

L1146810-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1146810-06 10/06/19 00:46 • (DUP) R3458346-6 10/06/19 01:03

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Chloride	3060	2940	1	4.00			15
Nitrate	42.4	53.0	1	22.2	JP1		15
Sulfate	36500	36400	1	0.159			15

Laboratory Control Sample (LCS)

(LCS) R3458346-2 10/05/19 10:49

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	39300	98.1	80.0-120	
Nitrate	8000	8010	100	80.0-120	
Sulfate	40000	40300	101	80.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1146788-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	16900	66400	66500	99.1	99.2	1	80.0-120	1	1	0.0724	15
Nitrate	5000	U	5080	5060	102	101	1	80.0-120	1	1	0.418	15
Sulfate	50000	41800	90100	89900	96.5	96.2	1	80.0-120	1	1	0.193	15

L1146810-06 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	3060	53200	100	1	80.0-120	1
Nitrate	5000	42.4	5140	102	1	80.0-120	1
Sulfate	50000	36500	84600	96.3	1	80.0-120	1

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3460404-1	10/11/19 11:54	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
TOC (Total Organic Carbon)	726	<u>1</u>		102	1000

L1146788-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1146788-04	10/11/19 14:25 • (DUP) R3460404-3	10/11/19 14:49			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%		%
TOC (Total Organic Carbon)	4410	4470	1	1.31	20

L1146896-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1146896-01	10/11/19 20:21 • (DUP) R3460404-6	10/11/19 20:46			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%		%
TOC (Total Organic Carbon)	62700	62900	2	0.318	20

Laboratory Control Sample (LCS)

(LCS) R3460404-2	10/11/19 12:41			
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%
TOC (Total Organic Carbon)	75000	76900	103	85.0-115

L1146788-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1146788-10	10/11/19 18:16 • (MS) R3460404-4	10/11/19 18:40 • (MSD) R3460404-5	10/11/19 19:08								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%		%			%	%
TOC (Total Organic Carbon)	50000	4820	54600	55200	99.6	101	80.0-120	<u>1</u>	<u>1</u>	109	20

L1146896-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1146896-07	10/12/19 10:13 • (MS) R3460404-7	10/12/19 10:41 • (MSD) R3460404-8	10/12/19 11:03								
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	%	%		%			%	%
TOC (Total Organic Carbon)	50000	134000	228000	227000	94.2	92.3	20	<u>80.0-120</u>	<u>80.0-120</u>	0.835	20



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3459091-1 10/08/19 22:49				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	1.51	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3459091-2 10/08/19 22:53 • (LCSD) R3459091-3 10/08/19 22:58									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	5030	5020	101	100	80.0-120			0.0752	20
Manganese	50.0	51.2	50.2	102	100	80.0-120			2.04	20

L1146802-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1146802-01 10/08/19 23:02 • (MS) R3459091-5 10/08/19 23:12 • (MSD) R3459091-6 10/08/19 23:16											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	758	6010	5870	105	102	1	75.0-125			2.38	20
Manganese	50.0	469	516	506	94.5	75.1	1	75.0-125			1.90	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Volatile Organic Compounds (GC) by Method RSK175

[L1146788-01.02.03.04.06.07.08.09.10](#)

Method Blank (MB)

(MB) R3459838-1 10/10/19 14:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1146788-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1146788-01 10/10/19 14:27 • (DUP) R3459838-2 10/10/19 15:25

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	143	146	1	182		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1146817-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1146817-09 10/10/19 15:44 • (DUP) R3459838-3 10/10/19 16:10

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	2700	2760	1	2.09		20
Ethane	105	111	1	5.19		20
Ethene	74.8	76.4	1	2.00		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3459838-4 10/10/19 16:16 • (LCSD) R3459838-5 10/10/19 16:20

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	73.3	74.3	108	110	85.0-115			1.34	20
Ethane	129	131	129	102	100	85.0-115			1.59	20
Ethene	127	139	135	109	107	85.0-115			2.51	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1146788-03.04](#)

Method Blank (MB)

(MB) R3460084-1	10/11/19 09:46																		
Analyte	MB Result	MB Qualifier	MB MDL	MB RDL															
Methane	U	ug/l	ug/l	ug/l															
			0.287	0.678															

L1146788-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1146788-03	10/11/19 09:50 • (DUP) R3460084-2	10/11/19 10:53																	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits													
Methane	23700	ug/l	ug/l	10	%	3.69	%	20											

L1147284-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1147284-04	10/11/19 11:38 • (DUP) R3460084-3	10/11/19 11:40																	
Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits													
Methane	ND	ug/l	ug/l	1	%	0.000	%	20											

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3460084-4	10/11/19 11:43 • (LCS) R3460084-5	10/11/19 11:47																	
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits									
Methane	67.8	ug/l	ug/l	ug/l	%	107	%	106	%	85.0-115	%	1.58	%	20					

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3461125-3 10/15/19 00:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3461125-3 10/15/19 00:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	104			70.0-130

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3461125-1 10/14/19 22:32 • (LCSD) R3461125-2 10/14/19 22:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	125	159	154	127	123	19.0-160			3.19	27
Acrylonitrile	125	139	138	111	110	55.0-149			0.722	20
Benzene	25.0	24.1	24.1	96.4	96.4	70.0-123			0.000	20
Bromobenzene	25.0	23.9	23.9	95.6	95.6	73.0-121			0.000	20
Bromodichloromethane	25.0	27.3	27.2	109	109	75.0-120			0.367	20
Bromochloromethane	25.0	26.0	26.0	104	104	76.0-122			0.000	20
Bromoform	25.0	25.7	25.7	103	103	68.0-132			0.000	20
Bromomethane	25.0	25.0	24.3	100	97.2	10.0-160			2.84	25
n-Butylbenzene	25.0	25.7	26.8	103	107	73.0-125			4.19	20
sec-Butylbenzene	25.0	25.0	25.2	100	101	75.0-125			0.797	20
tert-Butylbenzene	25.0	25.6	25.5	102	102	76.0-124			0.391	20
Carbon disulfide	25.0	21.6	21.4	86.4	85.6	61.0-128			0.930	20
Carbon tetrachloride	25.0	28.4	28.7	114	115	68.0-126			1.05	20
Chlorobenzene	25.0	24.2	24.1	96.8	96.4	80.0-121			0.444	20
Chlorodibromomethane	25.0	22.8	22.5	91.2	90.0	77.0-125			1.32	20
Chloroethane	25.0	25.1	25.3	100	101	47.0-150			0.794	20
Chloroform	25.0	25.7	25.5	103	102	73.0-120			0.781	20
Chloromethane	25.0	29.0	28.0	116	112	41.0-142			3.51	20
2-Chlorotoluene	25.0	24.6	24.3	98.4	97.2	76.0-123			1.23	20
4-Chlorotoluene	25.0	24.9	24.7	99.6	98.8	75.0-122			0.806	20
1,2-Dibromo-3-Chloropropane	25.0	24.0	24.7	96.0	98.8	58.0-134			2.87	20
1,2-Dibromoethane	25.0	24.7	24.1	98.8	96.4	80.0-122			2.46	20
Dibromomethane	25.0	27.8	27.4	111	110	80.0-120			1.45	20
1,2-Dichlorobenzene	25.0	25.6	25.4	102	102	79.0-121			0.784	20
1,3-Dichlorobenzene	25.0	25.0	24.8	100	99.2	79.0-120			0.803	20
1,4-Dichlorobenzene	25.0	25.0	24.7	100	98.8	79.0-120			1.21	20
Dichlorodifluoromethane	25.0	30.2	28.3	121	113	51.0-149			6.50	20
1,1-Dichloroethane	25.0	26.3	26.3	105	105	70.0-126			0.000	20
1,2-Dichloroethane	25.0	26.1	25.9	104	104	70.0-128			0.769	20
1,1-Dichloroethene	25.0	25.1	25.1	100	100	71.0-124			0.000	20
cis-1,2-Dichloroethene	25.0	24.9	25.2	99.6	101	73.0-120			1.20	20
trans-1,2-Dichloroethene	25.0	23.4	23.4	93.6	93.6	73.0-120			0.000	20
1,2-Dichloropropane	25.0	26.5	26.7	106	107	77.0-125			0.752	20
1,1-Dichloropropene	25.0	26.4	26.1	106	104	74.0-126			1.14	20
1,3-Dichloropropene	25.0	23.6	23.4	94.4	93.6	80.0-120			0.851	20
cis-1,3-Dichloropropene	25.0	27.3	27.1	109	108	80.0-123			0.735	20
trans-1,3-Dichloropropene	25.0	25.3	25.3	101	101	78.0-124			0.000	20
trans-1,4-Dichloro-2-butene	25.0	25.3	24.9	101	99.6	33.0-144			1.59	20
2,2-Dichloropropane	25.0	25.4	24.8	102	99.2	58.0-130			2.39	20
Diisopropyl ether	25.0	27.7	27.5	111	110	58.0-138			0.725	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	23.8	23.6	95.2	94.4	79.0-123			0.844	20
Hexachloro-1,3-butadiene	25.0	24.2	27.4	96.8	110	54.0-138			12.4	20
2-Hexanone	125	133	130	106	104	67.0-149			2.28	20
n-Hexane	25.0	25.9	25.6	104	102	57.0-133			1.17	20
Iodomethane	125	125	124	100	99.2	33.0-147			0.803	26
Isopropylbenzene	25.0	25.2	24.7	101	98.8	76.0-127			2.00	20
p-Isopropyltoluene	25.0	26.0	26.3	104	105	76.0-125			1.15	20
2-Butanone (MEK)	125	153	151	122	121	44.0-160			1.32	20
Methylene Chloride	25.0	23.6	24.0	94.4	96.0	67.0-120			1.68	20
4-Methyl-2-pentanone (MIBK)	125	136	134	109	107	68.0-142			1.48	20
Methyl tert-butyl ether	25.0	26.0	25.6	104	102	68.0-125			1.55	20
Naphthalene	25.0	23.8	26.4	95.2	106	54.0-135			10.4	20
n-Propylbenzene	25.0	24.2	24.1	96.8	96.4	77.0-124			0.444	20
Styrene	25.0	26.2	25.7	105	103	73.0-130			1.93	20
1,1,1,2-Tetrachloroethane	25.0	25.3	25.1	101	100	75.0-125			0.794	20
1,1,2,2-Tetrachloroethane	25.0	23.4	23.1	93.6	92.4	65.0-130			1.29	20
1,1,2-Trichlorotrifluoroethane	25.0	25.2	24.7	101	98.8	69.0-132			2.00	20
Tetrachloroethene	25.0	24.7	24.5	98.8	98.0	72.0-132			0.813	20
Toluene	25.0	23.2	23.0	92.8	92.0	79.0-120			0.866	20
1,2,3-Trichlorobenzene	25.0	25.8	28.8	103	115	50.0-138			11.0	20
1,2,4-Trichlorobenzene	25.0	25.3	27.3	101	109	57.0-137			7.60	20
1,1,1-Trichloroethane	25.0	28.0	27.5	112	110	73.0-124			1.80	20
1,1,2-Trichloroethane	25.0	23.9	23.9	95.6	95.6	80.0-120			0.000	20
Trichloroethene	25.0	27.4	27.6	110	110	78.0-124			0.727	20
Trichlorofluoromethane	25.0	30.7	29.7	123	119	59.0-147			3.31	20
1,2,3-Trichloropropane	25.0	25.1	23.9	100	95.6	73.0-130			4.90	20
1,2,4-Trimethylbenzene	25.0	24.0	23.4	96.0	93.6	76.0-121			2.53	20
1,2,3-Trimethylbenzene	25.0	24.5	24.4	98.0	97.6	77.0-120			0.409	20
1,3,5-Trimethylbenzene	25.0	25.0	24.9	100	99.6	76.0-122			0.401	20
Vinyl acetate	125	124	118	99.2	94.4	11.0-160			4.96	20
Vinyl chloride	25.0	27.8	27.5	111	110	67.0-131			1.08	20
Xylenes, Total	75.0	72.2	71.3	96.3	95.1	79.0-123			1.25	20
(S) Toluene-d8				96.2	96.7	80.0-120				
(S) 4-Bromofluorobenzene				101	101	77.0-126				
(S) 1,2-Dichloroethane-d4				112	113	70.0-130				

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L1148487-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1148487-01 10/15/19 07:24 • (MS) R3461125-4 10/15/19 09:50 • (MSD) R3461125-5 10/15/19 10:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	7.11	156	159	119	122	1	10.0-160			1.90	35
Acrylonitrile	125	U	144	140	115	112	1	21.0-160			2.82	32
Benzene	25.0	U	24.7	22.9	98.8	916	1	17.0-158			7.56	27
Bromobenzene	25.0	U	23.1	22.5	92.4	90.0	1	30.0-149			2.63	28
Bromodichloromethane	25.0	U	28.2	26.5	113	106	1	31.0-150			6.22	27
Bromochloromethane	25.0	U	26.7	25.3	107	101	1	38.0-142			5.38	26
Bromoform	25.0	U	27.5	26.6	110	106	1	29.0-150			3.33	29
Bromomethane	25.0	U	25.0	22.4	100	89.6	1	10.0-160			11.0	38
n-Butylbenzene	25.0	U	26.3	26.3	105	105	1	31.0-150			0.000	30
sec-Butylbenzene	25.0	U	25.7	25.1	103	100	1	33.0-155			2.36	29
tert-Butylbenzene	25.0	U	26.1	25.2	104	101	1	34.0-153			3.51	28
Carbon disulfide	25.0	U	23.3	20.7	93.2	82.8	1	10.0-156			11.8	28
Carbon tetrachloride	25.0	U	31.0	28.0	124	112	1	23.0-159			10.2	28
Chlorobenzene	25.0	U	25.6	24.2	102	96.8	1	33.0-152			5.62	27
Chlorodibromomethane	25.0	U	24.3	23.3	97.2	93.2	1	37.0-149			4.20	27
Chloroethane	25.0	U	25.9	23.6	104	94.4	1	10.0-160			9.29	30
Chloroform	25.0	1.01	27.4	25.2	106	96.8	1	29.0-154			8.37	28
Chloromethane	25.0	U	27.1	24.2	108	96.8	1	10.0-160			11.3	29
2-Chlorotoluene	25.0	U	24.3	23.4	97.2	93.6	1	32.0-153			3.77	28
4-Chlorotoluene	25.0	U	24.3	23.5	97.2	94.0	1	32.0-150			3.35	28
1,2-Dibromo-3-Chloropropane	25.0	U	24.5	25.5	98.0	102	1	22.0-151			4.00	34
1,2-Dibromoethane	25.0	U	25.4	24.3	102	97.2	1	34.0-147			4.43	27
Dibromomethane	25.0	U	28.0	27.4	112	110	1	30.0-151			2.17	27
1,2-Dichlorobenzene	25.0	U	25.4	25.1	102	100	1	34.0-149			1.19	28
1,3-Dichlorobenzene	25.0	U	24.5	24.0	98.0	96.0	1	36.0-146			2.06	27
1,4-Dichlorobenzene	25.0	U	25.3	24.4	101	97.6	1	35.0-142			3.62	27
Dichlorodifluoromethane	25.0	U	32.0	26.6	128	106	1	10.0-160			18.4	29
1,1-Dichloroethane	25.0	U	27.6	25.3	110	101	1	25.0-158			8.70	27
1,2-Dichloroethane	25.0	U	27.0	25.4	108	102	1	29.0-151			6.11	27
1,1-Dichloroethene	25.0	U	27.0	24.0	108	96.0	1	11.0-160			11.8	29
cis-1,2-Dichloroethene	25.0	0.302	26.2	24.2	104	95.6	1	10.0-160			7.94	27
trans-1,2-Dichloroethene	25.0	U	24.6	22.2	98.4	88.8	1	17.0-153			10.3	27
1,2-Dichloropropane	25.0	0.512	27.4	25.7	108	101	1	30.0-156			6.40	27
1,1-Dichloropropene	25.0	U	28.3	25.6	113	102	1	25.0-158			10.0	27
1,3-Dichloropropene	25.0	U	24.2	24.2	96.8	96.8	1	38.0-147			0.000	27
cis-1,3-Dichloropropene	25.0	U	27.2	25.6	109	102	1	34.0-149			6.06	28
trans-1,3-Dichloropropene	25.0	U	26.7	25.5	107	102	1	32.0-149			4.60	28
trans-1,4-Dichloro-2-butene	25.0	U	23.6	23.9	94.4	95.6	1	10.0-157			1.26	37
2,2-Dichloropropane	25.0	U	26.0	23.0	104	92.0	1	24.0-152			12.2	29
Di-isopropyl ether	25.0	U	28.5	27.1	114	108	1	21.0-160			5.04	28

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L1148487-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1148487-01 10/15/19 07:24 • (MS) R3461125-4 10/15/19 09:50 • (MSD) R3461125-5 10/15/19 10:11

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution %	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	U	25.2	23.7	101	94.8	1	30.0-155			6.13	27
Hexachloro-1,3-butadiene	25.0	U	25.4	27.4	102	110	1	20.0-154			7.58	34
2-Hexanone	125	U	138	133	110	106	1	21.0-160			3.69	29
n-Hexane	25.0	U	27.8	25.9	111	104	1	10.0-153			7.08	28
Iodomethane	125	U	130	118	104	94.4	1	10.0-160			9.68	40
Isopropylbenzene	25.0	U	27.3	25.7	109	103	1	28.0-157			6.04	27
p-Isopropyltoluene	25.0	U	26.3	25.8	105	103	1	30.0-154			1.92	29
2-Butanone (MEK)	125	U	158	154	126	123	1	10.0-160			2.56	32
Methylene Chloride	25.0	U	24.3	22.5	97.2	90.0	1	23.0-144			7.69	28
4-Methyl-2-pentanone (MIBK)	125	U	141	138	113	110	1	29.0-160			2.15	29
Methyl tert-butyl ether	25.0	U	26.1	25.3	104	101	1	28.0-150			3.11	29
Naphthalene	25.0	U	24.5	26.7	98.0	107	1	12.0-156			8.59	35
n-Propylbenzene	25.0	U	24.2	23.1	96.8	92.4	1	31.0-154			4.65	28
Styrene	25.0	U	27.3	25.8	109	103	1	33.0-155			5.65	28
1,1,1,2-Tetrachloroethane	25.0	U	27.2	25.9	109	104	1	36.0-151			4.90	29
1,1,2,2-Tetrachloroethane	25.0	U	24.4	24.7	97.6	98.8	1	33.0-150			1.22	28
1,1,2-Trichlorotrifluoroethane	25.0	U	27.2	24.5	109	98.0	1	23.0-160			10.4	30
Tetrachloroethene	25.0	U	27.1	24.8	108	99.2	1	10.0-160			8.86	27
Toluene	25.0	U	24.7	22.9	98.8	91.6	1	26.0-154			7.56	28
1,2,3-Trichlorobenzene	25.0	U	26.4	28.6	106	114	1	17.0-150			8.00	36
1,2,4-Trichlorobenzene	25.0	U	25.5	26.6	102	106	1	24.0-150			4.22	33
1,1,1-Trichloroethane	25.0	0.232	30.3	27.2	120	108	1	23.0-160			10.8	28
1,1,2-Trichloroethane	25.0	U	25.2	24.1	101	96.4	1	35.0-147			4.46	27
Trichloroethene	25.0	2.14	29.6	27.2	110	100	1	10.0-160			8.45	25
Trichlorofluoromethane	25.0	U	33.7	30.2	135	121	1	17.0-160			11.0	31
1,2,3-Trichloropropane	25.0	U	24.0	23.5	96.0	94.0	1	34.0-151			2.11	29
1,2,4-Trimethylbenzene	25.0	U	23.8	23.1	95.2	92.4	1	26.0-154			2.99	27
1,2,3-Trimethylbenzene	25.0	U	24.7	23.9	98.8	95.6	1	32.0-149			3.29	28
1,3,5-Trimethylbenzene	25.0	U	24.7	24.1	98.8	96.4	1	28.0-153			2.46	27
Vinyl acetate	125	U	163	157	130	126	1	12.0-160			3.75	31
Vinyl chloride	25.0	0.139	28.8	25.4	115	101	1	10.0-160			12.5	27
Xylenes, Total	75.0	U	76.4	71.4	102	95.2	1	29.0-154			6.77	28
<i>(S) Toluene-d8</i>												
<i>(S) 4-Bromofluorobenzene</i>												
<i>(S) 1,2-Dichloroethane-d4</i>												
					100	99.9		80.0-120				
					105	105		77.0-126				
					118	114		70.0-130				

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Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(MB) R3461296-3 10/15/19 10:02				
cis-1,2-Dichloroethene	U		0.0933	0.500
(S) Toluene-d8	94.7			80.0-120
(S) 4-Bromofluorobenzene	93.1			77.0-126
(S) 1,2-Dichloroethane-d4	85.2			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3461296-1 10/15/19 09:03 • (LCSD) R3461296-2 10/15/19 09:23										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	25.0	25.8	26.4	103	106	73.0-120			2.30	20
(S) Toluene-d8				93.5	93.1	80.0-120				
(S) 4-Bromofluorobenzene				95.6	94.6	77.0-126				
(S) 1,2-Dichloroethane-d4				85.9	81.0	70.0-130				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
P1	RPD value not applicable for sample concentrations less than 5 times the reporting limit.
T8	Sample(s) received past/too close to holding time expiration.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

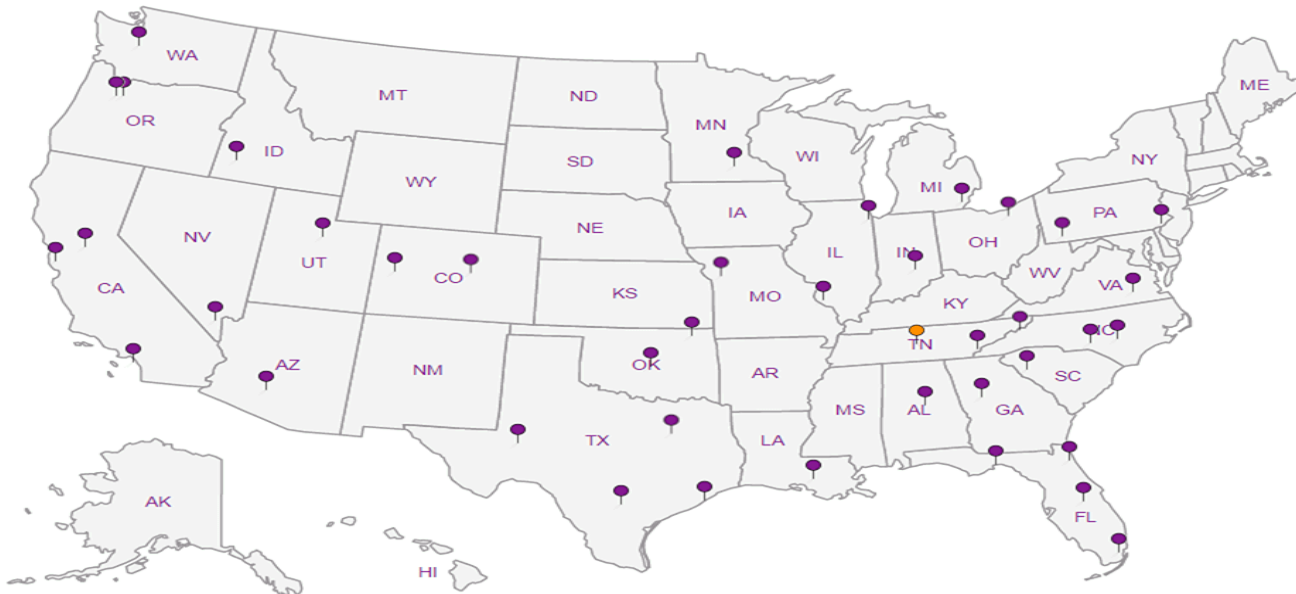
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES Environmental, Inc. - WA

1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Attn: Accounts Payable
1215 Fourth Ave., Ste. 1350
Seattle, WA 98161

Billing Information:

Report to:
Brian O'Neal/Bill Haldeman

Email To: boneal@pesenv.com;
bhaldean@pesenv.com;

KVK @ PES

Project Description: *American Linen*

City/State Collected: *Seattle, WA*

Please Circle: *ENV*

Phone: 206-529-3980
Fax: 206-529-3985

Client Project #: *1413.001.02.S01E*

Lab Project #: *PESENVSWA-ALP*

Collected by (print): *Sgt. Hecht*

Site/Facility ID #: *American Linen*

P.O. #

Collected by (signature): *[Signature]*

Rush? (Lab MUST be Notified)
Same Day _____ Five Day _____
Next Day _____ 5 Day (Rad Only) _____
Two Day _____ 10 Day (Rad Only) _____
Three Day _____

Quote #

Date Results Needed

No. of Cntrs

Immediately Packed on ice N ___ Y ___

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

Cntrs

Pres Chk

Analysis / Container / Preservative

Chain of Custody Page ___ of ___

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MW-316-100219	Grab	GW	64	10/2/19	0950	1
MW-324-100219		GW	71		1215	9
MW-328-100219		GW	70		1415	9
MW-327-100219		GW	35		1610	9
MW-316-100319	Grab	GW	64	10/3/19	0815	1
MW-315-100319		GW	42		0920	9
MW-915-100319		GW	105		1010	9
MW-325-100319		GW	39		1115	9
MW-326-100319		GW	94.5		1230	9
MW-329-100319		GW	105		1435	9

Remarks: *TRIP BLANK to be analyzed for VOC 8260*

pH _____ Temp _____
Flow _____ Other _____

* Matrix: SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned Via: UPS Fedex Courier

Tracking # *1445 2227 3465*

Trip Blank Received: Yes / No
(HCL/MeOH TBR)

Temp: *09+1=10.85* °C Bottles Received: *23*
Date: *10/5/19* Time: *8:45*

Relinquished by: (Signature) *[Signature]*

Date: *10-3-19* Time: *1610*

Received by: (Signature) *[Signature]*

Temp: _____ °C Bottles Received: _____
Date: _____ Time: _____

Hold: _____ Condition: *NCF / [Signature]*

Relinquished by: (Signature)

Date: _____ Time: _____

Received for lab by: (Signature) *[Signature]*

Date: *10/5/19* Time: *8:45*

Condition: *NCF / [Signature]*



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



Pace Analytical
National Center for Testing & Innovation



ANALYTICAL REPORT

October 24, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

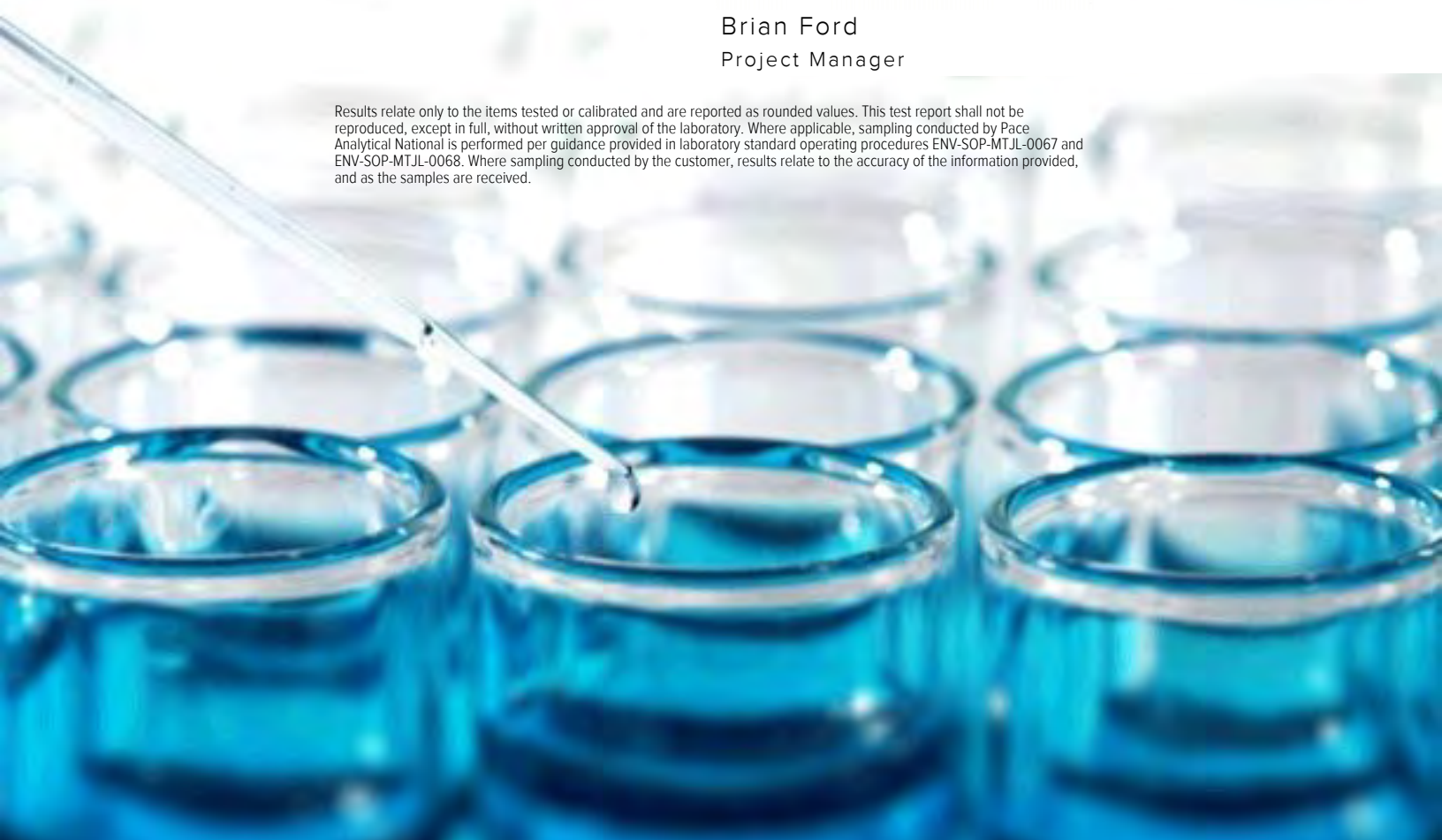
PES Environmental, Inc.- WA

Sample Delivery Group: L1148900
 Samples Received: 10/11/2019
 Project Number: 1413.001.02.501E
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-314-101019 L1148900-01 GW

Collected by Ben Hecht
Collected date/time 10/10/19 08:35
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1364209	1	10/18/19 00:08	10/18/19 00:08	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1361340	1	10/11/19 19:57	10/11/19 19:57	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1361340	10	10/12/19 10:42	10/12/19 10:42	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1362294	1	10/14/19 02:49	10/14/19 02:49	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	10	10/16/19 10:52	10/17/19 00:17	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1362474	1	10/14/19 16:16	10/14/19 16:16	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 18:28	10/19/19 18:28	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366289	10	10/21/19 14:12	10/21/19 14:12	ACG	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

SCL-MW105-101019 L1148900-02 GW

Collected by Ben Hecht
Collected date/time 10/10/19 09:50
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 18:48	10/19/19 18:48	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366289	10	10/21/19 14:32	10/21/19 14:32	ACG	Mt. Juliet, TN

MW-8-101019 L1148900-03 GW

Collected by Ben Hecht
Collected date/time 10/10/19 10:30
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366370	1	10/20/19 23:18	10/20/19 23:18	JHH	Mt. Juliet, TN

MW-311-101019 L1148900-04 GW

Collected by Ben Hecht
Collected date/time 10/10/19 11:20
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1364209	1	10/18/19 00:15	10/18/19 00:15	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1361340	1	10/11/19 20:14	10/11/19 20:14	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1362294	1	10/14/19 03:05	10/14/19 03:05	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	1	10/16/19 10:52	10/16/19 22:45	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	5	10/16/19 10:52	10/17/19 00:21	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1362474	1	10/14/19 16:19	10/14/19 16:19	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 19:29	10/19/19 19:29	JAH	Mt. Juliet, TN

SCS-2-101019 L1148900-05 GW

Collected by Ben Hecht
Collected date/time 10/10/19 11:35
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 19:49	10/19/19 19:49	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366289	10	10/21/19 14:53	10/21/19 14:53	ACG	Mt. Juliet, TN

MW-108-101019 L1148900-06 GW

Collected by Ben Hecht
Collected date/time 10/10/19 12:45
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1364209	1	10/18/19 00:22	10/18/19 00:22	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1361340	1	10/11/19 21:07	10/11/19 21:07	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1362294	1	10/14/19 04:05	10/14/19 04:05	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	10	10/16/19 10:52	10/17/19 00:24	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1362474	1	10/14/19 16:23	10/14/19 16:23	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 20:09	10/19/19 20:09	JAH	Mt. Juliet, TN



MW-108-101019 L1148900-06 GW

Collected by Ben Hecht
Collected date/time 10/10/19 12:45
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366289	25	10/21/19 15:13	10/21/19 15:13	ACG	Mt. Juliet, TN

1 Cp

2 Tc

MW-313-101019 L1148900-07 GW

Collected by Ben Hecht
Collected date/time 10/10/19 14:15
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1364209	1	10/18/19 00:28	10/18/19 00:28	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1361340	1	10/11/19 21:42	10/11/19 21:42	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1362294	1	10/14/19 04:27	10/14/19 04:27	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	1	10/16/19 10:52	10/16/19 23:05	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	10	10/16/19 10:52	10/17/19 00:48	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1362474	1	10/14/19 16:28	10/14/19 16:28	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 20:30	10/19/19 20:30	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366289	1	10/21/19 15:33	10/21/19 15:33	ACG	Mt. Juliet, TN

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

MW-310-101019 L1148900-08 GW

Collected by Ben Hecht
Collected date/time 10/10/19 13:45
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1364211	1	10/17/19 16:38	10/17/19 16:38	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1361340	1	10/11/19 22:00	10/11/19 22:00	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1362294	1	10/14/19 04:49	10/14/19 04:49	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	20	10/16/19 10:52	10/17/19 00:37	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1362474	1	10/14/19 16:32	10/14/19 16:32	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 20:50	10/19/19 20:50	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366289	1	10/21/19 16:18	10/21/19 16:18	BMB	Mt. Juliet, TN

9 Sc

MW-119-101019 L1148900-09 GW

Collected by Ben Hecht
Collected date/time 10/10/19 15:35
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1364211	1	10/17/19 16:44	10/17/19 16:44	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1361340	1	10/11/19 22:18	10/11/19 22:18	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1362294	1	10/14/19 05:09	10/14/19 05:09	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1363727	20	10/16/19 10:52	10/17/19 00:40	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1362474	1	10/14/19 16:35	10/14/19 16:35	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 21:10	10/19/19 21:10	JAH	Mt. Juliet, TN

TRIP-101019 L1148900-10 GW

Collected by Ben Hecht
Collected date/time 10/10/19 16:00
Received date/time 10/11/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1365855	1	10/19/19 16:05	10/19/19 16:05	JAH	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- ¹ Cp
- ² Tc
- ³ Ss
- ⁴ Cn
- ⁵ Sr
- ⁶ Qc
- ⁷ Gl
- ⁸ Al
- ⁹ Sc



Collected date/time: 10/10/19 08:35

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	253000		2710	20000	1	10/18/2019 00:08	WG1364209

Sample Narrative:

L1148900-01 WG1364209: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	24400		51.9	1000	1	10/11/2019 19:57	WG1361340
Nitrate	U		22.7	100	1	10/11/2019 19:57	WG1361340
Sulfate	264000		774	50000	10	10/12/2019 10:42	WG1361340

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2840	<u>B</u>	102	1000	1	10/14/2019 02:49	WG1362294

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2420		150	1000	10	10/17/2019 00:17	WG1363727
Manganese	1110		2.50	50.0	10	10/17/2019 00:17	WG1363727

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	377		0.287	0.678	1	10/14/2019 16:16	WG1362474
Ethane	18.6		0.296	1.29	1	10/14/2019 16:16	WG1362474
Ethene	U		0.422	1.27	1	10/14/2019 16:16	WG1362474

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	10/19/2019 18:28	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 18:28	WG1365855
Benzene	U		0.0896	0.500	1	10/19/2019 18:28	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 18:28	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 18:28	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 18:28	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 18:28	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 18:28	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 18:28	WG1365855
sec-Butylbenzene	U		0.134	0.500	1	10/19/2019 18:28	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 18:28	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 18:28	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 18:28	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 18:28	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 18:28	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 18:28	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 18:28	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 18:28	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 18:28	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 18:28	WG1365855

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/10/19 08:35

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 18:28	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 18:28	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 18:28	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 18:28	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 18:28	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 18:28	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 18:28	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 18:28	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 18:28	WG1365855
1,1-Dichloroethene	3.21		0.188	0.500	1	10/19/2019 18:28	WG1365855
cis-1,2-Dichloroethene	491		0.933	5.00	10	10/21/2019 14:12	WG1366289
trans-1,2-Dichloroethene	1.63		0.152	0.500	1	10/19/2019 18:28	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 18:28	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 18:28	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 18:28	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 18:28	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 18:28	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 18:28	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 18:28	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 18:28	WG1365855
Ethylbenzene	U		0.158	0.500	1	10/19/2019 18:28	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 18:28	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 18:28	WG1365855
n-Hexane	U		0.305	5.00	1	10/19/2019 18:28	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 18:28	WG1365855
Isopropylbenzene	U		0.126	0.500	1	10/19/2019 18:28	WG1365855
p-Isopropyltoluene	U		0.138	0.500	1	10/19/2019 18:28	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 18:28	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 18:28	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 18:28	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 18:28	WG1365855
Naphthalene	U		0.174	2.50	1	10/19/2019 18:28	WG1365855
n-Propylbenzene	U		0.162	0.500	1	10/19/2019 18:28	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 18:28	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 18:28	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 18:28	WG1365855
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 18:28	WG1365855
Tetrachloroethene	26.1		0.199	0.500	1	10/19/2019 18:28	WG1365855
Toluene	U		0.412	0.500	1	10/19/2019 18:28	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 18:28	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 18:28	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 18:28	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 18:28	WG1365855
Trichloroethene	106		0.153	0.500	1	10/19/2019 18:28	WG1365855
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 18:28	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 18:28	WG1365855
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/19/2019 18:28	WG1365855
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/19/2019 18:28	WG1365855
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/19/2019 18:28	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 18:28	WG1365855
Vinyl chloride	43.6		0.118	0.500	1	10/19/2019 18:28	WG1365855
Xylenes, Total	U		0.316	1.50	1	10/19/2019 18:28	WG1365855
(S) Toluene-d8	117			80.0-120		10/19/2019 18:28	WG1365855
(S) Toluene-d8	115			80.0-120		10/21/2019 14:12	WG1366289
(S) 4-Bromofluorobenzene	111			77.0-126		10/19/2019 18:28	WG1365855
(S) 4-Bromofluorobenzene	92.4			77.0-126		10/21/2019 14:12	WG1366289

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	99.2			70.0-130		10/19/2019 18:28	WG1365855
(S) 1,2-Dichloroethane-d4	95.6			70.0-130		10/21/2019 14:12	WG1366289

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	10/19/2019 18:48	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 18:48	WG1365855
Benzene	133		0.0896	0.500	1	10/19/2019 18:48	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 18:48	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 18:48	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 18:48	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 18:48	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 18:48	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 18:48	WG1365855
sec-Butylbenzene	8.08		0.134	0.500	1	10/19/2019 18:48	WG1365855
tert-Butylbenzene	0.260	J	0.183	0.500	1	10/19/2019 18:48	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 18:48	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 18:48	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 18:48	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 18:48	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 18:48	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 18:48	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 18:48	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 18:48	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 18:48	WG1365855
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 18:48	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 18:48	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 18:48	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 18:48	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 18:48	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 18:48	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 18:48	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 18:48	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 18:48	WG1365855
1,1-Dichloroethene	U		0.188	0.500	1	10/19/2019 18:48	WG1365855
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/19/2019 18:48	WG1365855
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/19/2019 18:48	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 18:48	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 18:48	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 18:48	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 18:48	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 18:48	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 18:48	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 18:48	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 18:48	WG1365855
Ethylbenzene	41.0		0.158	0.500	1	10/19/2019 18:48	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 18:48	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 18:48	WG1365855
n-Hexane	55.0		0.305	5.00	1	10/19/2019 18:48	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 18:48	WG1365855
Isopropylbenzene	149		0.126	0.500	1	10/19/2019 18:48	WG1365855
p-Isopropyltoluene	1.96		0.138	0.500	1	10/19/2019 18:48	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 18:48	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 18:48	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 18:48	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 18:48	WG1365855
Naphthalene	4.44		0.174	2.50	1	10/19/2019 18:48	WG1365855
n-Propylbenzene	359	JO	1.62	5.00	10	10/21/2019 14:32	WG1366289
Styrene	U		0.117	0.500	1	10/19/2019 18:48	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 18:48	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 18:48	WG1365855

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/10/19 09:50

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 18:48	WG1365855
Tetrachloroethene	U		0.199	0.500	1	10/19/2019 18:48	WG1365855
Toluene	15.5		0.412	0.500	1	10/19/2019 18:48	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 18:48	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 18:48	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 18:48	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 18:48	WG1365855
Trichloroethene	U		0.153	0.500	1	10/19/2019 18:48	WG1365855
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 18:48	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 18:48	WG1365855
1,2,4-Trimethylbenzene	0.510		0.123	0.500	1	10/19/2019 18:48	WG1365855
1,2,3-Trimethylbenzene	14.4		0.0739	0.500	1	10/19/2019 18:48	WG1365855
1,3,5-Trimethylbenzene	5.00		0.124	0.500	1	10/19/2019 18:48	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 18:48	WG1365855
Vinyl chloride	U		0.118	0.500	1	10/19/2019 18:48	WG1365855
Xylenes, Total	34.6		0.316	1.50	1	10/19/2019 18:48	WG1365855
(S) Toluene-d8	105			80.0-120		10/19/2019 18:48	WG1365855
(S) Toluene-d8	112			80.0-120		10/21/2019 14:32	WG1366289
(S) 4-Bromofluorobenzene	105			77.0-126		10/19/2019 18:48	WG1365855
(S) 4-Bromofluorobenzene	94.5			77.0-126		10/21/2019 14:32	WG1366289
(S) 1,2-Dichloroethane-d4	106			70.0-130		10/19/2019 18:48	WG1365855
(S) 1,2-Dichloroethane-d4	97.0			70.0-130		10/21/2019 14:32	WG1366289

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/10/19 10:30

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	<u>JO</u>	1.05	25.0	1	10/20/2019 23:18	WG1366370
Acrylonitrile	U		0.873	5.00	1	10/20/2019 23:18	WG1366370
Benzene	U		0.0896	0.500	1	10/20/2019 23:18	WG1366370
Bromobenzene	U		0.133	0.500	1	10/20/2019 23:18	WG1366370
Bromodichloromethane	U		0.0800	0.500	1	10/20/2019 23:18	WG1366370
Bromochloromethane	U		0.145	0.500	1	10/20/2019 23:18	WG1366370
Bromoform	U		0.186	0.500	1	10/20/2019 23:18	WG1366370
Bromomethane	U		0.157	2.50	1	10/20/2019 23:18	WG1366370
n-Butylbenzene	U		0.143	0.500	1	10/20/2019 23:18	WG1366370
sec-Butylbenzene	U		0.134	0.500	1	10/20/2019 23:18	WG1366370
tert-Butylbenzene	U		0.183	0.500	1	10/20/2019 23:18	WG1366370
Carbon disulfide	U		0.101	0.500	1	10/20/2019 23:18	WG1366370
Carbon tetrachloride	U		0.159	0.500	1	10/20/2019 23:18	WG1366370
Chlorobenzene	U		0.140	0.500	1	10/20/2019 23:18	WG1366370
Chlorodibromomethane	U		0.128	0.500	1	10/20/2019 23:18	WG1366370
Chloroethane	U		0.141	2.50	1	10/20/2019 23:18	WG1366370
Chloroform	U		0.0860	0.500	1	10/20/2019 23:18	WG1366370
Chloromethane	U		0.153	1.25	1	10/20/2019 23:18	WG1366370
2-Chlorotoluene	U		0.111	0.500	1	10/20/2019 23:18	WG1366370
4-Chlorotoluene	U		0.0972	0.500	1	10/20/2019 23:18	WG1366370
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/20/2019 23:18	WG1366370
1,2-Dibromoethane	U		0.193	0.500	1	10/20/2019 23:18	WG1366370
Dibromomethane	U		0.117	0.500	1	10/20/2019 23:18	WG1366370
1,2-Dichlorobenzene	U		0.101	0.500	1	10/20/2019 23:18	WG1366370
1,3-Dichlorobenzene	U		0.130	0.500	1	10/20/2019 23:18	WG1366370
1,4-Dichlorobenzene	U		0.121	0.500	1	10/20/2019 23:18	WG1366370
Dichlorodifluoromethane	U		0.127	2.50	1	10/20/2019 23:18	WG1366370
1,1-Dichloroethane	U		0.114	0.500	1	10/20/2019 23:18	WG1366370
1,2-Dichloroethane	U		0.108	0.500	1	10/20/2019 23:18	WG1366370
1,1-Dichloroethene	U		0.188	0.500	1	10/20/2019 23:18	WG1366370
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/20/2019 23:18	WG1366370
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/20/2019 23:18	WG1366370
1,2-Dichloropropane	0.253	<u>J</u>	0.190	0.500	1	10/20/2019 23:18	WG1366370
1,1-Dichloropropene	U		0.128	0.500	1	10/20/2019 23:18	WG1366370
1,3-Dichloropropane	U		0.147	1.00	1	10/20/2019 23:18	WG1366370
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/20/2019 23:18	WG1366370
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/20/2019 23:18	WG1366370
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	10/20/2019 23:18	WG1366370
2,2-Dichloropropane	U		0.0929	0.500	1	10/20/2019 23:18	WG1366370
Di-isopropyl ether	U		0.0924	0.500	1	10/20/2019 23:18	WG1366370
Ethylbenzene	U		0.158	0.500	1	10/20/2019 23:18	WG1366370
Hexachloro-1,3-butadiene	U	<u>J4</u>	0.157	1.00	1	10/20/2019 23:18	WG1366370
2-Hexanone	U		0.757	5.00	1	10/20/2019 23:18	WG1366370
n-Hexane	U		0.305	5.00	1	10/20/2019 23:18	WG1366370
Iodomethane	U	<u>JO</u>	0.377	10.0	1	10/20/2019 23:18	WG1366370
Isopropylbenzene	U		0.126	0.500	1	10/20/2019 23:18	WG1366370
p-Isopropyltoluene	U		0.138	0.500	1	10/20/2019 23:18	WG1366370
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/20/2019 23:18	WG1366370
Methylene Chloride	U		1.07	2.50	1	10/20/2019 23:18	WG1366370
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	10/20/2019 23:18	WG1366370
Methyl tert-butyl ether	U		0.102	0.500	1	10/20/2019 23:18	WG1366370
Naphthalene	0.886	<u>B J JO</u>	0.174	2.50	1	10/20/2019 23:18	WG1366370
n-Propylbenzene	U		0.162	0.500	1	10/20/2019 23:18	WG1366370
Styrene	U		0.117	0.500	1	10/20/2019 23:18	WG1366370
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/20/2019 23:18	WG1366370
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/20/2019 23:18	WG1366370

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/10/19 10:30

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/20/2019 23:18	WG1366370
Tetrachloroethene	U		0.199	0.500	1	10/20/2019 23:18	WG1366370
Toluene	U		0.412	0.500	1	10/20/2019 23:18	WG1366370
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/20/2019 23:18	WG1366370
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/20/2019 23:18	WG1366370
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/20/2019 23:18	WG1366370
1,1,2-Trichloroethane	U		0.186	0.500	1	10/20/2019 23:18	WG1366370
Trichloroethene	0.167	U	0.153	0.500	1	10/20/2019 23:18	WG1366370
Trichlorofluoromethane	U		0.130	2.50	1	10/20/2019 23:18	WG1366370
1,2,3-Trichloropropane	U		0.247	2.50	1	10/20/2019 23:18	WG1366370
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/20/2019 23:18	WG1366370
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/20/2019 23:18	WG1366370
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/20/2019 23:18	WG1366370
Vinyl acetate	U		0.645	5.00	1	10/20/2019 23:18	WG1366370
Vinyl chloride	U		0.118	0.500	1	10/20/2019 23:18	WG1366370
Xylenes, Total	U		0.316	1.50	1	10/20/2019 23:18	WG1366370
(S) Toluene-d8	95.6			80.0-120		10/20/2019 23:18	WG1366370
(S) 4-Bromofluorobenzene	89.6			77.0-126		10/20/2019 23:18	WG1366370
(S) 1,2-Dichloroethane-d4	81.3			70.0-130		10/20/2019 23:18	WG1366370

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	394000		2710	20000	1	10/18/2019 00:15	WG1364209

Sample Narrative:

L1148900-04 WG1364209: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	45900		51.9	1000	1	10/11/2019 20:14	WG1361340
Nitrate	U		22.7	100	1	10/11/2019 20:14	WG1361340
Sulfate	35000		77.4	5000	1	10/11/2019 20:14	WG1361340

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5310	<u>B</u>	102	1000	1	10/14/2019 03:05	WG1362294

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	349		15.0	100	1	10/16/2019 22:45	WG1363727
Manganese	738		1.25	25.0	5	10/17/2019 00:21	WG1363727

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	856		0.287	0.678	1	10/14/2019 16:19	WG1362474
Ethane	40.8		0.296	1.29	1	10/14/2019 16:19	WG1362474
Ethene	10.4		0.422	1.27	1	10/14/2019 16:19	WG1362474

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.51	<u>J</u>	1.05	25.0	1	10/19/2019 19:29	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 19:29	WG1365855
Benzene	U		0.0896	0.500	1	10/19/2019 19:29	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 19:29	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 19:29	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 19:29	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 19:29	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 19:29	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 19:29	WG1365855
sec-Butylbenzene	U		0.134	0.500	1	10/19/2019 19:29	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 19:29	WG1365855
Carbon disulfide	0.343	<u>J</u>	0.101	0.500	1	10/19/2019 19:29	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 19:29	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 19:29	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 19:29	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 19:29	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 19:29	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 19:29	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 19:29	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 19:29	WG1365855

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/10/19 11:20

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 19:29	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 19:29	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 19:29	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 19:29	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 19:29	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 19:29	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 19:29	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 19:29	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 19:29	WG1365855
1,1-Dichloroethene	0.665		0.188	0.500	1	10/19/2019 19:29	WG1365855
cis-1,2-Dichloroethene	173		0.0933	0.500	1	10/19/2019 19:29	WG1365855
trans-1,2-Dichloroethene	0.221	U	0.152	0.500	1	10/19/2019 19:29	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 19:29	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 19:29	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 19:29	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 19:29	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 19:29	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 19:29	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 19:29	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 19:29	WG1365855
Ethylbenzene	U		0.158	0.500	1	10/19/2019 19:29	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 19:29	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 19:29	WG1365855
n-Hexane	U		0.305	5.00	1	10/19/2019 19:29	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 19:29	WG1365855
Isopropylbenzene	U		0.126	0.500	1	10/19/2019 19:29	WG1365855
p-Isopropyltoluene	U		0.138	0.500	1	10/19/2019 19:29	WG1365855
2-Butanone (MEK)	2.39	U	1.28	5.00	1	10/19/2019 19:29	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 19:29	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 19:29	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 19:29	WG1365855
Naphthalene	U		0.174	2.50	1	10/19/2019 19:29	WG1365855
n-Propylbenzene	U		0.162	0.500	1	10/19/2019 19:29	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 19:29	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 19:29	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 19:29	WG1365855
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 19:29	WG1365855
Tetrachloroethene	20.4		0.199	0.500	1	10/19/2019 19:29	WG1365855
Toluene	U		0.412	0.500	1	10/19/2019 19:29	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 19:29	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 19:29	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 19:29	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 19:29	WG1365855
Trichloroethene	46.1		0.153	0.500	1	10/19/2019 19:29	WG1365855
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 19:29	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 19:29	WG1365855
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/19/2019 19:29	WG1365855
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/19/2019 19:29	WG1365855
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/19/2019 19:29	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 19:29	WG1365855
Vinyl chloride	25.1		0.118	0.500	1	10/19/2019 19:29	WG1365855
Xylenes, Total	U		0.316	1.50	1	10/19/2019 19:29	WG1365855
(S) Toluene-d8	114			80.0-120		10/19/2019 19:29	WG1365855
(S) 4-Bromofluorobenzene	111			77.0-126		10/19/2019 19:29	WG1365855
(S) 1,2-Dichloroethane-d4	98.9			70.0-130		10/19/2019 19:29	WG1365855

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	10/19/2019 19:49	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 19:49	WG1365855
Benzene	20.3		0.0896	0.500	1	10/19/2019 19:49	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 19:49	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 19:49	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 19:49	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 19:49	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 19:49	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 19:49	WG1365855
sec-Butylbenzene	2.75		0.134	0.500	1	10/19/2019 19:49	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 19:49	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 19:49	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 19:49	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 19:49	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 19:49	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 19:49	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 19:49	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 19:49	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 19:49	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 19:49	WG1365855
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 19:49	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 19:49	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 19:49	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 19:49	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 19:49	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 19:49	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 19:49	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 19:49	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 19:49	WG1365855
1,1-Dichloroethene	U		0.188	0.500	1	10/19/2019 19:49	WG1365855
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/19/2019 19:49	WG1365855
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/19/2019 19:49	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 19:49	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 19:49	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 19:49	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 19:49	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 19:49	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 19:49	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 19:49	WG1365855
Di-isopropyl ether	0.813		0.0924	0.500	1	10/19/2019 19:49	WG1365855
Ethylbenzene	307		1.58	5.00	10	10/21/2019 14:53	WG1366289
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 19:49	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 19:49	WG1365855
n-Hexane	14.1		0.305	5.00	1	10/19/2019 19:49	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 19:49	WG1365855
Isopropylbenzene	28.7		0.126	0.500	1	10/19/2019 19:49	WG1365855
p-Isopropyltoluene	0.676		0.138	0.500	1	10/19/2019 19:49	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 19:49	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 19:49	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 19:49	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 19:49	WG1365855
Naphthalene	89.5	<u>JO</u>	1.74	25.0	10	10/21/2019 14:53	WG1366289
n-Propylbenzene	58.4		0.162	0.500	1	10/19/2019 19:49	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 19:49	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 19:49	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 19:49	WG1365855

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 19:49	WG1365855
Tetrachloroethene	U		0.199	0.500	1	10/19/2019 19:49	WG1365855
Toluene	6.00		0.412	0.500	1	10/19/2019 19:49	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 19:49	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 19:49	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 19:49	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 19:49	WG1365855
Trichloroethene	U		0.153	0.500	1	10/19/2019 19:49	WG1365855
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 19:49	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 19:49	WG1365855
1,2,4-Trimethylbenzene	130		0.123	0.500	1	10/19/2019 19:49	WG1365855
1,2,3-Trimethylbenzene	119		0.0739	0.500	1	10/19/2019 19:49	WG1365855
1,3,5-Trimethylbenzene	8.19		0.124	0.500	1	10/19/2019 19:49	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 19:49	WG1365855
Vinyl chloride	U		0.118	0.500	1	10/19/2019 19:49	WG1365855
Xylenes, Total	123		0.316	1.50	1	10/19/2019 19:49	WG1365855
(S) Toluene-d8	106			80.0-120		10/19/2019 19:49	WG1365855
(S) Toluene-d8	109			80.0-120		10/21/2019 14:53	WG1366289
(S) 4-Bromofluorobenzene	108			77.0-126		10/19/2019 19:49	WG1365855
(S) 4-Bromofluorobenzene	89.8			77.0-126		10/21/2019 14:53	WG1366289
(S) 1,2-Dichloroethane-d4	99.4			70.0-130		10/19/2019 19:49	WG1365855
(S) 1,2-Dichloroethane-d4	95.0			70.0-130		10/21/2019 14:53	WG1366289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/10/19 12:45

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	570000		2710	20000	1	10/18/2019 00:22	WG1364209

Sample Narrative:

L1148900-06 WG1364209: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	26100		51.9	1000	1	10/11/2019 21:07	WG1361340
Nitrate	U		22.7	100	1	10/11/2019 21:07	WG1361340
Sulfate	43700		77.4	5000	1	10/11/2019 21:07	WG1361340

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5830	<u>B</u>	102	1000	1	10/14/2019 04:05	WG1362294

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	13500		150	1000	10	10/17/2019 00:24	WG1363727
Manganese	1760		2.50	50.0	10	10/17/2019 00:24	WG1363727

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	3650		0.287	0.678	1	10/14/2019 16:23	WG1362474
Ethane	70.7		0.296	1.29	1	10/14/2019 16:23	WG1362474
Ethene	6.24		0.422	1.27	1	10/14/2019 16:23	WG1362474

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.73	<u>J</u>	1.05	25.0	1	10/19/2019 20:09	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 20:09	WG1365855
Benzene	3.16		0.0896	0.500	1	10/19/2019 20:09	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 20:09	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 20:09	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 20:09	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 20:09	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 20:09	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 20:09	WG1365855
sec-Butylbenzene	U		0.134	0.500	1	10/19/2019 20:09	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 20:09	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 20:09	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 20:09	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 20:09	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 20:09	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 20:09	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 20:09	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 20:09	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 20:09	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 20:09	WG1365855

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/10/19 12:45

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 20:09	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 20:09	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 20:09	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 20:09	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 20:09	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 20:09	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 20:09	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 20:09	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 20:09	WG1365855
1,1-Dichloroethene	9.11		0.188	0.500	1	10/19/2019 20:09	WG1365855
cis-1,2-Dichloroethene	1080		2.33	12.5	25	10/21/2019 15:13	WG1366289
trans-1,2-Dichloroethene	5.55		0.152	0.500	1	10/19/2019 20:09	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 20:09	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 20:09	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 20:09	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 20:09	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 20:09	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 20:09	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 20:09	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 20:09	WG1365855
Ethylbenzene	0.327	U	0.158	0.500	1	10/19/2019 20:09	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 20:09	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 20:09	WG1365855
n-Hexane	U		0.305	5.00	1	10/19/2019 20:09	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 20:09	WG1365855
Isopropylbenzene	U		0.126	0.500	1	10/19/2019 20:09	WG1365855
p-Isopropyltoluene	U		0.138	0.500	1	10/19/2019 20:09	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 20:09	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 20:09	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 20:09	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 20:09	WG1365855
Naphthalene	23.8	B J J O	4.35	62.5	25	10/21/2019 15:13	WG1366289
n-Propylbenzene	0.177	U	0.162	0.500	1	10/19/2019 20:09	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 20:09	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 20:09	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 20:09	WG1365855
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 20:09	WG1365855
Tetrachloroethene	524		4.98	12.5	25	10/21/2019 15:13	WG1366289
Toluene	U		0.412	0.500	1	10/19/2019 20:09	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 20:09	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 20:09	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 20:09	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 20:09	WG1365855
Trichloroethene	483		3.83	12.5	25	10/21/2019 15:13	WG1366289
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 20:09	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 20:09	WG1365855
1,2,4-Trimethylbenzene	0.392	U	0.123	0.500	1	10/19/2019 20:09	WG1365855
1,2,3-Trimethylbenzene	0.556		0.0739	0.500	1	10/19/2019 20:09	WG1365855
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/19/2019 20:09	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 20:09	WG1365855
Vinyl chloride	194		0.118	0.500	1	10/19/2019 20:09	WG1365855
Xylenes, Total	U		0.316	1.50	1	10/19/2019 20:09	WG1365855
(S) Toluene-d8	115			80.0-120		10/19/2019 20:09	WG1365855
(S) Toluene-d8	111			80.0-120		10/21/2019 15:13	WG1366289
(S) 4-Bromofluorobenzene	107			77.0-126		10/19/2019 20:09	WG1365855
(S) 4-Bromofluorobenzene	92.6			77.0-126		10/21/2019 15:13	WG1366289

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	93.2			70.0-130		10/19/2019 20:09	WG1365855
(S) 1,2-Dichloroethane-d4	98.4			70.0-130		10/21/2019 15:13	WG1366289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/10/19 14:15

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	378000		2710	20000	1	10/18/2019 00:28	WG1364209

Sample Narrative:

L1148900-07 WG1364209: Endpoint pH 4.5 headspace

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	11600		51.9	1000	1	10/11/2019 21:42	WG1361340
Nitrate	199		22.7	100	1	10/11/2019 21:42	WG1361340
Sulfate	66300		77.4	5000	1	10/11/2019 21:42	WG1361340

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4390	<u>B</u>	102	1000	1	10/14/2019 04:27	WG1362294

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	2150		15.0	100	1	10/16/2019 23:05	WG1363727
Manganese	1590		2.50	50.0	10	10/17/2019 00:48	WG1363727

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	76.2		0.287	0.678	1	10/14/2019 16:28	WG1362474
Ethane	U		0.296	1.29	1	10/14/2019 16:28	WG1362474
Ethene	U		0.422	1.27	1	10/14/2019 16:28	WG1362474

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	10/19/2019 20:30	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 20:30	WG1365855
Benzene	U		0.0896	0.500	1	10/19/2019 20:30	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 20:30	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 20:30	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 20:30	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 20:30	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 20:30	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 20:30	WG1365855
sec-Butylbenzene	U		0.134	0.500	1	10/19/2019 20:30	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 20:30	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 20:30	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 20:30	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 20:30	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 20:30	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 20:30	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 20:30	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 20:30	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 20:30	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 20:30	WG1365855

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/10/19 14:15

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 20:30	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 20:30	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 20:30	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 20:30	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 20:30	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 20:30	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 20:30	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 20:30	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 20:30	WG1365855
1,1-Dichloroethene	U		0.188	0.500	1	10/19/2019 20:30	WG1365855
cis-1,2-Dichloroethene	7.34		0.0933	0.500	1	10/21/2019 15:33	WG1366289
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/19/2019 20:30	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 20:30	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 20:30	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 20:30	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 20:30	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 20:30	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 20:30	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 20:30	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 20:30	WG1365855
Ethylbenzene	U		0.158	0.500	1	10/19/2019 20:30	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 20:30	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 20:30	WG1365855
n-Hexane	U		0.305	5.00	1	10/19/2019 20:30	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 20:30	WG1365855
Isopropylbenzene	U		0.126	0.500	1	10/19/2019 20:30	WG1365855
p-Isopropyltoluene	U		0.138	0.500	1	10/19/2019 20:30	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 20:30	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 20:30	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 20:30	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 20:30	WG1365855
Naphthalene	U	<u>JO</u>	0.174	2.50	1	10/21/2019 15:33	WG1366289
n-Propylbenzene	U		0.162	0.500	1	10/19/2019 20:30	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 20:30	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 20:30	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 20:30	WG1365855
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 20:30	WG1365855
Tetrachloroethene	U		0.199	0.500	1	10/21/2019 15:33	WG1366289
Toluene	U		0.412	0.500	1	10/19/2019 20:30	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 20:30	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 20:30	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 20:30	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 20:30	WG1365855
Trichloroethene	U		0.153	0.500	1	10/21/2019 15:33	WG1366289
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 20:30	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 20:30	WG1365855
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/19/2019 20:30	WG1365855
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/19/2019 20:30	WG1365855
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/19/2019 20:30	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 20:30	WG1365855
Vinyl chloride	1.09		0.118	0.500	1	10/19/2019 20:30	WG1365855
Xylenes, Total	U		0.316	1.50	1	10/19/2019 20:30	WG1365855
(S) Toluene-d8	112			80.0-120		10/19/2019 20:30	WG1365855
(S) Toluene-d8	113			80.0-120		10/21/2019 15:33	WG1366289
(S) 4-Bromofluorobenzene	111			77.0-126		10/19/2019 20:30	WG1365855
(S) 4-Bromofluorobenzene	94.9			77.0-126		10/21/2019 15:33	WG1366289

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	97.1			70.0-130		10/19/2019 20:30	WG1365855
(S) 1,2-Dichloroethane-d4	97.0			70.0-130		10/21/2019 15:33	WG1366289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/10/19 13:45

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	786000		2710	20000	1	10/17/2019 16:38	WG1364211

Sample Narrative:

L1148900-08 WG1364211: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10700		51.9	1000	1	10/11/2019 22:00	WG1361340
Nitrate	U		22.7	100	1	10/11/2019 22:00	WG1361340
Sulfate	88000		77.4	5000	1	10/11/2019 22:00	WG1361340

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	8930		102	1000	1	10/14/2019 04:49	WG1362294

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	11200		300	2000	20	10/17/2019 00:37	WG1363727
Manganese	3010		5.00	100	20	10/17/2019 00:37	WG1363727

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	558		0.287	0.678	1	10/14/2019 16:32	WG1362474
Ethane	U		0.296	1.29	1	10/14/2019 16:32	WG1362474
Ethene	U		0.422	1.27	1	10/14/2019 16:32	WG1362474

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.91	J	1.05	25.0	1	10/19/2019 20:50	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 20:50	WG1365855
Benzene	U		0.0896	0.500	1	10/19/2019 20:50	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 20:50	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 20:50	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 20:50	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 20:50	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 20:50	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 20:50	WG1365855
sec-Butylbenzene	U		0.134	0.500	1	10/19/2019 20:50	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 20:50	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 20:50	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 20:50	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 20:50	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 20:50	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 20:50	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 20:50	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 20:50	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 20:50	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 20:50	WG1365855

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 10/10/19 13:45

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 20:50	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 20:50	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 20:50	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 20:50	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 20:50	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 20:50	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 20:50	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 20:50	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 20:50	WG1365855
1,1-Dichloroethene	U		0.188	0.500	1	10/19/2019 20:50	WG1365855
cis-1,2-Dichloroethene	0.148	U	0.0933	0.500	1	10/21/2019 16:18	WG1366289
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/19/2019 20:50	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 20:50	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 20:50	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 20:50	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 20:50	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 20:50	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 20:50	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 20:50	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 20:50	WG1365855
Ethylbenzene	U		0.158	0.500	1	10/19/2019 20:50	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 20:50	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 20:50	WG1365855
n-Hexane	U		0.305	5.00	1	10/19/2019 20:50	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 20:50	WG1365855
Isopropylbenzene	0.352	U	0.126	0.500	1	10/19/2019 20:50	WG1365855
p-Isopropyltoluene	U		0.138	0.500	1	10/19/2019 20:50	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 20:50	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 20:50	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 20:50	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 20:50	WG1365855
Naphthalene	U		0.174	2.50	1	10/21/2019 16:18	WG1366289
n-Propylbenzene	U		0.162	0.500	1	10/19/2019 20:50	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 20:50	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 20:50	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 20:50	WG1365855
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 20:50	WG1365855
Tetrachloroethene	U		0.199	0.500	1	10/19/2019 20:50	WG1365855
Toluene	U		0.412	0.500	1	10/19/2019 20:50	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 20:50	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 20:50	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 20:50	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 20:50	WG1365855
Trichloroethene	U		0.153	0.500	1	10/21/2019 16:18	WG1366289
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 20:50	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 20:50	WG1365855
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/19/2019 20:50	WG1365855
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/19/2019 20:50	WG1365855
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/19/2019 20:50	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 20:50	WG1365855
Vinyl chloride	U		0.118	0.500	1	10/19/2019 20:50	WG1365855
Xylenes, Total	U		0.316	1.50	1	10/19/2019 20:50	WG1365855
(S) Toluene-d8	111			80.0-120		10/19/2019 20:50	WG1365855
(S) Toluene-d8	112			80.0-120		10/21/2019 16:18	WG1366289
(S) 4-Bromofluorobenzene	111			77.0-126		10/19/2019 20:50	WG1365855
(S) 4-Bromofluorobenzene	93.8			77.0-126		10/21/2019 16:18	WG1366289

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	96.6			70.0-130		10/19/2019 20:50	WG1365855
(S) 1,2-Dichloroethane-d4	94.3			70.0-130		10/21/2019 16:18	WG1366289

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	226000		2710	20000	1	10/17/2019 16:44	WG1364211

Sample Narrative:

L1148900-09 WG1364211: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	18600		51.9	1000	1	10/11/2019 22:18	WG1361340
Nitrate	U		22.7	100	1	10/11/2019 22:18	WG1361340
Sulfate	26400		77.4	5000	1	10/11/2019 22:18	WG1361340

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	4980	<u>B</u>	102	1000	1	10/14/2019 05:09	WG1362294

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	10700		300	2000	20	10/17/2019 00:40	WG1363727
Manganese	2630		5.00	100	20	10/17/2019 00:40	WG1363727

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	289		0.287	0.678	1	10/14/2019 16:35	WG1362474
Ethane	U		0.296	1.29	1	10/14/2019 16:35	WG1362474
Ethene	U		0.422	1.27	1	10/14/2019 16:35	WG1362474

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.20	<u>J</u>	1.05	25.0	1	10/19/2019 21:10	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 21:10	WG1365855
Benzene	U		0.0896	0.500	1	10/19/2019 21:10	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 21:10	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 21:10	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 21:10	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 21:10	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 21:10	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 21:10	WG1365855
sec-Butylbenzene	U		0.134	0.500	1	10/19/2019 21:10	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 21:10	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 21:10	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 21:10	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 21:10	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 21:10	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 21:10	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 21:10	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 21:10	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 21:10	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 21:10	WG1365855

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/10/19 15:35

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 21:10	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 21:10	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 21:10	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 21:10	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 21:10	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 21:10	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 21:10	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 21:10	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 21:10	WG1365855
1,1-Dichloroethene	U		0.188	0.500	1	10/19/2019 21:10	WG1365855
cis-1,2-Dichloroethene	12.6		0.0933	0.500	1	10/19/2019 21:10	WG1365855
trans-1,2-Dichloroethene	0.159	U	0.152	0.500	1	10/19/2019 21:10	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 21:10	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 21:10	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 21:10	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 21:10	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 21:10	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 21:10	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 21:10	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 21:10	WG1365855
Ethylbenzene	U		0.158	0.500	1	10/19/2019 21:10	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 21:10	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 21:10	WG1365855
n-Hexane	U		0.305	5.00	1	10/19/2019 21:10	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 21:10	WG1365855
Isopropylbenzene	U		0.126	0.500	1	10/19/2019 21:10	WG1365855
p-Isopropyltoluene	U		0.138	0.500	1	10/19/2019 21:10	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 21:10	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 21:10	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 21:10	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 21:10	WG1365855
Naphthalene	U		0.174	2.50	1	10/19/2019 21:10	WG1365855
n-Propylbenzene	U		0.162	0.500	1	10/19/2019 21:10	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 21:10	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 21:10	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 21:10	WG1365855
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 21:10	WG1365855
Tetrachloroethene	0.876		0.199	0.500	1	10/19/2019 21:10	WG1365855
Toluene	U		0.412	0.500	1	10/19/2019 21:10	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 21:10	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 21:10	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 21:10	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 21:10	WG1365855
Trichloroethene	7.54		0.153	0.500	1	10/19/2019 21:10	WG1365855
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 21:10	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 21:10	WG1365855
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/19/2019 21:10	WG1365855
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/19/2019 21:10	WG1365855
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/19/2019 21:10	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 21:10	WG1365855
Vinyl chloride	U		0.118	0.500	1	10/19/2019 21:10	WG1365855
Xylenes, Total	U		0.316	1.50	1	10/19/2019 21:10	WG1365855
(S) Toluene-d8	115			80.0-120		10/19/2019 21:10	WG1365855
(S) 4-Bromofluorobenzene	112			77.0-126		10/19/2019 21:10	WG1365855
(S) 1,2-Dichloroethane-d4	98.4			70.0-130		10/19/2019 21:10	WG1365855

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/10/19 16:00

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	10/19/2019 16:05	WG1365855
Acrylonitrile	U		0.873	5.00	1	10/19/2019 16:05	WG1365855
Benzene	U		0.0896	0.500	1	10/19/2019 16:05	WG1365855
Bromobenzene	U		0.133	0.500	1	10/19/2019 16:05	WG1365855
Bromodichloromethane	U		0.0800	0.500	1	10/19/2019 16:05	WG1365855
Bromochloromethane	U		0.145	0.500	1	10/19/2019 16:05	WG1365855
Bromoform	U		0.186	0.500	1	10/19/2019 16:05	WG1365855
Bromomethane	U		0.157	2.50	1	10/19/2019 16:05	WG1365855
n-Butylbenzene	U		0.143	0.500	1	10/19/2019 16:05	WG1365855
sec-Butylbenzene	U		0.134	0.500	1	10/19/2019 16:05	WG1365855
tert-Butylbenzene	U		0.183	0.500	1	10/19/2019 16:05	WG1365855
Carbon disulfide	U		0.101	0.500	1	10/19/2019 16:05	WG1365855
Carbon tetrachloride	U		0.159	0.500	1	10/19/2019 16:05	WG1365855
Chlorobenzene	U		0.140	0.500	1	10/19/2019 16:05	WG1365855
Chlorodibromomethane	U		0.128	0.500	1	10/19/2019 16:05	WG1365855
Chloroethane	U		0.141	2.50	1	10/19/2019 16:05	WG1365855
Chloroform	U		0.0860	0.500	1	10/19/2019 16:05	WG1365855
Chloromethane	U		0.153	1.25	1	10/19/2019 16:05	WG1365855
2-Chlorotoluene	U		0.111	0.500	1	10/19/2019 16:05	WG1365855
4-Chlorotoluene	U		0.0972	0.500	1	10/19/2019 16:05	WG1365855
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/19/2019 16:05	WG1365855
1,2-Dibromoethane	U		0.193	0.500	1	10/19/2019 16:05	WG1365855
Dibromomethane	U		0.117	0.500	1	10/19/2019 16:05	WG1365855
1,2-Dichlorobenzene	U		0.101	0.500	1	10/19/2019 16:05	WG1365855
1,3-Dichlorobenzene	U		0.130	0.500	1	10/19/2019 16:05	WG1365855
1,4-Dichlorobenzene	U		0.121	0.500	1	10/19/2019 16:05	WG1365855
Dichlorodifluoromethane	U		0.127	2.50	1	10/19/2019 16:05	WG1365855
1,1-Dichloroethane	U		0.114	0.500	1	10/19/2019 16:05	WG1365855
1,2-Dichloroethane	U		0.108	0.500	1	10/19/2019 16:05	WG1365855
1,1-Dichloroethene	U		0.188	0.500	1	10/19/2019 16:05	WG1365855
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/19/2019 16:05	WG1365855
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/19/2019 16:05	WG1365855
1,2-Dichloropropane	U		0.190	0.500	1	10/19/2019 16:05	WG1365855
1,1-Dichloropropene	U		0.128	0.500	1	10/19/2019 16:05	WG1365855
1,3-Dichloropropane	U		0.147	1.00	1	10/19/2019 16:05	WG1365855
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/19/2019 16:05	WG1365855
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/19/2019 16:05	WG1365855
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/19/2019 16:05	WG1365855
2,2-Dichloropropane	U		0.0929	0.500	1	10/19/2019 16:05	WG1365855
Di-isopropyl ether	U		0.0924	0.500	1	10/19/2019 16:05	WG1365855
Ethylbenzene	U		0.158	0.500	1	10/19/2019 16:05	WG1365855
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/19/2019 16:05	WG1365855
2-Hexanone	U		0.757	5.00	1	10/19/2019 16:05	WG1365855
n-Hexane	U		0.305	5.00	1	10/19/2019 16:05	WG1365855
Iodomethane	U		0.377	10.0	1	10/19/2019 16:05	WG1365855
Isopropylbenzene	U		0.126	0.500	1	10/19/2019 16:05	WG1365855
p-Isopropyltoluene	U		0.138	0.500	1	10/19/2019 16:05	WG1365855
2-Butanone (MEK)	U		1.28	5.00	1	10/19/2019 16:05	WG1365855
Methylene Chloride	U		1.07	2.50	1	10/19/2019 16:05	WG1365855
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/19/2019 16:05	WG1365855
Methyl tert-butyl ether	U		0.102	0.500	1	10/19/2019 16:05	WG1365855
Naphthalene	U		0.174	2.50	1	10/19/2019 16:05	WG1365855
n-Propylbenzene	U		0.162	0.500	1	10/19/2019 16:05	WG1365855
Styrene	U		0.117	0.500	1	10/19/2019 16:05	WG1365855
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/19/2019 16:05	WG1365855
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/19/2019 16:05	WG1365855

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/10/19 16:00

L1148900

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/19/2019 16:05	WG1365855
Tetrachloroethene	U		0.199	0.500	1	10/19/2019 16:05	WG1365855
Toluene	U		0.412	0.500	1	10/19/2019 16:05	WG1365855
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/19/2019 16:05	WG1365855
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/19/2019 16:05	WG1365855
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/19/2019 16:05	WG1365855
1,1,2-Trichloroethane	U		0.186	0.500	1	10/19/2019 16:05	WG1365855
Trichloroethene	U		0.153	0.500	1	10/19/2019 16:05	WG1365855
Trichlorofluoromethane	U		0.130	2.50	1	10/19/2019 16:05	WG1365855
1,2,3-Trichloropropane	U		0.247	2.50	1	10/19/2019 16:05	WG1365855
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/19/2019 16:05	WG1365855
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/19/2019 16:05	WG1365855
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/19/2019 16:05	WG1365855
Vinyl acetate	U		0.645	5.00	1	10/19/2019 16:05	WG1365855
Vinyl chloride	U		0.118	0.500	1	10/19/2019 16:05	WG1365855
Xylenes, Total	U		0.316	1.50	1	10/19/2019 16:05	WG1365855
(S) Toluene-d8	113			80.0-120		10/19/2019 16:05	WG1365855
(S) 4-Bromofluorobenzene	113			77.0-126		10/19/2019 16:05	WG1365855
(S) 1,2-Dichloroethane-d4	98.1			70.0-130		10/19/2019 16:05	WG1365855

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3462293-1 10/18/19 00:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	5440	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1148902-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1148902-01 10/18/19 00:35 • (DUP) R3462293-2 10/18/19 00:41

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	364000	362000	1	0.303		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

L1148902-16 Original Sample (OS) • Duplicate (DUP)

(OS) L1148902-16 10/18/19 02:38 • (DUP) R3462293-4 10/18/19 02:45

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	257000	265000	1	2.93		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3462293-3 10/18/19 01:09

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	99800	99.8	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3462246-1 10/17/19 15:27

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	5510	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1148878-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1148878-01 10/17/19 16:23 • (DUP) R3462246-3 10/17/19 16:30

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	570000	572000	1	0.322		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

L1149219-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1149219-04 10/17/19 18:27 • (DUP) R3462246-6 10/17/19 18:34

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	351000	353000	1	0.456		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3462246-5 10/17/19 16:51

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	101000	101	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Method Blank (MB)

(MB) R3460365-1 10/11/19 09:54

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1148852-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1148852-05 10/11/19 17:36 • (DUP) R3460365-3 10/11/19 17:53

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	ND	213	1	0.000		15
Nitrate	ND	0.000	1	0.000		15
Sulfate	ND	0.000	1	0.000		15

L1148902-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1148902-01 10/11/19 22:53 • (DUP) R3460365-6 10/11/19 23:11

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	37500	37300	1	0.490		15
Nitrate	170	168	1	1.54		15
Sulfate	8290	8280	1	0.0821		15

Laboratory Control Sample (LCS)

(LCS) R3460365-2 10/11/19 10:11

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	38700	96.7	80.0-120	
Nitrate	8000	7920	99.0	80.0-120	
Sulfate	40000	39300	98.4	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1148854-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	343000	375000	376000	65.5	65.7	1	80.0-120	E V	E V	0.0306	15
Nitrate	5000	ND	4860	4950	97.3	99.0	1	80.0-120			1.77	15
Sulfate	50000	ND	52100	51900	98.3	98.1	1	80.0-120			0.235	15

L1148902-02 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Chloride	50000	25000	73000	96.1	1	80.0-120	
Nitrate	5000	U	4850	97.0	1	80.0-120	
Sulfate	50000	1490	50100	97.2	1	80.0-120	

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⁹ Sc

⁸ Al

⁷ Gl

QC

⁵ Sr

Cn

Ss

Tc

Cp



Method Blank (MB)

(MB) R3461010-1 10/13/19 17:37	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	662	<u>J</u>	102	1000

L1148464-41 Original Sample (OS) • Duplicate (DUP)

(OS) L1148464-41 10/13/19 19:54 • (DUP) R3461010-3 10/13/19 20:12	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	ND	640	1	11.4	<u>J</u>	20

L1148844-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1148844-06 10/14/19 00:29 • (DUP) R3461010-6 10/14/19 00:50	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	27900	28400	1	1.67		20

Laboratory Control Sample (LCS)

(LCS) R3461010-2 10/13/19 18:20	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	77100	103	85.0-115	

L1148844-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1148844-04 10/13/19 23:08 • (MS) R3461010-4 10/13/19 23:29 • (MSD) R3461010-5 10/13/19 23:50	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	4760	56900	55100	104	101	1	80.0-120			3.30	20

L1148900-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1148900-04 10/14/19 03:05 • (MS) R3461010-7 10/14/19 03:26 • (MSD) R3461010-8 10/14/19 03:49	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	5310	57700	57900	105	105	1	80.0-120			0.380	20

1 Cp 2 Tc 3 Ss 4 Cn 5 Sr 6 Qc 7 Gl 8 Al 9 Sc



Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Iron	U		15.0 ug/l	100 ug/l
Manganese	0.691	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	Spike Amount	LCSD Result	LCSD Result	LCS Rec.							
Iron	5000	4820	4870	96.5	97.4	80.0-120			1.00	20	
Manganese	50.0	48.6	48.7	97.3	97.3	80.0-120			0.0807	20	

L1148780-22 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.						
Iron	5000	ND	4660	5000	93.2	100	1	75.0-125			6.96	20
Manganese	50.0	20.3	65.8	69.2	91.1	97.9	1	75.0-125			5.01	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1148900-01.04.06.07.08.09](#)

Method Blank (MB)

(MB) R3460900-1 10/14/19 15:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1148844-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1148844-02 10/14/19 15:17 • (DUP) R3460900-2 10/14/19 16:06

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Methane	5560	5470	1	1.51		20
Ethane	141	138	1	2.40		20
Ethene	17.6	17.1	1	3.01		20

L1149259-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1149259-01 10/14/19 16:43 • (DUP) R3460900-3 10/14/19 16:48

Analyte	Original Result		DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l					
Methane	2030	2050	1	1.19		20	
Ethane	U	0.000	1	0.000		20	
Ethene	U	0.000	1	0.000		20	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3460900-4 10/14/19 16:59 • (LCSD) R3460900-5 10/14/19 17:05

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%							
Methane	67.8	76.9	73.6	73.6	113	109			85.0-115			4.36	20
Ethane	129	134	130	130	104	101			85.0-115			2.75	20
Ethene	127	140	136	136	110	107			85.0-115			2.68	20



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Method Blank (MB)

(MB) R3462928-3 10/19/19 12:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3462928-3 10/19/19 12:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	112			80.0-120
(S) 4-Bromofluorobenzene	109			77.0-126
(S) 1,2-Dichloroethane-d4	96.0			70.0-130

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Public Review Draft

ACCOUNT:

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Laboratory Control Sample (LCS)

(LCS) R3462928-1 10/19/19 11:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	140	112	19.0-160	1 Cp
Acrylonitrile	125	141	113	55.0-149	2 Tc
Benzene	25.0	23.7	94.8	70.0-123	3 Ss
Bromobenzene	25.0	20.6	82.4	73.0-121	4 Cn
Bromodichloromethane	25.0	24.0	96.0	75.0-120	
Bromochloromethane	25.0	27.3	109	76.0-122	
Bromoform	25.0	29.5	118	68.0-132	5 Sr
Bromomethane	25.0	25.4	102	10.0-160	
n-Butylbenzene	25.0	22.2	88.8	73.0-125	
sec-Butylbenzene	25.0	23.1	92.4	75.0-125	6 Qc
tert-Butylbenzene	25.0	25.0	100	76.0-124	
Carbon disulfide	25.0	23.8	95.2	61.0-128	
Carbon tetrachloride	25.0	28.4	114	68.0-126	7 Gl
Chlorobenzene	25.0	27.2	109	80.0-121	
Chlorodibromomethane	25.0	29.5	118	77.0-125	8 Al
Chloroethane	25.0	25.7	103	47.0-150	
Chloroform	25.0	22.5	90.0	73.0-120	
Chloromethane	25.0	25.5	102	41.0-142	
2-Chlorotoluene	25.0	22.2	88.8	76.0-123	
4-Chlorotoluene	25.0	22.2	88.8	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	25.2	101	58.0-134	
1,2-Dibromoethane	25.0	26.1	104	80.0-122	
Dibromomethane	25.0	26.1	104	80.0-120	
1,2-Dichlorobenzene	25.0	24.9	99.6	79.0-121	
1,3-Dichlorobenzene	25.0	24.5	98.0	79.0-120	
1,4-Dichlorobenzene	25.0	22.7	90.8	79.0-120	
Dichlorodifluoromethane	25.0	25.7	103	51.0-149	
1,1-Dichloroethane	25.0	24.6	98.4	70.0-126	
1,2-Dichloroethane	25.0	23.5	94.0	70.0-128	
1,1-Dichloroethene	25.0	26.1	104	71.0-124	
cis-1,2-Dichloroethene	25.0	25.4	102	73.0-120	
trans-1,2-Dichloroethene	25.0	24.6	98.4	73.0-120	
1,2-Dichloropropane	25.0	24.9	99.6	77.0-125	
1,1-Dichloropropene	25.0	24.8	99.2	74.0-126	
1,3-Dichloropropene	25.0	25.7	103	80.0-120	
cis-1,3-Dichloropropene	25.0	24.9	99.6	80.0-123	
trans-1,3-Dichloropropene	25.0	26.3	105	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	23.5	94.0	33.0-144	
2,2-Dichloropropane	25.0	25.8	103	58.0-130	
Di-isopropyl ether	25.0	26.2	105	58.0-138	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Laboratory Control Sample (LCS)

(LCS) R3462928-1 10/19/19 11:45

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	26.0	104	79.0-123	
Hexachloro-1,3-butadiene	25.0	23.6	94.4	54.0-138	
2-Hexanone	125	141	113	67.0-149	
n-Hexane	25.0	26.6	106	57.0-133	
Iodomethane	125	139	111	33.0-147	
Isopropylbenzene	25.0	28.4	114	76.0-127	
p-Isopropyltoluene	25.0	24.2	96.8	76.0-125	
2-Butanone (MEK)	125	139	111	44.0-160	
Methylene Chloride	25.0	23.6	94.4	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	147	118	68.0-142	
Methyl tert-butyl ether	25.0	25.5	102	68.0-125	
Naphthalene	25.0	23.7	94.8	54.0-135	
n-Propylbenzene	25.0	22.8	91.2	77.0-124	
Styrene	25.0	28.1	112	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	29.7	119	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	22.7	90.8	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	28.0	112	69.0-132	
Tetrachloroethene	25.0	28.6	114	72.0-132	
Toluene	25.0	25.6	102	79.0-120	
1,2,3-Trichlorobenzene	25.0	23.1	92.4	50.0-138	
1,2,4-Trichlorobenzene	25.0	23.0	92.0	57.0-137	
1,1,1-Trichloroethane	25.0	26.0	104	73.0-124	
1,1,2-Trichloroethane	25.0	26.7	107	80.0-120	
Trichloroethene	25.0	27.0	108	78.0-124	
Trichlorofluoromethane	25.0	27.4	110	59.0-147	
1,2,3-Trichloropropane	25.0	22.8	91.2	73.0-130	
1,2,4-Trimethylbenzene	25.0	22.8	91.2	76.0-121	
1,2,3-Trimethylbenzene	25.0	21.9	87.6	77.0-120	
1,3,5-Trimethylbenzene	25.0	23.4	93.6	76.0-122	
Vinyl acetate	125	149	119	11.0-160	
Vinyl chloride	25.0	26.6	106	67.0-131	
Xylenes, Total	75.0	81.4	109	79.0-123	
(S) Toluene-d8			112	80.0-120	
(S) 4-Bromofluorobenzene			109	77.0-126	
(S) 1,2-Dichloroethane-d4			106	70.0-130	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1148900-01.02.05.06.07.08](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Ethylbenzene	U		0.158	0.500
Naphthalene	0.191	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	113			80.0-120
(S) 4-Bromofluorobenzene	90.0			77.0-126
(S) 1,2-Dichloroethane-d4	94.7			70.0-130

Laboratory Control Sample (LCS)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
(LCS) R3463319-1 10/21/19 09:35					
cis-1,2-Dichloroethene	25.0	21.8	87.2	73.0-120	
Ethylbenzene	25.0	22.0	88.0	79.0-123	
Naphthalene	25.0	13.9	55.6	54.0-135	
n-Propylbenzene	25.0	30.5	122	77.0-124	
Tetrachloroethene	25.0	22.4	89.6	72.0-132	
Trichloroethene	25.0	22.6	90.4	78.0-124	
(S) Toluene-d8			107	80.0-120	
(S) 4-Bromofluorobenzene			93.1	77.0-126	
(S) 1,2-Dichloroethane-d4			101	70.0-130	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3463386-2 10/20/19 20:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1148900-03](#)

Method Blank (MB)

(MB) R3463386-2 10/20/19 20:35

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.266	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	8.25	J	0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	1.03	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.416	J	0.164	0.500
1,2,4-Trichlorobenzene	0.361	J	0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	95.5			80.0-120
(S) 4-Bromofluorobenzene	93.4			77.0-126
(S) 1,2-Dichloroethane-d4	81.4			70.0-130

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3463386-1 10/20/19 19:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	96.7	77.4	19.0-160	
Acrylonitrile	125	101	80.8	55.0-149	
Benzene	25.0	23.8	95.2	70.0-123	
Bromobenzene	25.0	26.2	105	73.0-121	
Bromodichloromethane	25.0	23.0	92.0	75.0-120	
Bromochloromethane	25.0	25.2	101	76.0-122	
Bromoform	25.0	23.6	94.4	68.0-132	
Bromomethane	25.0	24.1	96.4	10.0-160	
n-Butylbenzene	25.0	28.7	115	73.0-125	
sec-Butylbenzene	25.0	27.3	109	75.0-125	
tert-Butylbenzene	25.0	25.9	104	76.0-124	
Carbon disulfide	25.0	23.9	95.6	61.0-128	
Carbon tetrachloride	25.0	22.2	88.8	68.0-126	
Chlorobenzene	25.0	24.8	99.2	80.0-121	
Chlorodibromomethane	25.0	24.5	98.0	77.0-125	
Chloroethane	25.0	23.7	94.8	47.0-150	
Chloroform	25.0	23.4	93.6	73.0-120	
Chloromethane	25.0	22.3	89.2	41.0-142	
2-Chlorotoluene	25.0	25.7	103	76.0-123	
4-Chlorotoluene	25.0	25.1	100	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	21.5	86.0	58.0-134	
1,2-Dibromoethane	25.0	24.0	96.0	80.0-122	
Dibromomethane	25.0	23.7	94.8	80.0-120	
1,2-Dichlorobenzene	25.0	28.6	114	79.0-121	
1,3-Dichlorobenzene	25.0	29.0	116	79.0-120	
1,4-Dichlorobenzene	25.0	28.1	112	79.0-120	
Dichlorodifluoromethane	25.0	26.5	106	51.0-149	
1,1-Dichloroethane	25.0	22.5	90.0	70.0-126	
1,2-Dichloroethane	25.0	21.1	84.4	70.0-128	
1,1-Dichloroethene	25.0	27.4	110	71.0-124	
cis-1,2-Dichloroethene	25.0	25.2	101	73.0-120	
trans-1,2-Dichloroethene	25.0	24.1	96.4	73.0-120	
1,2-Dichloropropane	25.0	22.3	89.2	77.0-125	
1,1-Dichloropropene	25.0	24.5	98.0	74.0-126	
1,3-Dichloropropene	25.0	25.1	100	80.0-120	
cis-1,3-Dichloropropene	25.0	23.3	93.2	80.0-123	
trans-1,3-Dichloropropene	25.0	23.7	94.8	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.4	69.6	33.0-144	
2,2-Dichloropropane	25.0	20.8	83.2	58.0-130	
Di-isopropyl ether	25.0	21.8	87.2	58.0-138	

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1 Cp
2 Tc
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1148900-03](#)

Laboratory Control Sample (LCS)

(LCS) R3463386-1 10/20/19 19:55

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	24.0	96.0	79.0-123	
Hexachloro-1,3-butadiene	25.0	37.4	150	54.0-138	J4
2-Hexanone	125	101	80.8	67.0-149	
n-Hexane	25.0	21.4	85.6	57.0-133	
Iodomethane	125	102	81.6	33.0-147	
Isopropylbenzene	25.0	22.9	91.6	76.0-127	
p-Isopropyltoluene	25.0	28.4	114	76.0-125	
2-Butanone (MEK)	125	87.2	69.8	44.0-160	
Methylene Chloride	25.0	23.6	94.4	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	92.0	73.6	68.0-142	
Methyl tert-butyl ether	25.0	22.1	88.4	68.0-125	
Naphthalene	25.0	20.5	82.0	54.0-135	
n-Propylbenzene	25.0	24.3	97.2	77.0-124	
Styrene	25.0	24.7	98.8	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	24.2	96.8	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	22.5	90.0	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	22.9	91.6	69.0-132	
Tetrachloroethene	25.0	25.4	102	72.0-132	
Toluene	25.0	24.0	96.0	79.0-120	
1,2,3-Trichlorobenzene	25.0	27.8	111	50.0-138	
1,2,4-Trichlorobenzene	25.0	31.4	126	57.0-137	
1,1,1-Trichloroethane	25.0	22.1	88.4	73.0-124	
1,1,2-Trichloroethane	25.0	23.3	93.2	80.0-120	
Trichloroethene	25.0	24.2	96.8	78.0-124	
Trichlorofluoromethane	25.0	25.9	104	59.0-147	
1,2,3-Trichloropropane	25.0	22.7	90.8	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.1	100	76.0-121	
1,2,3-Trimethylbenzene	25.0	26.0	104	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.9	99.6	76.0-122	
Vinyl acetate	125	105	84.0	11.0-160	
Vinyl chloride	25.0	26.9	108	67.0-131	
Xylenes, Total	75.0	73.3	97.7	79.0-123	
(S) Toluene-d8			93.7	80.0-120	
(S) 4-Bromofluorobenzene			90.1	77.0-126	
(S) 1,2-Dichloroethane-d4			84.9	70.0-130	

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1 Cp
2 Tc
3 Ss
4 Cn
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Volatile Organic Compounds (GC/MS) by Method 8260C

L1148900-03

L1148900-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1148900-03 10/20/19 23:18 • (MS) R3463386-3 10/21/19 00:16 • (MSD) R3463386-4 10/21/19 00:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Acetone	125	U	77.0	85.5	61.6	68.4	1	10.0-160			10.5	35
Acrylonitrile	125	U	95.0	104	76.0	83.2	1	21.0-160			9.05	32
Benzene	25.0	U	216	22.5	86.4	90.0	1	17.0-158			4.08	27
Bromobenzene	25.0	U	23.9	25.8	95.6	103	1	30.0-149			7.65	28
Bromodichloromethane	25.0	U	21.0	21.9	84.0	87.6	1	31.0-150			4.20	27
Bromochloromethane	25.0	U	22.4	22.8	89.6	91.2	1	38.0-142			1.77	26
Bromoform	25.0	U	216	24.3	86.4	97.2	1	29.0-150			11.8	29
Bromomethane	25.0	U	18.9	19.9	75.6	79.6	1	10.0-160			5.15	38
n-Butylbenzene	25.0	U	26.1	27.5	104	110	1	31.0-150			5.22	30
sec-Butylbenzene	25.0	U	24.5	26.3	98.0	105	1	33.0-155			7.09	29
tert-Butylbenzene	25.0	U	23.6	25.1	94.4	100	1	34.0-153			6.16	28
Carbon disulfide	25.0	U	20.2	21.1	80.8	84.4	1	10.0-156			4.36	28
Carbon tetrachloride	25.0	U	20.5	21.3	82.0	85.2	1	23.0-159			3.83	28
Chlorobenzene	25.0	U	22.5	24.3	90.0	97.2	1	33.0-152			7.69	27
Chlorodibromomethane	25.0	U	22.8	24.8	91.2	99.2	1	37.0-149			8.40	27
Chloroethane	25.0	U	21.5	21.9	86.0	87.6	1	10.0-160			1.84	30
Chloroform	25.0	U	21.1	21.8	84.4	87.2	1	29.0-154			3.26	28
Chloromethane	25.0	U	19.6	20.0	78.4	80.0	1	10.0-160			2.02	29
2-Chlorotoluene	25.0	U	23.6	25.1	94.4	100	1	32.0-153			6.16	28
4-Chlorotoluene	25.0	U	22.7	24.3	90.8	97.2	1	32.0-150			6.81	28
1,2-Dibromo-3-Chloropropane	25.0	U	19.4	22.6	77.6	90.4	1	22.0-151			15.2	34
1,2-Dibromoethane	25.0	U	21.7	23.2	86.8	92.8	1	34.0-147			6.68	27
Dibromomethane	25.0	U	21.7	22.3	86.8	89.2	1	30.0-151			2.73	27
1,2-Dichlorobenzene	25.0	U	25.6	28.2	102	113	1	34.0-149			9.67	28
1,3-Dichlorobenzene	25.0	U	26.0	28.0	104	112	1	36.0-146			7.41	27
1,4-Dichlorobenzene	25.0	U	26.0	27.4	104	110	1	35.0-142			5.24	27
Dichlorodifluoromethane	25.0	U	23.8	24.1	95.2	96.4	1	10.0-160			1.25	29
1,1-Dichloroethane	25.0	U	20.4	20.8	81.6	83.2	1	25.0-158			1.94	27
1,2-Dichloroethane	25.0	U	19.3	20.3	77.2	81.2	1	29.0-151			5.05	27
1,1-Dichloroethene	25.0	U	24.6	25.9	98.4	104	1	11.0-160			5.15	29
cis-1,2-Dichloroethene	25.0	U	22.6	23.6	90.4	94.4	1	10.0-160			4.33	27
trans-1,2-Dichloroethene	25.0	U	21.8	22.8	87.2	91.2	1	17.0-153			4.48	27
1,2-Dichloropropane	25.0	0.253	20.7	21.4	81.8	84.6	1	30.0-156			3.33	27
1,1-Dichloropropene	25.0	U	22.2	22.8	88.8	91.2	1	25.0-158			2.67	27
1,3-Dichloropropene	25.0	U	22.9	25.2	91.6	101	1	38.0-147			9.56	27
cis-1,3-Dichloropropene	25.0	U	20.3	20.7	81.2	82.8	1	34.0-149			1.95	28
trans-1,3-Dichloropropene	25.0	U	21.3	22.8	85.2	91.2	1	32.0-149			6.80	28
trans-1,4-Dichloro-2-butene	25.0	U	14.8	15.7	59.2	62.8	1	10.0-157			5.90	37
2,2-Dichloropropane	25.0	U	17.6	16.6	70.4	66.4	1	24.0-152			5.85	29
Di-isopropyl ether	25.0	U	20.0	20.9	80.0	83.6	1	21.0-160			4.40	28

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PES Environmental, Inc.- WA

1413.00102.501E

L1148900

10/24/19 13:54

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L1148900-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1148900-03 10/20/19 23:18 • (MS) R3463386-3 10/21/19 00:16 • (MSD) R3463386-4 10/21/19 00:36

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	25.0	U	22.4	24.1	89.6	96.4	1	30.0-155			7.31	27
Hexachloro-1,3-butadiene	25.0	U	32.9	36.6	132	146	1	20.0-154			10.6	34
2-Hexanone	125	U	92.3	106	73.8	84.8	1	21.0-160			13.8	29
n-Hexane	25.0	U	20.0	20.5	80.0	82.0	1	10.0-153			2.47	28
Iodomethane	125	U	83.1	78.2	66.5	62.6	1	10.0-160			6.08	40
Isopropylbenzene	25.0	U	20.7	22.4	82.8	89.6	1	28.0-157			7.89	27
p-Isopropyltoluene	25.0	U	25.7	27.5	103	110	1	30.0-154			6.77	29
2-Butanone (MEK)	125	U	79.6	86.9	63.7	69.5	1	10.0-160			8.77	32
Methylene Chloride	25.0	U	21.4	22.6	85.6	90.4	1	23.0-144			5.45	28
4-Methyl-2-pentanone (MIBK)	125	U	86.2	98.4	69.0	78.7	1	29.0-160			13.2	29
Methyl tert-butyl ether	25.0	U	20.0	21.0	80.0	84.0	1	28.0-150			4.88	29
Naphthalene	25.0	0.886	18.0	21.3	68.5	81.7	1	12.0-156			16.8	35
n-Propylbenzene	25.0	U	22.3	23.6	89.2	94.4	1	31.0-154			5.66	28
Styrene	25.0	U	22.4	24.5	89.6	98.0	1	33.0-155			8.96	28
1,1,1,2-Tetrachloroethane	25.0	U	22.2	24.5	88.8	98.0	1	36.0-151			9.85	29
1,1,2,2-Tetrachloroethane	25.0	U	21.1	24.6	84.4	98.4	1	33.0-150			15.3	28
1,1,2-Trichlorotrifluoroethane	25.0	U	22.6	22.7	90.4	90.8	1	23.0-160			0.442	30
Tetrachloroethene	25.0	U	23.6	25.0	94.4	100	1	10.0-160			5.76	27
Toluene	25.0	U	22.2	23.7	88.8	94.8	1	26.0-154			6.54	28
1,2,3-Trichlorobenzene	25.0	U	24.8	28.4	99.2	114	1	17.0-150			13.5	36
1,2,4-Trichlorobenzene	25.0	U	28.0	31.7	112	127	1	24.0-150			12.4	33
1,1,1-Trichloroethane	25.0	U	20.3	20.9	81.2	83.6	1	23.0-160			2.91	28
1,1,2-Trichloroethane	25.0	U	22.0	24.0	88.0	96.0	1	35.0-147			8.70	27
Trichloroethene	25.0	0.167	21.3	22.4	84.5	88.9	1	10.0-160			5.03	25
Trichlorofluoromethane	25.0	U	24.2	24.5	96.8	98.0	1	17.0-160			1.23	31
1,2,3-Trichloropropane	25.0	U	22.1	25.0	88.4	100	1	34.0-151			12.3	29
1,2,4-Trimethylbenzene	25.0	U	23.3	24.5	93.2	98.0	1	26.0-154			5.02	27
1,2,3-Trimethylbenzene	25.0	U	24.1	25.8	96.4	103	1	32.0-149			6.81	28
1,3,5-Trimethylbenzene	25.0	U	22.8	24.0	91.2	96.0	1	28.0-153			5.13	27
Vinyl acetate	125	U	109	117	87.2	93.6	1	12.0-160			7.08	31
Vinyl chloride	25.0	U	23.2	23.9	92.8	95.6	1	10.0-160			2.97	27
Xylenes, Total	75.0	U	66.5	71.6	88.7	95.5	1	29.0-154			7.39	28
<i>(S) Toluene-d8</i>												
<i>(S) 4-Bromofluorobenzene</i>												
<i>(S) 1,2-Dichloroethane-d4</i>												
					81.8	79.6		70.0-130				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

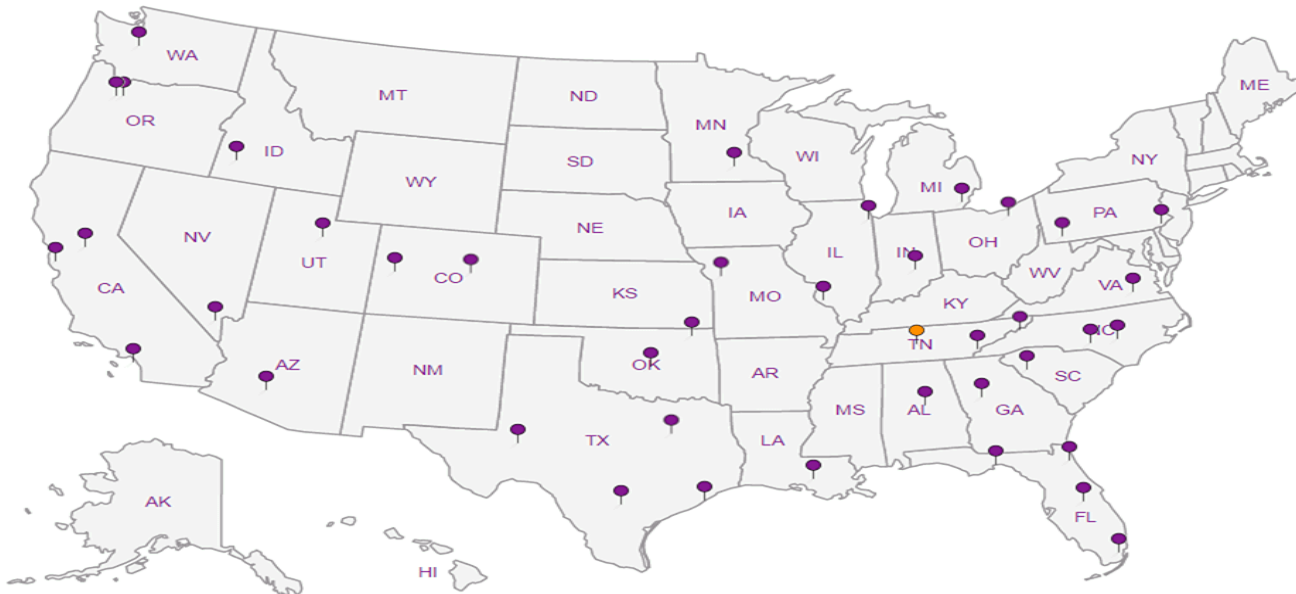
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Report to: Bill Haldeman/Brian O'neal
 Email To: on file
 Project: American Livin
 Description: American Livin
 City/State: Seattle, WA
 Client Project #: 1413.001.02.5015
 Lab Project #: PESENVSWA-ALP
 Phone: on file
 Fax: 1413.001.05.601
 Site/Facility ID #: American Livin
 P.O. #
 Collected by (print): Ben Hecht
 Collected by (signature): *Ben Hecht*
 Rush? (Lab MUST Be Notified) Same Day Five Day Next Day 5 Day (Rad Only) Two Day 10 Day (Rad Only) Three Day
 Date Results Needed: STAT
 Packed on Ice: N Y V
 Sample ID

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MW-314-101019	Grab	GW	72	10-10-19	0835	9	**NO3,SO4,Chloride**48 hour hold
5CL-MW 105-101019		GW	25'		0950	3	NWTPHGX
MW-8-101019		GW	16		10:30	5	VOCs (V8260LLC)
MW-311-101019		GW	68'		11:20	9	Total Fe Mn 6020
SCS-2-101019		GW	20		11:35	3	TOC
MW108-101019		GW	45		12:45	9	Alkalinity
MW-313-101019		GW	26.5		14:15	9	EEM (RSK175LL)
MW-310-101019		GW	26		13:45	9	
MW119-101019		GW	40		15:35	9	
TRIP-101019		GW	-		16:00	1	

Remarks:
 Samples returned via: UPS Fedex Courier
 Tracking # *Edx 1203 5774 0501*
 Received by: *[Signature]*
 Received for lab by: *[Signature]*
 Trip Blank Received: *Yes/No*
 HCL / MeOH
 Temp: *APP* Bottles Received: *65*
 Date: *10/11/19* Time: *8:05*
 pH _____ Temp _____
 Flow _____ Other _____

Relinquished by: *[Signature]* Date: *10-10-19* Time: *1645*
 Relinquished by: *[Signature]* Date: _____ Time: _____
 Condition: NCF / *OK*
 RAD SCREEN: *0.5 mPR/h*
 Sample Receipt Checklist:
 COC Seal Present/Intact: Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 If Applicable
 VOA Zero Headspace: Y N
 Preservation Correct/checked: Y N

Pace Analytical
 National Center for Testing & Innovation
 12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859


Account: PESENVSWA
 Template:
 Prelogin:
 TSR: Brian Ford
 PB:
 Shipped Via:
 Remarks: *Me 6x*
 Sample # (lab only): *-01*

Remarks	Sample # (lab only)
<i>Me 6x</i>	<i>-01</i>
<i>QA/QC</i>	<i>02</i>
	<i>03</i>
	<i>04</i>
	<i>05</i>
	<i>06</i>
	<i>07</i>
	<i>08</i>
	<i>09</i>
	<i>10</i>



ANALYTICAL REPORT

October 25, 2019

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- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

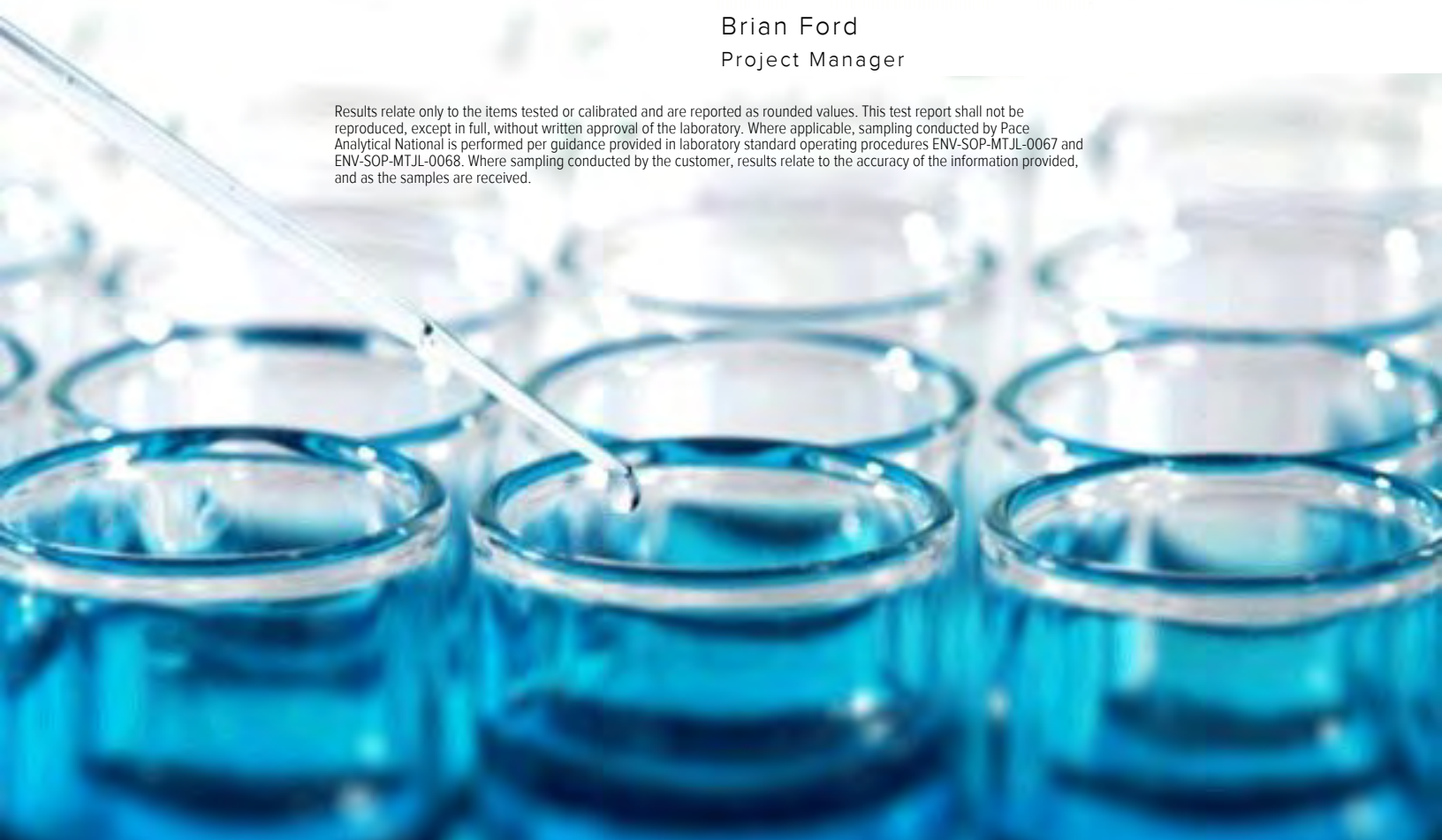
PES Environmental, Inc.- WA

Sample Delivery Group: L1149851
 Samples Received: 10/15/2019
 Project Number: 1413.001.02.501E
 Description:
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-154-101419 L1149851-05	19	6 Qc
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MW-190-101419 L1149851-01 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 09:10
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 11:14	10/18/19 11:14	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363086	1	10/15/19 22:42	10/15/19 22:42	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364227	1	10/17/19 03:19	10/17/19 03:19	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 11:10	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1364938	1	10/18/19 04:37	10/18/19 04:37	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1363432	1	10/16/19 13:10	10/16/19 13:10	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 11:44	10/21/19 11:44	BMB	Mt. Juliet, TN

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MW-146-101419 L1149851-02 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 10:15
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 11:22	10/18/19 11:22	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363086	1	10/15/19 22:56	10/15/19 22:56	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364227	1	10/17/19 03:41	10/17/19 03:41	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 11:25	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1364938	1	10/18/19 05:01	10/18/19 05:01	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1363432	1	10/16/19 13:15	10/16/19 13:15	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 12:03	10/21/19 12:03	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	100	10/23/19 01:49	10/23/19 01:49	TJJ	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

MW-309-101419 L1149851-03 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 10:35
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 11:37	10/18/19 11:37	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363086	1	10/15/19 23:54	10/15/19 23:54	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364227	1	10/17/19 03:58	10/17/19 03:58	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 11:29	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1363432	1	10/16/19 13:25	10/16/19 13:25	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 12:23	10/21/19 12:23	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	1	10/23/19 02:10	10/23/19 02:10	TJJ	Mt. Juliet, TN

MW-189-101419 L1149851-04 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 11:30
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 11:44	10/18/19 11:44	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363086	1	10/16/19 00:08	10/16/19 00:08	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364227	1	10/17/19 04:56	10/17/19 04:56	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 11:32	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1364938	1	10/18/19 05:24	10/18/19 05:24	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1363432	1	10/16/19 13:27	10/16/19 13:27	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 12:43	10/21/19 12:43	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	1	10/23/19 02:30	10/23/19 02:30	TJJ	Mt. Juliet, TN



MW-154-101419 L1149851-05 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 12:05
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 11:52	10/18/19 11:52	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363086	1	10/16/19 00:23	10/16/19 00:23	ELN	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364227	1	10/17/19 05:16	10/17/19 05:16	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 11:58	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1364938	1	10/18/19 05:48	10/18/19 05:48	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364418	1	10/17/19 11:11	10/17/19 11:11	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 13:02	10/21/19 13:02	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	1	10/23/19 02:50	10/23/19 02:50	TJJ	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

MW-122-101419 L1149851-06 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 12:05
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 11:59	10/18/19 11:59	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363090	1	10/15/19 16:07	10/15/19 16:07	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364227	1	10/17/19 05:34	10/17/19 05:34	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 12:02	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364418	1	10/17/19 11:14	10/17/19 11:14	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 13:22	10/21/19 13:22	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	1	10/23/19 03:11	10/23/19 03:11	TJJ	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

MW-111-101419 L1149851-07 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 13:25
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 12:06	10/18/19 12:06	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363090	1	10/15/19 16:33	10/15/19 16:33	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364227	1	10/17/19 05:51	10/17/19 05:51	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 12:05	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364418	1	10/17/19 11:17	10/17/19 11:17	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 13:41	10/21/19 13:41	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	1	10/23/19 03:31	10/23/19 03:31	TJJ	Mt. Juliet, TN

MW-147-101419 L1149851-08 GW

Collected by KZ/HC/BH
Collected date/time 10/14/19 13:55
Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 12:13	10/18/19 12:13	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363090	1	10/15/19 17:38	10/15/19 17:38	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364260	5	10/17/19 16:35	10/17/19 16:35	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 12:09	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1364938	1	10/18/19 06:12	10/18/19 06:12	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364418	1	10/17/19 11:26	10/17/19 11:26	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365165	10	10/18/19 13:08	10/18/19 13:08	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 14:01	10/21/19 14:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	25	10/23/19 03:51	10/23/19 03:51	TJJ	Mt. Juliet, TN



MW-161-101419 L1149851-09 GW

Collected by KZ/HC/BH
 Collected date/time 10/14/19 14:28
 Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 12:20	10/18/19 12:20	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363090	1	10/15/19 17:51	10/15/19 17:51	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364260	1	10/17/19 16:53	10/17/19 16:53	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 12:13	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1367521	1	10/23/19 02:14	10/23/19 02:14	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364418	1	10/17/19 13:20	10/17/19 13:20	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 14:21	10/21/19 14:21	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1367719	1	10/23/19 04:11	10/23/19 04:11	TJJ	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

MW-103-101419 L1149851-10 GW

Collected by KZ/HC/BH
 Collected date/time 10/14/19 14:55
 Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1365104	1	10/18/19 12:27	10/18/19 12:27	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363090	1	10/15/19 18:04	10/15/19 18:04	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1364260	1	10/17/19 17:20	10/17/19 17:20	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364629	1	10/20/19 13:40	10/21/19 12:16	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364418	1	10/17/19 13:23	10/17/19 13:23	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1366365	1	10/21/19 14:40	10/21/19 14:40	BMB	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

TB-101419 L1149851-11 GW

Collected by KZ/HC/BH
 Collected date/time 10/14/19 15:30
 Received date/time 10/15/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1364938	1	10/18/19 01:02	10/18/19 01:02	DWR	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368672	1	10/24/19 16:33	10/24/19 16:33	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369459	1	10/25/19 11:05	10/25/19 11:05	JAH	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	172000		2710	20000	1	10/18/2019 11:14	WG1365104

Sample Narrative:

L1149851-01 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	12800		51.9	1000	1	10/15/2019 22:42	WG1363086
Nitrate	U		22.7	100	1	10/15/2019 22:42	WG1363086
Sulfate	20300		77.4	5000	1	10/15/2019 22:42	WG1363086

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	10300		102	1000	1	10/17/2019 03:19	WG1364227

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1850		15.0	100	1	10/21/2019 11:10	WG1364629
Manganese	406		0.250	5.00	1	10/21/2019 11:10	WG1364629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 04:37	WG1364938
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 04:37	WG1364938

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	428		0.287	0.678	1	10/16/2019 13:10	WG1363432
Ethane	6.87		0.296	1.29	1	10/16/2019 13:10	WG1363432
Ethene	U		0.422	1.27	1	10/16/2019 13:10	WG1363432

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	JO	1.05	25.0	1	10/21/2019 11:44	WG1366365
Acrylonitrile	U	JO	0.873	5.00	1	10/21/2019 11:44	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 11:44	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 11:44	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 11:44	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 11:44	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 11:44	WG1366365
Bromomethane	U	JO	0.157	2.50	1	10/21/2019 11:44	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 11:44	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 11:44	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 11:44	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 11:44	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 11:44	WG1366365

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 10/14/19 09:10

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/21/2019 11:44	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 11:44	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 11:44	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 11:44	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 11:44	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 11:44	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 11:44	WG1366365
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 11:44	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 11:44	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 11:44	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 11:44	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 11:44	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 11:44	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 11:44	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 11:44	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 11:44	WG1366365
1,1-Dichloroethene	U		0.188	0.500	1	10/21/2019 11:44	WG1366365
cis-1,2-Dichloroethene	7.78		0.0933	0.500	1	10/21/2019 11:44	WG1366365
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/21/2019 11:44	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 11:44	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 11:44	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 11:44	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 11:44	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 11:44	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 11:44	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 11:44	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 11:44	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 11:44	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 11:44	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 11:44	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 11:44	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 11:44	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 11:44	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 11:44	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 11:44	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 11:44	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 11:44	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 11:44	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 11:44	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 11:44	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 11:44	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 11:44	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 11:44	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 11:44	WG1366365
Tetrachloroethene	U		0.199	0.500	1	10/21/2019 11:44	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 11:44	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 11:44	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 11:44	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 11:44	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 11:44	WG1366365
Trichloroethene	U		0.153	0.500	1	10/21/2019 11:44	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 11:44	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 11:44	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 11:44	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 11:44	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 11:44	WG1366365

1
Cp

2
Tc

3
Ss

4
Cn

5
Sr

6
Qc

7
Gl

8
Al

9
Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/21/2019 11:44	WG1366365
Vinyl chloride	0.994		0.118	0.500	1	10/21/2019 11:44	WG1366365
Xylenes, Total	U		0.316	1.50	1	10/21/2019 11:44	WG1366365
<i>(S) Toluene-d8</i>	96.6			80.0-120		10/21/2019 11:44	WG1366365
<i>(S) 4-Bromofluorobenzene</i>	94.2			77.0-126		10/21/2019 11:44	WG1366365
<i>(S) 1,2-Dichloroethane-d4</i>	85.9			70.0-130		10/21/2019 11:44	WG1366365

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	338000		2710	20000	1	10/18/2019 11:22	WG1365104

Sample Narrative:

L1149851-02 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	23300		51.9	1000	1	10/15/2019 22:56	WG1363086
Nitrate	U		22.7	100	1	10/15/2019 22:56	WG1363086
Sulfate	20600		77.4	5000	1	10/15/2019 22:56	WG1363086

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3630	<u>B</u>	102	1000	1	10/17/2019 03:41	WG1364227

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2910		15.0	100	1	10/21/2019 11:25	WG1364629
Manganese	898		0.250	5.00	1	10/21/2019 11:25	WG1364629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	1310		31.6	100	1	10/18/2019 05:01	WG1364938
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 05:01	WG1364938

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	6190		0.287	0.678	1	10/16/2019 13:15	WG1363432
Ethane	U		0.296	1.29	1	10/16/2019 13:15	WG1363432
Ethene	394		0.422	1.27	1	10/16/2019 13:15	WG1363432

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/21/2019 12:03	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 12:03	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 12:03	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 12:03	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 12:03	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 12:03	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 12:03	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 12:03	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 12:03	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 12:03	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 12:03	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 12:03	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 12:03	WG1366365

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/14/19 10:15

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/21/2019 12:03	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 12:03	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 12:03	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 12:03	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 12:03	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 12:03	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 12:03	WG1366365
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 12:03	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 12:03	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 12:03	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 12:03	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 12:03	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 12:03	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 12:03	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 12:03	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 12:03	WG1366365
1,1-Dichloroethene	2.83		0.188	0.500	1	10/21/2019 12:03	WG1366365
cis-1,2-Dichloroethene	1350		9.33	50.0	100	10/23/2019 01:49	WG1367719
trans-1,2-Dichloroethene	7.85		0.152	0.500	1	10/21/2019 12:03	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 12:03	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 12:03	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 12:03	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 12:03	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 12:03	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 12:03	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 12:03	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 12:03	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 12:03	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 12:03	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 12:03	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 12:03	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 12:03	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 12:03	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 12:03	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 12:03	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 12:03	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 12:03	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 12:03	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 12:03	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 12:03	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 12:03	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 12:03	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 12:03	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 12:03	WG1366365
Tetrachloroethene	2.03		0.199	0.500	1	10/21/2019 12:03	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 12:03	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 12:03	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 12:03	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 12:03	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 12:03	WG1366365
Trichloroethene	6.77		0.153	0.500	1	10/21/2019 12:03	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 12:03	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 12:03	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 12:03	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 12:03	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 12:03	WG1366365

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/14/19 10:15

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/21/2019 12:03	WG1366365
Vinyl chloride	2830		11.8	50.0	100	10/23/2019 01:49	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 12:03	WG1366365
(S) Toluene-d8	94.4			80.0-120		10/21/2019 12:03	WG1366365
(S) Toluene-d8	96.6			80.0-120		10/23/2019 01:49	WG1367719
(S) 4-Bromofluorobenzene	92.3			77.0-126		10/21/2019 12:03	WG1366365
(S) 4-Bromofluorobenzene	107			77.0-126		10/23/2019 01:49	WG1367719
(S) 1,2-Dichloroethane-d4	81.9			70.0-130		10/21/2019 12:03	WG1366365
(S) 1,2-Dichloroethane-d4	103			70.0-130		10/23/2019 01:49	WG1367719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	228000		2710	20000	1	10/18/2019 11:37	WG1365104

Sample Narrative:

L1149851-03 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	15100		51.9	1000	1	10/15/2019 23:54	WG1363086
Nitrate	U		22.7	100	1	10/15/2019 23:54	WG1363086
Sulfate	86500		77.4	5000	1	10/15/2019 23:54	WG1363086

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	2950	<u>B</u>	102	1000	1	10/17/2019 03:58	WG1364227

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	511		15.0	100	1	10/21/2019 11:29	WG1364629
Manganese	435		0.250	5.00	1	10/21/2019 11:29	WG1364629

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	105		0.287	0.678	1	10/16/2019 13:25	WG1363432
Ethane	U		0.296	1.29	1	10/16/2019 13:25	WG1363432
Ethene	U		0.422	1.27	1	10/16/2019 13:25	WG1363432

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	<u>JO</u>	1.05	25.0	1	10/21/2019 12:23	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 12:23	WG1366365
Benzene	0.295	<u>J</u>	0.0896	0.500	1	10/21/2019 12:23	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 12:23	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 12:23	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 12:23	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 12:23	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 12:23	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 12:23	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 12:23	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 12:23	WG1366365
Carbon disulfide	5.84		0.101	0.500	1	10/21/2019 12:23	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 12:23	WG1366365
Chlorobenzene	U		0.140	0.500	1	10/21/2019 12:23	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 12:23	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 12:23	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 12:23	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 12:23	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 12:23	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 12:23	WG1366365

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/14/19 10:35

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 12:23	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 12:23	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 12:23	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 12:23	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 12:23	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 12:23	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 12:23	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 12:23	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 12:23	WG1366365
1,1-Dichloroethene	U		0.188	0.500	1	10/21/2019 12:23	WG1366365
cis-1,2-Dichloroethene	1.47		0.0933	0.500	1	10/23/2019 02:10	WG1367719
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/21/2019 12:23	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 12:23	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 12:23	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 12:23	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 12:23	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 12:23	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 12:23	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 12:23	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 12:23	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 12:23	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 12:23	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 12:23	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 12:23	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 12:23	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 12:23	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 12:23	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 12:23	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 12:23	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 12:23	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 12:23	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 12:23	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 12:23	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 12:23	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 12:23	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 12:23	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 12:23	WG1366365
Tetrachloroethene	1.11		0.199	0.500	1	10/21/2019 12:23	WG1366365
Toluene	2.01		0.412	0.500	1	10/21/2019 12:23	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 12:23	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 12:23	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 12:23	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 12:23	WG1366365
Trichloroethene	0.497	J	0.153	0.500	1	10/21/2019 12:23	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 12:23	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 12:23	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 12:23	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 12:23	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 12:23	WG1366365
Vinyl acetate	U	JO	0.645	5.00	1	10/21/2019 12:23	WG1366365
Vinyl chloride	6.37		0.118	0.500	1	10/23/2019 02:10	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 12:23	WG1366365
(S) Toluene-d8	99.9			80.0-120		10/21/2019 12:23	WG1366365
(S) Toluene-d8	96.5			80.0-120		10/23/2019 02:10	WG1367719
(S) 4-Bromofluorobenzene	95.2			77.0-126		10/21/2019 12:23	WG1366365
(S) 4-Bromofluorobenzene	102			77.0-126		10/23/2019 02:10	WG1367719

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	84.3			70.0-130		10/21/2019 12:23	WG1366365
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		10/23/2019 02:10	WG1367719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	197000		2710	20000	1	10/18/2019 11:44	WG1365104

Sample Narrative:

L1149851-04 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	17100		51.9	1000	1	10/16/2019 00:08	WG1363086
Nitrate	U		22.7	100	1	10/16/2019 00:08	WG1363086
Sulfate	37200		77.4	5000	1	10/16/2019 00:08	WG1363086

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3780	<u>B</u>	102	1000	1	10/17/2019 04:56	WG1364227

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1330		15.0	100	1	10/21/2019 11:32	WG1364629
Manganese	838		0.250	5.00	1	10/21/2019 11:32	WG1364629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 05:24	WG1364938
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 05:24	WG1364938

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	203		0.287	0.678	1	10/16/2019 13:27	WG1363432
Ethane	U		0.296	1.29	1	10/16/2019 13:27	WG1363432
Ethene	69.9		0.422	1.27	1	10/16/2019 13:27	WG1363432

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/21/2019 12:43	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 12:43	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 12:43	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 12:43	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 12:43	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 12:43	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 12:43	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 12:43	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 12:43	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 12:43	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 12:43	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 12:43	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 12:43	WG1366365

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/14/19 11:30

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/21/2019 12:43	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 12:43	WG1366365
Chloroethane	0.362	J	0.141	2.50	1	10/21/2019 12:43	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 12:43	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 12:43	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 12:43	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 12:43	WG1366365
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 12:43	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 12:43	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 12:43	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 12:43	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 12:43	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 12:43	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 12:43	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 12:43	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 12:43	WG1366365
1,1-Dichloroethene	U		0.188	0.500	1	10/21/2019 12:43	WG1366365
cis-1,2-Dichloroethene	2.23		0.0933	0.500	1	10/23/2019 02:30	WG1367719
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/21/2019 12:43	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 12:43	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 12:43	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 12:43	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 12:43	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 12:43	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 12:43	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 12:43	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 12:43	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 12:43	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 12:43	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 12:43	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 12:43	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 12:43	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 12:43	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 12:43	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 12:43	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 12:43	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 12:43	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 12:43	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 12:43	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 12:43	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 12:43	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 12:43	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 12:43	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 12:43	WG1366365
Tetrachloroethene	U		0.199	0.500	1	10/21/2019 12:43	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 12:43	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 12:43	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 12:43	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 12:43	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 12:43	WG1366365
Trichloroethene	U		0.153	0.500	1	10/21/2019 12:43	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 12:43	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 12:43	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 12:43	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 12:43	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 12:43	WG1366365

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/14/19 11:30

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/21/2019 12:43	WG1366365
Vinyl chloride	18.2		0.118	0.500	1	10/23/2019 02:30	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 12:43	WG1366365
(S) Toluene-d8	96.3			80.0-120		10/21/2019 12:43	WG1366365
(S) Toluene-d8	95.3			80.0-120		10/23/2019 02:30	WG1367719
(S) 4-Bromofluorobenzene	91.4			77.0-126		10/21/2019 12:43	WG1366365
(S) 4-Bromofluorobenzene	102			77.0-126		10/23/2019 02:30	WG1367719
(S) 1,2-Dichloroethane-d4	83.1			70.0-130		10/21/2019 12:43	WG1366365
(S) 1,2-Dichloroethane-d4	98.2			70.0-130		10/23/2019 02:30	WG1367719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	186000		2710	20000	1	10/18/2019 11:52	WG1365104

Sample Narrative:

L1149851-05 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	18400		51.9	1000	1	10/16/2019 00:23	WG1363086
Nitrate	1580		22.7	100	1	10/16/2019 00:23	WG1363086
Sulfate	87800		77.4	5000	1	10/16/2019 00:23	WG1363086

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1920	<u>B</u>	102	1000	1	10/17/2019 05:16	WG1364227

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	173		15.0	100	1	10/21/2019 11:58	WG1364629
Manganese	129		0.250	5.00	1	10/21/2019 11:58	WG1364629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 05:48	WG1364938
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		10/18/2019 05:48	WG1364938

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	10/17/2019 11:11	WG1364418
Ethane	U		0.296	1.29	1	10/17/2019 11:11	WG1364418
Ethene	U		0.422	1.27	1	10/17/2019 11:11	WG1364418

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/21/2019 13:02	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 13:02	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 13:02	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 13:02	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 13:02	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 13:02	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 13:02	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 13:02	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 13:02	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 13:02	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 13:02	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 13:02	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 13:02	WG1366365

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/14/19 12:05

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/21/2019 13:02	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 13:02	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 13:02	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 13:02	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 13:02	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 13:02	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 13:02	WG1366365
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 13:02	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 13:02	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 13:02	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 13:02	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 13:02	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 13:02	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 13:02	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 13:02	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 13:02	WG1366365
1,1-Dichloroethene	U		0.188	0.500	1	10/21/2019 13:02	WG1366365
cis-1,2-Dichloroethene	1.40		0.0933	0.500	1	10/23/2019 02:50	WG1367719
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/21/2019 13:02	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 13:02	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 13:02	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 13:02	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 13:02	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 13:02	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 13:02	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 13:02	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 13:02	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 13:02	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 13:02	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 13:02	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 13:02	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 13:02	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 13:02	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 13:02	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 13:02	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 13:02	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 13:02	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 13:02	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 13:02	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 13:02	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 13:02	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 13:02	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 13:02	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 13:02	WG1366365
Tetrachloroethene	4.99		0.199	0.500	1	10/21/2019 13:02	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 13:02	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 13:02	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 13:02	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 13:02	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 13:02	WG1366365
Trichloroethene	0.445	J	0.153	0.500	1	10/21/2019 13:02	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 13:02	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 13:02	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 13:02	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 13:02	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 13:02	WG1366365

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/14/19 12:05

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/21/2019 13:02	WG1366365
Vinyl chloride	U		0.118	0.500	1	10/23/2019 02:50	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 13:02	WG1366365
(S) Toluene-d8	95.1			80.0-120		10/21/2019 13:02	WG1366365
(S) Toluene-d8	97.5			80.0-120		10/23/2019 02:50	WG1367719
(S) 4-Bromofluorobenzene	91.0			77.0-126		10/21/2019 13:02	WG1366365
(S) 4-Bromofluorobenzene	105			77.0-126		10/23/2019 02:50	WG1367719
(S) 1,2-Dichloroethane-d4	83.6			70.0-130		10/21/2019 13:02	WG1366365
(S) 1,2-Dichloroethane-d4	103			70.0-130		10/23/2019 02:50	WG1367719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/14/19 12:05

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	182000		2710	20000	1	10/18/2019 11:59	WG1365104

Sample Narrative:

L1149851-06 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7800		51.9	1000	1	10/15/2019 16:07	WG1363090
Nitrate	58.4	J	22.7	100	1	10/15/2019 16:07	WG1363090
Sulfate	5820		77.4	5000	1	10/15/2019 16:07	WG1363090

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1190	B	102	1000	1	10/17/2019 05:34	WG1364227

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	348		15.0	100	1	10/21/2019 12:02	WG1364629
Manganese	212		0.250	5.00	1	10/21/2019 12:02	WG1364629

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	U		0.287	0.678	1	10/17/2019 11:14	WG1364418
Ethane	U		0.296	1.29	1	10/17/2019 11:14	WG1364418
Ethene	U		0.422	1.27	1	10/17/2019 11:14	WG1364418

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	JO	1.05	25.0	1	10/21/2019 13:22	WG1366365
Acrylonitrile	U	JO	0.873	5.00	1	10/21/2019 13:22	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 13:22	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 13:22	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 13:22	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 13:22	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 13:22	WG1366365
Bromomethane	U	JO	0.157	2.50	1	10/21/2019 13:22	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 13:22	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 13:22	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 13:22	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 13:22	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 13:22	WG1366365
Chlorobenzene	U		0.140	0.500	1	10/21/2019 13:22	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 13:22	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 13:22	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 13:22	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 13:22	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 13:22	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 13:22	WG1366365

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/14/19 12:05

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 13:22	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 13:22	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 13:22	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 13:22	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 13:22	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 13:22	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 13:22	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 13:22	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 13:22	WG1366365
1,1-Dichloroethene	U		0.188	0.500	1	10/21/2019 13:22	WG1366365
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/23/2019 03:11	WG1367719
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/21/2019 13:22	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 13:22	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 13:22	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 13:22	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 13:22	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 13:22	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 13:22	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 13:22	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 13:22	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 13:22	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 13:22	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 13:22	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 13:22	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 13:22	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 13:22	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 13:22	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 13:22	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 13:22	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 13:22	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 13:22	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 13:22	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 13:22	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 13:22	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 13:22	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 13:22	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 13:22	WG1366365
Tetrachloroethene	0.223	J	0.199	0.500	1	10/21/2019 13:22	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 13:22	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 13:22	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 13:22	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 13:22	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 13:22	WG1366365
Trichloroethene	U		0.153	0.500	1	10/21/2019 13:22	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 13:22	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 13:22	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 13:22	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 13:22	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 13:22	WG1366365
Vinyl acetate	U	JO	0.645	5.00	1	10/21/2019 13:22	WG1366365
Vinyl chloride	U		0.118	0.500	1	10/23/2019 03:11	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 13:22	WG1366365
(S) Toluene-d8	99.6			80.0-120		10/21/2019 13:22	WG1366365
(S) Toluene-d8	95.7			80.0-120		10/23/2019 03:11	WG1367719
(S) 4-Bromofluorobenzene	93.7			77.0-126		10/21/2019 13:22	WG1366365
(S) 4-Bromofluorobenzene	108			77.0-126		10/23/2019 03:11	WG1367719

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/14/19 12:05

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	83.3			70.0-130		10/21/2019 13:22	WG1366365
(S) 1,2-Dichloroethane-d4	102			70.0-130		10/23/2019 03:11	WG1367719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	222000		2710	20000	1	10/18/2019 12:06	WG1365104

Sample Narrative:

L1149851-07 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	29100		51.9	1000	1	10/15/2019 16:33	WG1363090
Nitrate	U		22.7	100	1	10/15/2019 16:33	WG1363090
Sulfate	7700		77.4	5000	1	10/15/2019 16:33	WG1363090

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1970	<u>B</u>	102	1000	1	10/17/2019 05:51	WG1364227

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	159		15.0	100	1	10/21/2019 12:05	WG1364629
Manganese	229		0.250	5.00	1	10/21/2019 12:05	WG1364629

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	324		0.287	0.678	1	10/17/2019 11:17	WG1364418
Ethane	20.9		0.296	1.29	1	10/17/2019 11:17	WG1364418
Ethene	20.1		0.422	1.27	1	10/17/2019 11:17	WG1364418

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.25	<u>J JO</u>	1.05	25.0	1	10/21/2019 13:41	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 13:41	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 13:41	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 13:41	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 13:41	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 13:41	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 13:41	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 13:41	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 13:41	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 13:41	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 13:41	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 13:41	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 13:41	WG1366365
Chlorobenzene	U		0.140	0.500	1	10/21/2019 13:41	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 13:41	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 13:41	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 13:41	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 13:41	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 13:41	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 13:41	WG1366365

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/14/19 13:25

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 13:41	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 13:41	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 13:41	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 13:41	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 13:41	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 13:41	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 13:41	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 13:41	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 13:41	WG1366365
1,1-Dichloroethene	U		0.188	0.500	1	10/21/2019 13:41	WG1366365
cis-1,2-Dichloroethene	0.413	J	0.0933	0.500	1	10/23/2019 03:31	WG1367719
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/21/2019 13:41	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 13:41	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 13:41	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 13:41	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 13:41	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 13:41	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 13:41	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 13:41	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 13:41	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 13:41	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 13:41	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 13:41	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 13:41	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 13:41	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 13:41	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 13:41	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 13:41	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 13:41	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 13:41	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 13:41	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 13:41	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 13:41	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 13:41	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 13:41	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 13:41	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 13:41	WG1366365
Tetrachloroethene	U		0.199	0.500	1	10/21/2019 13:41	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 13:41	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 13:41	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 13:41	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 13:41	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 13:41	WG1366365
Trichloroethene	U		0.153	0.500	1	10/21/2019 13:41	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 13:41	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 13:41	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 13:41	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 13:41	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 13:41	WG1366365
Vinyl acetate	U	JO	0.645	5.00	1	10/21/2019 13:41	WG1366365
Vinyl chloride	8.63		0.118	0.500	1	10/23/2019 03:31	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 13:41	WG1366365
(S) Toluene-d8	97.1			80.0-120		10/21/2019 13:41	WG1366365
(S) Toluene-d8	94.2			80.0-120		10/23/2019 03:31	WG1367719
(S) 4-Bromofluorobenzene	90.6			77.0-126		10/21/2019 13:41	WG1366365
(S) 4-Bromofluorobenzene	101			77.0-126		10/23/2019 03:31	WG1367719

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	81.7			70.0-130		10/21/2019 13:41	WG1366365
(S) 1,2-Dichloroethane-d4	108			70.0-130		10/23/2019 03:31	WG1367719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	339000		2710	20000	1	10/18/2019 12:13	WG1365104

Sample Narrative:

L1149851-08 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	23200		51.9	1000	1	10/15/2019 17:38	WG1363090
Nitrate	U		22.7	100	1	10/15/2019 17:38	WG1363090
Sulfate	28000		77.4	5000	1	10/15/2019 17:38	WG1363090

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	6700	<u>B</u>	510	5000	5	10/17/2019 16:35	WG1364260

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	9370		15.0	100	1	10/21/2019 12:09	WG1364629
Manganese	919		0.250	5.00	1	10/21/2019 12:09	WG1364629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	513		31.6	100	1	10/18/2019 06:12	WG1364938
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 06:12	WG1364938

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	7830		2.87	6.78	10	10/18/2019 13:08	WG1365165
Ethane	2.94		0.296	1.29	1	10/17/2019 11:26	WG1364418
Ethene	457		0.422	1.27	1	10/17/2019 11:26	WG1364418

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/21/2019 14:01	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 14:01	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 14:01	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 14:01	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 14:01	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 14:01	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 14:01	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 14:01	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 14:01	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 14:01	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 14:01	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 14:01	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 14:01	WG1366365

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Collected date/time: 10/14/19 13:55

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/21/2019 14:01	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 14:01	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 14:01	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 14:01	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 14:01	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 14:01	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 14:01	WG1366365
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 14:01	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 14:01	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 14:01	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 14:01	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 14:01	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 14:01	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 14:01	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 14:01	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 14:01	WG1366365
1,1-Dichloroethene	1.92		0.188	0.500	1	10/21/2019 14:01	WG1366365
cis-1,2-Dichloroethene	597		2.33	12.5	25	10/23/2019 03:51	WG1367719
trans-1,2-Dichloroethene	2.91		0.152	0.500	1	10/21/2019 14:01	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 14:01	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 14:01	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 14:01	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 14:01	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 14:01	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 14:01	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 14:01	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 14:01	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 14:01	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 14:01	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 14:01	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 14:01	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 14:01	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 14:01	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 14:01	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 14:01	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 14:01	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 14:01	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 14:01	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 14:01	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 14:01	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 14:01	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 14:01	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 14:01	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 14:01	WG1366365
Tetrachloroethene	U		0.199	0.500	1	10/21/2019 14:01	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 14:01	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 14:01	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 14:01	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 14:01	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 14:01	WG1366365
Trichloroethene	3.38		0.153	0.500	1	10/21/2019 14:01	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 14:01	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 14:01	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 14:01	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 14:01	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 14:01	WG1366365

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/14/19 13:55

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/21/2019 14:01	WG1366365
Vinyl chloride	1410		2.95	12.5	25	10/23/2019 03:51	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 14:01	WG1366365
(S) Toluene-d8	98.9			80.0-120		10/21/2019 14:01	WG1366365
(S) Toluene-d8	96.4			80.0-120		10/23/2019 03:51	WG1367719
(S) 4-Bromofluorobenzene	95.6			77.0-126		10/21/2019 14:01	WG1366365
(S) 4-Bromofluorobenzene	102			77.0-126		10/23/2019 03:51	WG1367719
(S) 1,2-Dichloroethane-d4	81.8			70.0-130		10/21/2019 14:01	WG1366365
(S) 1,2-Dichloroethane-d4	102			70.0-130		10/23/2019 03:51	WG1367719

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	289000		2710	20000	1	10/18/2019 12:20	WG1365104

Sample Narrative:

L1149851-09 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	26000		51.9	1000	1	10/15/2019 17:51	WG1363090
Nitrate	U		22.7	100	1	10/15/2019 17:51	WG1363090
Sulfate	14400		77.4	5000	1	10/15/2019 17:51	WG1363090

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1280	<u>B</u>	102	1000	1	10/17/2019 16:53	WG1364260

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1390		15.0	100	1	10/21/2019 12:13	WG1364629
Manganese	737		0.250	5.00	1	10/21/2019 12:13	WG1364629

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	54.7	<u>B, J</u>	31.6	100	1	10/23/2019 02:14	WG1367521
(S) a,a,a-Trifluorotoluene(FID)	103			78.0-120		10/23/2019 02:14	WG1367521

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	226		0.287	0.678	1	10/17/2019 13:20	WG1364418
Ethane	U		0.296	1.29	1	10/17/2019 13:20	WG1364418
Ethene	U		0.422	1.27	1	10/17/2019 13:20	WG1364418

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/21/2019 14:21	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 14:21	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 14:21	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 14:21	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 14:21	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 14:21	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 14:21	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 14:21	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 14:21	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 14:21	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 14:21	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 14:21	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 14:21	WG1366365

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/14/19 14:28

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/21/2019 14:21	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 14:21	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 14:21	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 14:21	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 14:21	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 14:21	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 14:21	WG1366365
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 14:21	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 14:21	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 14:21	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 14:21	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 14:21	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 14:21	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 14:21	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 14:21	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 14:21	WG1366365
1,1-Dichloroethene	0.451	<u>J</u>	0.188	0.500	1	10/21/2019 14:21	WG1366365
cis-1,2-Dichloroethene	1.30		0.0933	0.500	1	10/23/2019 04:11	WG1367719
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/21/2019 14:21	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 14:21	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 14:21	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 14:21	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 14:21	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 14:21	WG1366365
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	10/21/2019 14:21	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 14:21	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 14:21	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 14:21	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 14:21	WG1366365
2-Hexanone	U	<u>JO</u>	0.757	5.00	1	10/21/2019 14:21	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 14:21	WG1366365
Iodomethane	U	<u>JO</u>	0.377	10.0	1	10/21/2019 14:21	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 14:21	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 14:21	WG1366365
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/21/2019 14:21	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 14:21	WG1366365
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	10/21/2019 14:21	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 14:21	WG1366365
Naphthalene	U	<u>JO</u>	0.174	2.50	1	10/21/2019 14:21	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 14:21	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 14:21	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 14:21	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 14:21	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 14:21	WG1366365
Tetrachloroethene	U		0.199	0.500	1	10/21/2019 14:21	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 14:21	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 14:21	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 14:21	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 14:21	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 14:21	WG1366365
Trichloroethene	0.978		0.153	0.500	1	10/21/2019 14:21	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 14:21	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 14:21	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 14:21	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 14:21	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 14:21	WG1366365

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/14/19 14:28

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/21/2019 14:21	WG1366365
Vinyl chloride	U		0.118	0.500	1	10/23/2019 04:11	WG1367719
Xylenes, Total	U		0.316	1.50	1	10/21/2019 14:21	WG1366365
(S) Toluene-d8	97.1			80.0-120		10/21/2019 14:21	WG1366365
(S) Toluene-d8	94.4			80.0-120		10/23/2019 04:11	WG1367719
(S) 4-Bromofluorobenzene	90.8			77.0-126		10/21/2019 14:21	WG1366365
(S) 4-Bromofluorobenzene	104			77.0-126		10/23/2019 04:11	WG1367719
(S) 1,2-Dichloroethane-d4	80.7			70.0-130		10/21/2019 14:21	WG1366365
(S) 1,2-Dichloroethane-d4	103			70.0-130		10/23/2019 04:11	WG1367719

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	302000		2710	20000	1	10/18/2019 12:27	WG1365104

Sample Narrative:

L1149851-10 WG1365104: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	27400		51.9	1000	1	10/15/2019 18:04	WG1363090
Nitrate	U		22.7	100	1	10/15/2019 18:04	WG1363090
Sulfate	25000		77.4	5000	1	10/15/2019 18:04	WG1363090

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	1550	<u>B</u>	102	1000	1	10/17/2019 17:20	WG1364260

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	948		15.0	100	1	10/21/2019 12:16	WG1364629
Manganese	870		0.250	5.00	1	10/21/2019 12:16	WG1364629

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	166		0.287	0.678	1	10/17/2019 13:23	WG1364418
Ethane	17.7		0.296	1.29	1	10/17/2019 13:23	WG1364418
Ethene	13.8		0.422	1.27	1	10/17/2019 13:23	WG1364418

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	<u>JO</u>	1.05	25.0	1	10/21/2019 14:40	WG1366365
Acrylonitrile	U	<u>JO</u>	0.873	5.00	1	10/21/2019 14:40	WG1366365
Benzene	U		0.0896	0.500	1	10/21/2019 14:40	WG1366365
Bromobenzene	U		0.133	0.500	1	10/21/2019 14:40	WG1366365
Bromodichloromethane	U		0.0800	0.500	1	10/21/2019 14:40	WG1366365
Bromochloromethane	U		0.145	0.500	1	10/21/2019 14:40	WG1366365
Bromoform	U		0.186	0.500	1	10/21/2019 14:40	WG1366365
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/21/2019 14:40	WG1366365
n-Butylbenzene	U		0.143	0.500	1	10/21/2019 14:40	WG1366365
sec-Butylbenzene	U		0.134	0.500	1	10/21/2019 14:40	WG1366365
tert-Butylbenzene	U		0.183	0.500	1	10/21/2019 14:40	WG1366365
Carbon disulfide	U		0.101	0.500	1	10/21/2019 14:40	WG1366365
Carbon tetrachloride	U		0.159	0.500	1	10/21/2019 14:40	WG1366365
Chlorobenzene	U		0.140	0.500	1	10/21/2019 14:40	WG1366365
Chlorodibromomethane	U		0.128	0.500	1	10/21/2019 14:40	WG1366365
Chloroethane	U		0.141	2.50	1	10/21/2019 14:40	WG1366365
Chloroform	U		0.0860	0.500	1	10/21/2019 14:40	WG1366365
Chloromethane	U		0.153	1.25	1	10/21/2019 14:40	WG1366365
2-Chlorotoluene	U		0.111	0.500	1	10/21/2019 14:40	WG1366365
4-Chlorotoluene	U		0.0972	0.500	1	10/21/2019 14:40	WG1366365

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/14/19 14:55

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/21/2019 14:40	WG1366365
1,2-Dibromoethane	U		0.193	0.500	1	10/21/2019 14:40	WG1366365
Dibromomethane	U		0.117	0.500	1	10/21/2019 14:40	WG1366365
1,2-Dichlorobenzene	U		0.101	0.500	1	10/21/2019 14:40	WG1366365
1,3-Dichlorobenzene	U		0.130	0.500	1	10/21/2019 14:40	WG1366365
1,4-Dichlorobenzene	U		0.121	0.500	1	10/21/2019 14:40	WG1366365
Dichlorodifluoromethane	U		0.127	2.50	1	10/21/2019 14:40	WG1366365
1,1-Dichloroethane	U		0.114	0.500	1	10/21/2019 14:40	WG1366365
1,2-Dichloroethane	U		0.108	0.500	1	10/21/2019 14:40	WG1366365
1,1-Dichloroethene	1.08		0.188	0.500	1	10/21/2019 14:40	WG1366365
cis-1,2-Dichloroethene	91.7		0.0933	0.500	1	10/21/2019 14:40	WG1366365
trans-1,2-Dichloroethene	0.158	J	0.152	0.500	1	10/21/2019 14:40	WG1366365
1,2-Dichloropropane	U		0.190	0.500	1	10/21/2019 14:40	WG1366365
1,1-Dichloropropene	U		0.128	0.500	1	10/21/2019 14:40	WG1366365
1,3-Dichloropropane	U		0.147	1.00	1	10/21/2019 14:40	WG1366365
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/21/2019 14:40	WG1366365
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/21/2019 14:40	WG1366365
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/21/2019 14:40	WG1366365
2,2-Dichloropropane	U		0.0929	0.500	1	10/21/2019 14:40	WG1366365
Di-isopropyl ether	U		0.0924	0.500	1	10/21/2019 14:40	WG1366365
Ethylbenzene	U		0.158	0.500	1	10/21/2019 14:40	WG1366365
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/21/2019 14:40	WG1366365
2-Hexanone	U	JO	0.757	5.00	1	10/21/2019 14:40	WG1366365
n-Hexane	U		0.305	5.00	1	10/21/2019 14:40	WG1366365
Iodomethane	U	JO	0.377	10.0	1	10/21/2019 14:40	WG1366365
Isopropylbenzene	U		0.126	0.500	1	10/21/2019 14:40	WG1366365
p-Isopropyltoluene	U		0.138	0.500	1	10/21/2019 14:40	WG1366365
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/21/2019 14:40	WG1366365
Methylene Chloride	U		1.07	2.50	1	10/21/2019 14:40	WG1366365
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/21/2019 14:40	WG1366365
Methyl tert-butyl ether	U		0.102	0.500	1	10/21/2019 14:40	WG1366365
Naphthalene	U	JO	0.174	2.50	1	10/21/2019 14:40	WG1366365
n-Propylbenzene	U		0.162	0.500	1	10/21/2019 14:40	WG1366365
Styrene	U		0.117	0.500	1	10/21/2019 14:40	WG1366365
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/21/2019 14:40	WG1366365
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/21/2019 14:40	WG1366365
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/21/2019 14:40	WG1366365
Tetrachloroethene	U		0.199	0.500	1	10/21/2019 14:40	WG1366365
Toluene	U		0.412	0.500	1	10/21/2019 14:40	WG1366365
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/21/2019 14:40	WG1366365
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/21/2019 14:40	WG1366365
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/21/2019 14:40	WG1366365
1,1,2-Trichloroethane	U		0.186	0.500	1	10/21/2019 14:40	WG1366365
Trichloroethene	U		0.153	0.500	1	10/21/2019 14:40	WG1366365
Trichlorofluoromethane	U		0.130	2.50	1	10/21/2019 14:40	WG1366365
1,2,3-Trichloropropane	U		0.247	2.50	1	10/21/2019 14:40	WG1366365
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/21/2019 14:40	WG1366365
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/21/2019 14:40	WG1366365
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/21/2019 14:40	WG1366365
Vinyl acetate	U	JO	0.645	5.00	1	10/21/2019 14:40	WG1366365
Vinyl chloride	51.8		0.118	0.500	1	10/21/2019 14:40	WG1366365
Xylenes, Total	U		0.316	1.50	1	10/21/2019 14:40	WG1366365
(S) Toluene-d8	95.4			80.0-120		10/21/2019 14:40	WG1366365
(S) 4-Bromofluorobenzene	89.6			77.0-126		10/21/2019 14:40	WG1366365
(S) 1,2-Dichloroethane-d4	82.6			70.0-130		10/21/2019 14:40	WG1366365

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/14/19 15:30

L1149851

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 01:02	WG1364938
(S) a,a,a-Trifluorotoluene(FID)	108			78.0-120		10/18/2019 01:02	WG1364938

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.29	J	1.05	25.0	1	10/25/2019 11:05	WG1369459
Acrylonitrile	U		0.873	5.00	1	10/24/2019 16:33	WG1368672
Benzene	U		0.0896	0.500	1	10/24/2019 16:33	WG1368672
Bromobenzene	U		0.133	0.500	1	10/24/2019 16:33	WG1368672
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 16:33	WG1368672
Bromochloromethane	U		0.145	0.500	1	10/24/2019 16:33	WG1368672
Bromoform	U		0.186	0.500	1	10/24/2019 16:33	WG1368672
Bromomethane	U		0.157	2.50	1	10/24/2019 16:33	WG1368672
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 16:33	WG1368672
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 16:33	WG1368672
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 16:33	WG1368672
Carbon disulfide	U		0.101	0.500	1	10/24/2019 16:33	WG1368672
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 16:33	WG1368672
Chlorobenzene	U		0.140	0.500	1	10/24/2019 16:33	WG1368672
Chlorodibromomethane	U		0.128	0.500	1	10/24/2019 16:33	WG1368672
Chloroethane	U	JO	0.141	2.50	1	10/24/2019 16:33	WG1368672
Chloroform	U		0.0860	0.500	1	10/24/2019 16:33	WG1368672
Chloromethane	U		0.153	1.25	1	10/24/2019 16:33	WG1368672
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 16:33	WG1368672
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 16:33	WG1368672
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 16:33	WG1368672
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 16:33	WG1368672
Dibromomethane	U		0.117	0.500	1	10/24/2019 16:33	WG1368672
1,2-Dichlorobenzene	U		0.101	0.500	1	10/24/2019 16:33	WG1368672
1,3-Dichlorobenzene	U		0.130	0.500	1	10/24/2019 16:33	WG1368672
1,4-Dichlorobenzene	U		0.121	0.500	1	10/24/2019 16:33	WG1368672
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 16:33	WG1368672
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 16:33	WG1368672
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 16:33	WG1368672
1,1-Dichloroethene	U		0.188	0.500	1	10/24/2019 16:33	WG1368672
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/24/2019 16:33	WG1368672
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/24/2019 16:33	WG1368672
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 16:33	WG1368672
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 16:33	WG1368672
1,3-Dichloropropane	U		0.147	1.00	1	10/24/2019 16:33	WG1368672
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 16:33	WG1368672
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 16:33	WG1368672
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/24/2019 16:33	WG1368672
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 16:33	WG1368672
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 16:33	WG1368672
Ethylbenzene	U		0.158	0.500	1	10/24/2019 16:33	WG1368672
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 16:33	WG1368672
2-Hexanone	U		0.757	5.00	1	10/24/2019 16:33	WG1368672
n-Hexane	U		0.305	5.00	1	10/24/2019 16:33	WG1368672
Iodomethane	U		0.377	10.0	1	10/24/2019 16:33	WG1368672
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 16:33	WG1368672
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 16:33	WG1368672
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 16:33	WG1368672



Collected date/time: 10/14/19 15:30

L1149851

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/24/2019 16:33	WG1368672
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 16:33	WG1368672
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 16:33	WG1368672
Naphthalene	U		0.174	2.50	1	10/24/2019 16:33	WG1368672
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 16:33	WG1368672
Styrene	U		0.117	0.500	1	10/24/2019 16:33	WG1368672
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 16:33	WG1368672
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/24/2019 16:33	WG1368672
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 16:33	WG1368672
Tetrachloroethene	U		0.199	0.500	1	10/24/2019 16:33	WG1368672
Toluene	U		0.412	0.500	1	10/24/2019 16:33	WG1368672
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 16:33	WG1368672
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 16:33	WG1368672
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 16:33	WG1368672
1,1,2-Trichloroethane	U		0.186	0.500	1	10/24/2019 16:33	WG1368672
Trichloroethene	U		0.153	0.500	1	10/24/2019 16:33	WG1368672
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 16:33	WG1368672
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 16:33	WG1368672
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 16:33	WG1368672
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 16:33	WG1368672
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 16:33	WG1368672
Vinyl acetate	U	J4	0.645	5.00	1	10/24/2019 16:33	WG1368672
Vinyl chloride	U		0.118	0.500	1	10/24/2019 16:33	WG1368672
Xylenes, Total	U		0.316	1.50	1	10/24/2019 16:33	WG1368672
(S) Toluene-d8	105			80.0-120		10/24/2019 16:33	WG1368672
(S) Toluene-d8	97.2			80.0-120		10/25/2019 11:05	WG1369459
(S) 4-Bromofluorobenzene	99.0			77.0-126		10/24/2019 16:33	WG1368672
(S) 4-Bromofluorobenzene	106			77.0-126		10/25/2019 11:05	WG1369459
(S) 1,2-Dichloroethane-d4	100			70.0-130		10/24/2019 16:33	WG1368672
(S) 1,2-Dichloroethane-d4	98.7			70.0-130		10/25/2019 11:05	WG1369459

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3462708-1 10/18/19 10:07

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Alkalinity	3710	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1147295-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1147295-01 10/18/19 10:17 • (DUP) R3462708-2 10/18/19 10:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	168000	168000	1	0.177		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

L1149977-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1149977-02 10/18/19 12:40 • (DUP) R3462708-4 10/18/19 12:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Alkalinity	41000	40700	1	0.520		20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3462708-3 10/18/19 11:28

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Alkalinity	100000	99200	99.2	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3461441-1 10/15/19 14:23

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		51.9	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1149795-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1149795-01 10/15/19 16:27 • (DUP) R3461441-3 10/15/19 16:42

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Chloride	22700	22600	1	0.451		15
Nitrate	ND	0.000	1	0.000		15
Sulfate	56400	56500	1	0.179		15

L1149841-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1149841-01 10/15/19 22:13 • (DUP) R3461441-6 10/15/19 22:28

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Chloride	14000	13900	1	0.362		15
Nitrate	137	133	1	2.88		15
Sulfate	184000	184000	1	0.128	E	15

Laboratory Control Sample (LCS)

(LCS) R3461441-2 10/15/19 14:37

Analyte	Spike Amount		LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l				
Chloride	40000	39400	98.5		80.0-120	
Nitrate	8000	8120	101		80.0-120	
Sulfate	40000	40700	102		80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1149851-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	236000	274000	275000	76.0	76.6	1	80.0-120	E V	E V	0.106	15
Nitrate	5000	1280	6260	6360	99.6	102	1	80.0-120			1.62	15
Sulfate	50000	15400	65900	65700	101	101	1	80.0-120			0.364	15

L1149851-02 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	23300	72800	99.1	1	80.0-120	
Nitrate	5000	U	4920	98.3	1	80.0-120	
Sulfate	50000	20600	70400	99.6	1	80.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.00102.501E

SDG:

L1149851

DATE/TIME:

10/25/19 17:27

PAGE:

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Method Blank (MB)

(MB) R3461431-1 10/15/19 09:38

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	61.6	J	51.9	1000
Nitrate	U		22.7	100
Sulfate	107	J	77.4	5000

L1149872-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1149872-02 10/15/19 15:14 • (DUP) R3461431-3 10/15/19 15:28

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	DUP Result		%	DUP RPD		
Chloride	45800	46100	1	0.661			15
Nitrate	7420	7470	1	0.687			15
Sulfate	23000	23100	1	0.167			15

L1149851-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1149851-06 10/15/19 16:07 • (DUP) R3461431-5 10/15/19 16:20

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	DUP Result		%	DUP RPD		
Chloride	7800	7500	1	3.90			15
Nitrate	58.4	55.7	1	4.73	J		15
Sulfate	5820	5840	1	0.295			15

Laboratory Control Sample (LCS)

(LCS) R3461431-2 10/15/19 09:51

Analyte	Spike Amount		LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	LCS Result		%	%	
Chloride	40000	38700	96.7	80.0-120		
Nitrate	8000	8030	100	80.0-120		
Sulfate	40000	38900	97.3	80.0-120		

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1 Cp
2 Tc
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6 Qc
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L1149872-02 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	45800	92500	93.3	1	80.0-120	
Nitrate	5000	7420	12000	91.3	1	80.0-120	E
Sulfate	50000	23000	71100	96.2	1	80.0-120	

L1149851-07 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	29100	76400	76200	94.7	94.1	1	80.0-120			0.345	15
Nitrate	5000	U	4960	4970	99.3	99.4	1	80.0-120			0.111	15
Sulfate	50000	7700	56500	56100	97.5	96.9	1	80.0-120			0.571	15

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Method Blank (MB)

(MB) R3462022-1	10/16/19 18:09	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	416	<u>J</u>	102	1000	

L1149387-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1149387-08	10/16/19 21:34 • (DUP) R3462022-3	10/16/19 21:57			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	6970	7050	1	1.08	20

L1149591-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1149591-06	10/17/19 08:46 • (DUP) R3462022-9	10/17/19 09:03			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	489	421	1	15.1	<u>J</u> 20

Laboratory Control Sample (LCS)

(LCS) R3462022-2	10/16/19 18:52				
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>	
Analyte	ug/l	ug/l	%	%	
TOC	75000	69000	92.0	85.0-115	

L1149591-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1149591-04	10/17/19 00:20 • (MS) R3462022-4	10/17/19 00:42 • (MSD) R3462022-5	10/17/19 01:04		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	5870	53200	94.7	98.1
		Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>
		1	80.0-120	3.11	20
				RPD	RPD Limits
				%	%

L1149851-03 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1149851-03	10/17/19 03:58 • (MS) R3462022-7	10/17/19 04:19 • (MSD) R3462022-8	10/17/19 04:40		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	2950	50000	49.700	94.1
		Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>
		1	80.0-120	0.542	20
				RPD	RPD Limits
				%	%

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Method Blank (MB)

(MB) R3462318-1	10/17/19 14:53	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	422	1	ug/l	1000
TOC (Total Organic Carbon)					

L1150179-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1150179-01	10/17/19 17:59 • (DUP) R3462318-3	10/17/19 18:20	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	1500	1460	1	2.78	%	%	20
TOC								

L1150179-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1150179-07	10/17/19 22:20 • (DUP) R3462318-6	10/17/19 22:46	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	130000	127000	5	2.26	%	%	20
TOC								

Laboratory Control Sample (LCS)

(LCS) R3462318-2	10/17/19 15:36	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	75000	69500	92.6	85.0-115	%
TOC						

L1150179-04 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150179-04	10/17/19 20:40 • (MS) R3462318-4	10/17/19 21:01 • (MSD) R3462318-5	10/17/19 21:22	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	50000	ND	47200	48700	93.1	96.1	80.0-120	3.17	20	%	%	%	%	
TOC															

L1150234-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150234-01	10/18/19 01:16 • (MS) R3462318-7	10/18/19 01:39 • (MSD) R3462318-8	10/18/19 02:01	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	50000	7380	55600	55000	96.4	95.2	80.0-120	1.01	20	%	%	%	%	
TOC															

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Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Iron	U		15.0 ug/l	100 ug/l
Manganese	0.540	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount	LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
		ug/l	%	ug/l	%							
Iron	5000	5110	102	5090	102	102	102	80.0-120		0.334	20	20
Manganese	50.0	50.9	102	50.0	102	100	100	80.0-120		1.71	20	20

L1149851-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result		MS Result		MSD Result		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
		ug/l	%	ug/l	%	ug/l	%						
Iron	5000	1850	104	7050	102	102	102	1	75.0-125			161	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1149851-01.02.04.05.08.11](#)

Method Blank (MB)

(MB) R3463331-2 10/18/19 00:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) <i>o,o</i> -Trifluorotoluene(FID)	107			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3463331-1 10/17/19 23:14

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5340	97.1	70.0-124	
^(S) <i>o,o</i> -Trifluorotoluene(FID)			83.7	78.0-120	

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1149851-09](#)

Method Blank (MB)

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	62.3	J	316	100
^(S) a,a-o-Trifluorotoluene(FID)	104			78.0-120

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
									%	%
Gasoline Range Organics-NWTPH	5500	6540	6030	119	110	70.0-124			8.11	20
^(S) a,a-o-Trifluorotoluene(FID)				107	106	78.0-120				

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Method Blank (MB)

(MB) R3461591-1 10/16/19 10:37

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1149371-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1149371-06 10/16/19 11:29 • (DUP) R3461591-2 10/16/19 12:00

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Methane	1080	1130	1	4.95		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

L1149387-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1149387-04 10/16/19 13:29 • (DUP) R3461591-3 10/16/19 13:32

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Methane	12.3	12.9	1	4.67		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3461591-4 10/16/19 13:35 • (LCSD) R3461591-5 10/16/19 13:39

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%							
Methane	67.8	75.3	76.3	76.3	111	112			85.0-115			1.34	20
Ethane	129	133	129	129	103	100			85.0-115			2.40	20
Ethene	127	138	135	135	109	106			85.0-115			2.67	20



Volatile Organic Compounds (GC) by Method RSK175

[L1149851-05.06.07.08.09.10](#)

Method Blank (MB)

(MB) R3462073-1 10/17/19 10:48

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1149851-07 Original Sample (OS) • Duplicate (DUP)

(OS) L1149851-07 10/17/19 11:17 • (DUP) R3462073-2 10/17/19 13:16

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Methane	324	319	1	1.78		20
Ethane	20.9	19.8	1	5.28		20
Ethene	20.1	19.4	1	3.31		20

L1150060-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1150060-01 10/17/19 13:25 • (DUP) R3462073-3 10/17/19 13:56

Analyte	Original Result		DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l					
Methane	1720	1730	1	0.724		20	
Ethane	97.1	98.5	1	1.46		20	
Ethene	197	199	1	1.02		20	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3462073-4 10/17/19 14:02 • (LCSD) R3462073-5 10/17/19 14:06

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%							
Methane	67.8	70.5	71.5	104	106			85.0-115			1.46	20	
Ethane	129	127	128	98.6	98.9			85.0-115			0.256	20	
Ethene	127	133	133	104	105			85.0-115			0.285	20	



Volatile Organic Compounds (GC) by Method RSK175

[L1149851-08](#)

Method Blank (MB)

(MB) R3462507-1 10/18/19 13:05		MB Result		<u>MB Qualifier</u>		MB MDL		MB RDL	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287		0.678				

L1150336-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1150336-08 10/18/19 13:10 • (DUP) R3462507-2 10/18/19 13:33		Original Result		DUP Result		Dilution		DUP RPD		<u>DUP Qualifier</u>		DUP RPD Limits	
Analyte	ug/l	ug/l	ug/l	%	%		%	%	%	%	%	%	%
Methane	20.2	22.0	1	8.39			20						

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3462507-5 10/18/19 13:50 • (LCSD) R3462507-6 10/18/19 13:56		Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits		<u>LCS Qualifier</u>		<u>LCSD Qualifier</u>		RPD		RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Methane	67.8	72.3	71.6	107	106			85.0-115		0.913		20									

L1150339-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150339-10 10/18/19 13:42 • (MS) R3462507-3 10/18/19 13:45 • (MSD) R3462507-4 10/18/19 13:47		Spike Amount		Original Result		MS Result		MSD Result		MS Rec.		MSD Rec.		Dilution		Rec. Limits		<u>MS Qualifier</u>		<u>MSD Qualifier</u>		RPD		RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%	%	%	%	%	%	%	%	
Methane	67.8	10400	10600	11000	19.7	74.1	10	85.0-115		Y	Y											3.43		20	

1 Cp
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(MB) R3463753-2 10/21/19 08:08

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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(MB) R3463753-2 10/21/19 08:08

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	98.9			80.0-120
(S) 4-Bromofluorobenzene	92.7			77.0-126
(S) 1,2-Dichloroethane-d4	83.6			70.0-130

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Laboratory Control Sample (LCS)

(LCS) R3463753-1 10/21/19 06:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	88.2	70.6	19.0-160	
Acrylonitrile	125	94.1	75.3	55.0-149	
Benzene	25.0	22.6	90.4	70.0-123	
Bromobenzene	25.0	24.4	97.6	73.0-121	
Bromodichloromethane	25.0	22.1	88.4	75.0-120	
Bromochloromethane	25.0	24.0	96.0	76.0-122	
Bromoform	25.0	22.6	90.4	68.0-132	
Bromomethane	25.0	19.1	76.4	10.0-160	
n-Butylbenzene	25.0	26.5	106	73.0-125	
sec-Butylbenzene	25.0	25.4	102	75.0-125	
tert-Butylbenzene	25.0	24.3	97.2	76.0-124	
Carbon disulfide	25.0	22.4	89.6	61.0-128	
Carbon tetrachloride	25.0	21.3	85.2	68.0-126	
Chlorobenzene	25.0	24.3	97.2	80.0-121	
Chlorodibromomethane	25.0	23.7	94.8	77.0-125	
Chloroethane	25.0	23.4	93.6	47.0-150	
Chloroform	25.0	22.0	88.0	73.0-120	
Chloromethane	25.0	20.1	80.4	41.0-142	
2-Chlorotoluene	25.0	24.2	96.8	76.0-123	
4-Chlorotoluene	25.0	23.4	93.6	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	20.3	81.2	58.0-134	
1,2-Dibromoethane	25.0	23.5	94.0	80.0-122	
Dibromomethane	25.0	22.3	89.2	80.0-120	
1,2-Dichlorobenzene	25.0	26.3	105	79.0-121	
1,3-Dichlorobenzene	25.0	26.7	107	79.0-120	
1,4-Dichlorobenzene	25.0	26.5	106	79.0-120	
Dichlorodifluoromethane	25.0	25.4	102	51.0-149	
1,1-Dichloroethane	25.0	21.3	85.2	70.0-126	
1,2-Dichloroethane	25.0	20.1	80.4	70.0-128	
1,1-Dichloroethene	25.0	25.6	102	71.0-124	
cis-1,2-Dichloroethene	25.0	24.1	96.4	73.0-120	
trans-1,2-Dichloroethene	25.0	23.2	92.8	73.0-120	
1,2-Dichloropropane	25.0	21.0	84.0	77.0-125	
1,1-Dichloropropene	25.0	23.7	94.8	74.0-126	
1,3-Dichloropropene	25.0	24.3	97.2	80.0-120	
cis-1,3-Dichloropropene	25.0	22.0	88.0	80.0-123	
trans-1,3-Dichloropropene	25.0	22.8	91.2	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	14.8	59.2	33.0-144	
2,2-Dichloropropane	25.0	20.1	80.4	58.0-130	
Di-isopropyl ether	25.0	20.6	82.4	58.0-138	

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1 Cp
2 Tc
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Laboratory Control Sample (LCS)

(LCS) R3463753-1 10/21/19 06:49

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	23.6	94.4	79.0-123	
Hexachloro-1,3-butadiene	25.0	33.8	135	54.0-138	
2-Hexanone	125	98.0	78.4	67.0-149	
n-Hexane	25.0	20.8	83.2	57.0-133	
Iodomethane	125	98.7	79.0	33.0-147	
Isopropylbenzene	25.0	22.2	88.8	76.0-127	
p-Isopropyltoluene	25.0	26.5	106	76.0-125	
2-Butanone (MEK)	125	81.5	65.2	44.0-160	
Methylene Chloride	25.0	22.7	90.8	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	87.8	70.2	68.0-142	
Methyl tert-butyl ether	25.0	20.5	82.0	68.0-125	
Naphthalene	25.0	19.2	76.8	54.0-135	
n-Propylbenzene	25.0	22.8	91.2	77.0-124	
Styrene	25.0	24.4	97.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	23.8	95.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	20.3	81.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	23.1	92.4	69.0-132	
Tetrachloroethene	25.0	25.2	101	72.0-132	
Toluene	25.0	23.7	94.8	79.0-120	
1,2,3-Trichlorobenzene	25.0	26.4	106	50.0-138	
1,2,4-Trichlorobenzene	25.0	28.9	116	57.0-137	
1,1,1-Trichloroethane	25.0	20.9	83.6	73.0-124	
1,1,2-Trichloroethane	25.0	23.4	93.6	80.0-120	
Trichloroethene	25.0	23.0	92.0	78.0-124	
Trichlorofluoromethane	25.0	25.7	103	59.0-147	
1,2,3-Trichloropropane	25.0	21.3	85.2	73.0-130	
1,2,4-Trimethylbenzene	25.0	24.0	96.0	76.0-121	
1,2,3-Trimethylbenzene	25.0	24.5	98.0	77.0-120	
1,3,5-Trimethylbenzene	25.0	23.3	93.2	76.0-122	
Vinyl acetate	125	92.6	74.1	11.0-160	
Vinyl chloride	25.0	25.2	101	67.0-131	
Xylenes, Total	75.0	71.6	95.5	79.0-123	
(S) Toluene-d8			98.4	80.0-120	
(S) 4-Bromofluorobenzene			96.6	77.0-126	
(S) 1,2-Dichloroethane-d4			81.0	70.0-130	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1149851-02.03.04.05.06.07.08.09](#)

Method Blank (MB)

(MB) R3464659-2 10/23/19 00:07

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	95.1			80.0-120
(S) 4-Bromofluorobenzene	102			77.0-126
(S) 1,2-Dichloroethane-d4	101			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3464659-1 10/22/19 23:26

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	22.4	89.6	73.0-120	
Vinyl chloride	25.0	24.8	99.2	67.0-131	
(S) Toluene-d8			95.6	80.0-120	
(S) 4-Bromofluorobenzene			109	77.0-126	
(S) 1,2-Dichloroethane-d4			105	70.0-130	

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Method Blank (MB)

(MB) R34647612 10/24/19 10:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Diisopropyl ether	U		0.0924	0.500
Ethylbenzene	U		0.158	0.500

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Method Blank (MB)

(MB) R346476-12 10/24/19 10:35

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	0.232	U	0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	0.162	U	0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	107			80.0-120
(S) 4-Bromofluorobenzene	101			77.0-126
(S) 1,2-Dichloroethane-d4	95.5			70.0-130

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Laboratory Control Sample (LCS)

(LCS) R3464761-1 10/24/19 09:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acrylonitrile	125	94.6	75.7	55.0-149	1 Cp
Benzene	25.0	22.2	88.8	70.0-123	3 Ss
Bromobenzene	25.0	24.4	97.6	73.0-121	2 Tc
Bromodichloromethane	25.0	25.0	100	75.0-120	4 Cn
Bromochloromethane	25.0	22.9	91.6	76.0-122	
Bromoform	25.0	25.9	104	68.0-132	
Bromomethane	25.0	22.3	89.2	10.0-160	
n-Butylbenzene	25.0	23.1	92.4	73.0-125	5 Sr
sec-Butylbenzene	25.0	23.2	92.8	75.0-125	
tert-Butylbenzene	25.0	24.8	99.2	76.0-124	
Carbon disulfide	25.0	23.5	94.0	61.0-128	6 Qc
Carbon tetrachloride	25.0	26.1	104	68.0-126	7 Gl
Chlorobenzene	25.0	22.9	91.6	80.0-121	
Chlorodibromomethane	25.0	24.8	99.2	77.0-125	
Chloroethane	25.0	20.3	81.2	47.0-150	
Chloroform	25.0	24.2	96.8	73.0-120	
Chloromethane	25.0	24.0	96.0	41.0-142	
2-Chlorotoluene	25.0	26.0	104	76.0-123	8 Al
4-Chlorotoluene	25.0	25.9	104	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.2	96.8	58.0-134	
1,2-Dibromoethane	25.0	23.0	92.0	80.0-122	
Dibromomethane	25.0	22.1	88.4	80.0-120	
1,2-Dichlorobenzene	25.0	22.7	90.8	79.0-121	
1,3-Dichlorobenzene	25.0	22.4	89.6	79.0-120	
1,4-Dichlorobenzene	25.0	22.8	91.2	79.0-120	
Dichlorodifluoromethane	25.0	29.0	116	51.0-149	
1,1-Dichloroethane	25.0	23.6	94.4	70.0-126	
1,2-Dichloroethane	25.0	22.1	88.4	70.0-128	
1,1-Dichloroethene	25.0	24.2	96.8	71.0-124	
cis-1,2-Dichloroethene	25.0	23.9	95.6	73.0-120	
trans-1,2-Dichloroethene	25.0	23.4	93.6	73.0-120	
1,2-Dichloropropane	25.0	23.4	93.6	77.0-125	
1,1-Dichloropropene	25.0	24.8	99.2	74.0-126	
1,3-Dichloropropene	25.0	22.7	90.8	80.0-120	
cis-1,3-Dichloropropene	25.0	24.9	99.6	80.0-123	
trans-1,3-Dichloropropene	25.0	24.2	96.8	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	22.4	89.6	33.0-144	
2,2-Dichloropropane	25.0	31.6	126	58.0-130	
Di-isopropyl ether	25.0	23.2	92.8	58.0-138	
Ethylbenzene	25.0	22.5	90.0	79.0-123	

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Laboratory Control Sample (LCS)

(LCS) R3464761-1 10/24/19 09:38

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Hexachloro-1,3-butadiene	25.0	33.3	133	54.0-138	
2-Hexanone	125	114	91.2	67.0-149	
n-Hexane	25.0	32.0	128	57.0-133	
Iodomethane	125	125	100	33.0-147	
Isopropylbenzene	25.0	24.3	97.2	76.0-127	
p-Isopropyltoluene	25.0	23.4	93.6	76.0-125	
2-Butanone (MEK)	125	101	80.8	44.0-160	
Methylene Chloride	25.0	23.0	92.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	100	80.0	68.0-142	
Methyl tert-butyl ether	25.0	22.5	90.0	68.0-125	
Naphthalene	25.0	25.9	104	54.0-135	
n-Propylbenzene	25.0	25.7	103	77.0-124	
Styrene	25.0	23.4	93.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	23.9	95.6	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	25.4	102	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	27.8	111	69.0-132	
Tetrachloroethene	25.0	26.8	107	72.0-132	
Toluene	25.0	22.5	90.0	79.0-120	
1,2,3-Trichlorobenzene	25.0	34.4	138	50.0-138	
1,2,4-Trichlorobenzene	25.0	31.2	125	57.0-137	
1,1,1-Trichloroethane	25.0	27.3	109	73.0-124	
1,1,2-Trichloroethane	25.0	22.8	91.2	80.0-120	
Trichloroethene	25.0	22.2	88.8	78.0-124	
Trichlorofluoromethane	25.0	28.2	113	59.0-147	
1,2,3-Trichloropropane	25.0	25.0	100	73.0-130	
1,2,4-Trimethylbenzene	25.0	23.4	93.6	76.0-121	
1,2,3-Trimethylbenzene	25.0	22.7	90.8	77.0-120	
1,3,5-Trimethylbenzene	25.0	26.7	107	76.0-122	
Vinyl acetate	125	228	182	11.0-160	J4
Vinyl chloride	25.0	20.7	82.8	67.0-131	
Xylenes, Total	75.0	69.5	92.7	79.0-123	
(S) Toluene-d8			104	80.0-120	
(S) 4-Bromofluorobenzene			101	77.0-126	
(S) 1,2-Dichloroethane-d4			112	70.0-130	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1149851-11](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(MB) R3465173-3	10/25/19 10:30			
Acetone	U		1.05	25.0
(S) Toluene-d8	95.9			80.0-120
(S) 4-Bromofluorobenzene	104			77.0-126
(S) 1,2-Dichloroethane-d4	97.9			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
	Spike Amount ug/l	LCSD Result ug/l	LCS Result ug/l	LCSD Result ug/l							
Acetone	125	118	114	94.4	91.2	19.0-160			3.45	27	
(S) Toluene-d8				98.9	90.3	80.0-120					
(S) 4-Bromofluorobenzene				108	86.9	77.0-126					
(S) 1,2-Dichloroethane-d4				94.8	92.1	70.0-130					

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2 Tc
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6 Qc
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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

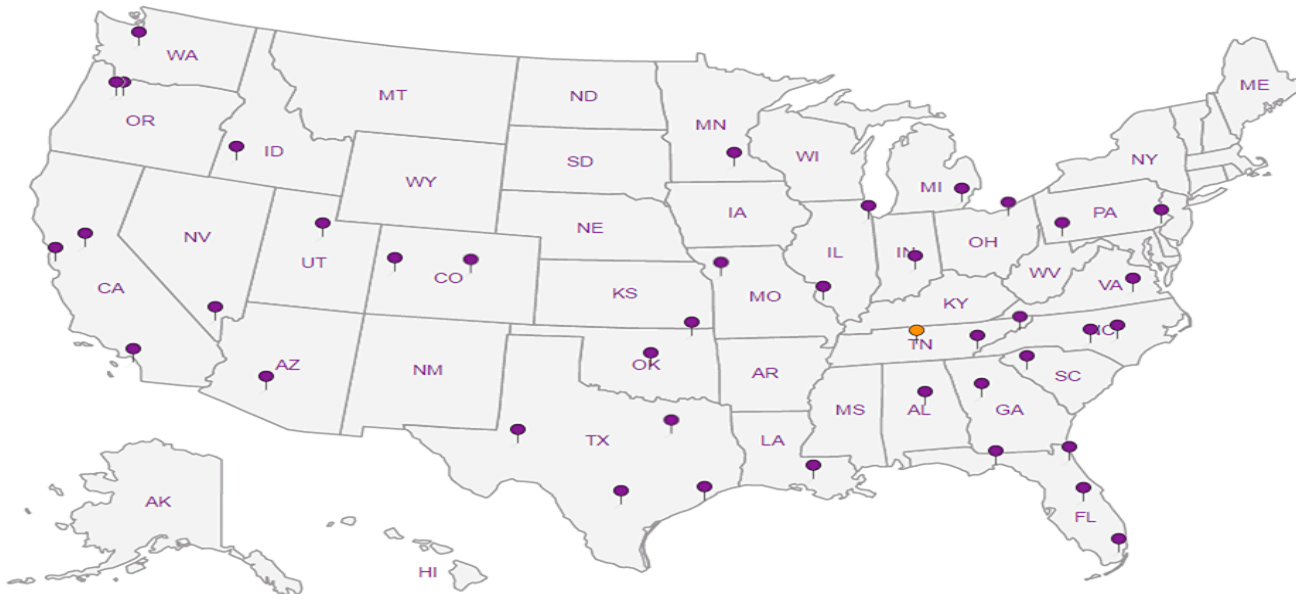
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES-Seattle

Billing Information:
PES-Seattle

Analysis / Container / Preservative

Chain of Custody

Page 1 of 2

Report to:
Bill Haldeman/Brian O'neal

Email To:
on file

Project Description:

City/State: Seattle, WA

Phone: on file

Client Project #
1413.00102.501E

Lab Project #
PESENVSWA-ALP

Fax:

Collected by (print):
K. Elyss/H. C. B. H. H. H.

Site/Facility ID #
American Green

P.O. #

Collected by (signature):
K. Elyss/H. C. B. H. H. H.

Rush? (Lab MUST be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Quote #

Immediately Packed on Ice N ___ Y ___

Date Results Needed

No. of Cntrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

NO3,SO4,Chloride48 hour hold

NWTPHGX

VOCs (V8260LLC)

Total Fe Mn 6020

TOC

Alkalinity

EEM (RSK175LL)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
MU-190-101419	Grab	GW	83	10/14/19	0916	12
MU-146-101419		GW	43		1015	12
MU-309-101419		GW	67		1035	9
MU-189-101419		GW	53		1130	12
MU-154-101419		GW	32.5		1205	12
MU122-101419		GW	112		1205	9
MU111-101419		GW	75		1325	9
MU-147-101419		GW	75		1355	12
MU-161-101419		GW	125		1428	12
MU103-101419		GW	108		1455	9

Remarks:

Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Blossay
WW - Wastewater
DW - Drinking Water
OT - Other

Samples returned via:
UPS _____ FedEx _____ Courier _____

Tracking # 1703 5774 6562
Received by: (Signature)

Trip Blank Received: Yes/No
Udel/Meoh

Temp: 5.3 42
Bottles Received: 108

Temp: 108
Date: 10/15/19 8:45

Relinquished by: (Signature)
Relinquished by: (Signature)

Date: 10/14/19
Time: 1600

Received for lab by: (Signature)

Date: 10/15/19 8:45

Hold:

Condition: NCF 10K



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 1149851
E023

Account: PESENVSWA

Template:

Prelogin:

TSR: Brian Ford

PB:

Shipped Via:

Remarks

Sample Receipt Checklist
COC Seal Present/Intact: NP
COC Signed/Accurate: N
Bottles arrive Intact: N
Correct bottles used: N
Sufficient volume sent: N
If Applicable
VOA Zero HeadSpace: N
Preservation Correct/checked: N
RAD SCREEN: <0.5 mR/hr
If preservation required by Login: Date/Time
Hold:

PES-Seattle

Billing Information:
PES-Seattle

Analysis / Container / Preservative

Chain of Custody Page 2 of 2

Report to:
Bill Haldeman/Brian O'neal

Email To:
on file

City/State
Seattle, WA

Project Description:
on file

Client Project #
1413.00102.501E

Lab Project #
PESENVSWA-ALP

Phone:
Fax:

Site/Facility ID #

P.O. #

Collected by (print):
K. Egan/H. Gwin/B. Hadd

American Lines

Quote #

Rush? (Lab MUST Be Notified)
Same Day Five Day
Next Day 5 Day (Rad Only)
Two Day 10 Day (Rad Only)
Three Day

Date Results Needed

Collected by (signature):
K. Egan

Immediately Packed on Ice N ___ Y ___

Sample ID
TB-101419

Comp/Grab

Matrix *

Depth

Date

Time

No. of Cntrs

- **NO3,SO4,Chloride**48 hour hold
- NWTPHGX
- VOCs (V8260LLC)
- Total Fe Mn 6020
- TOC
- Alkalinity
- EEM (RSK175LL)

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs
TB-101419	—	GW	—	10-14-19	1530	1
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				
		GW				

Remarks:

Samples returned via:
UPS FedEx Counter

Tracking #
Received by: (Signature)

Trip Blank Received: Yes/No
Bottles Received: 108
Temp: 51.2-53.2 °C
Date: 10/15/19 Time: 8:45

Sample Receipt Checklist
COC Seal Present/Intact: Y N
COC Signed/Accurate: Y N
Bottles arrive intact: Y N
Correct bottles used: Y N
Sufficient volume sent: Y N
If Applicable
VOA Zero HeadSpace: Y N
Preservation Correct/Checked: Y N
RAD SCREEN: <0.5 mR/hr

Relinquished by: (Signature)
Date: 10/14/19 Time: 1600
Received for lab by: (Signature)
Date: 10/15/19 Time: 8:45

Relinquished by: (Signature)
Date: _____ Time: _____
Condition: NCF /



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859



ANALYTICAL REPORT

October 29, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

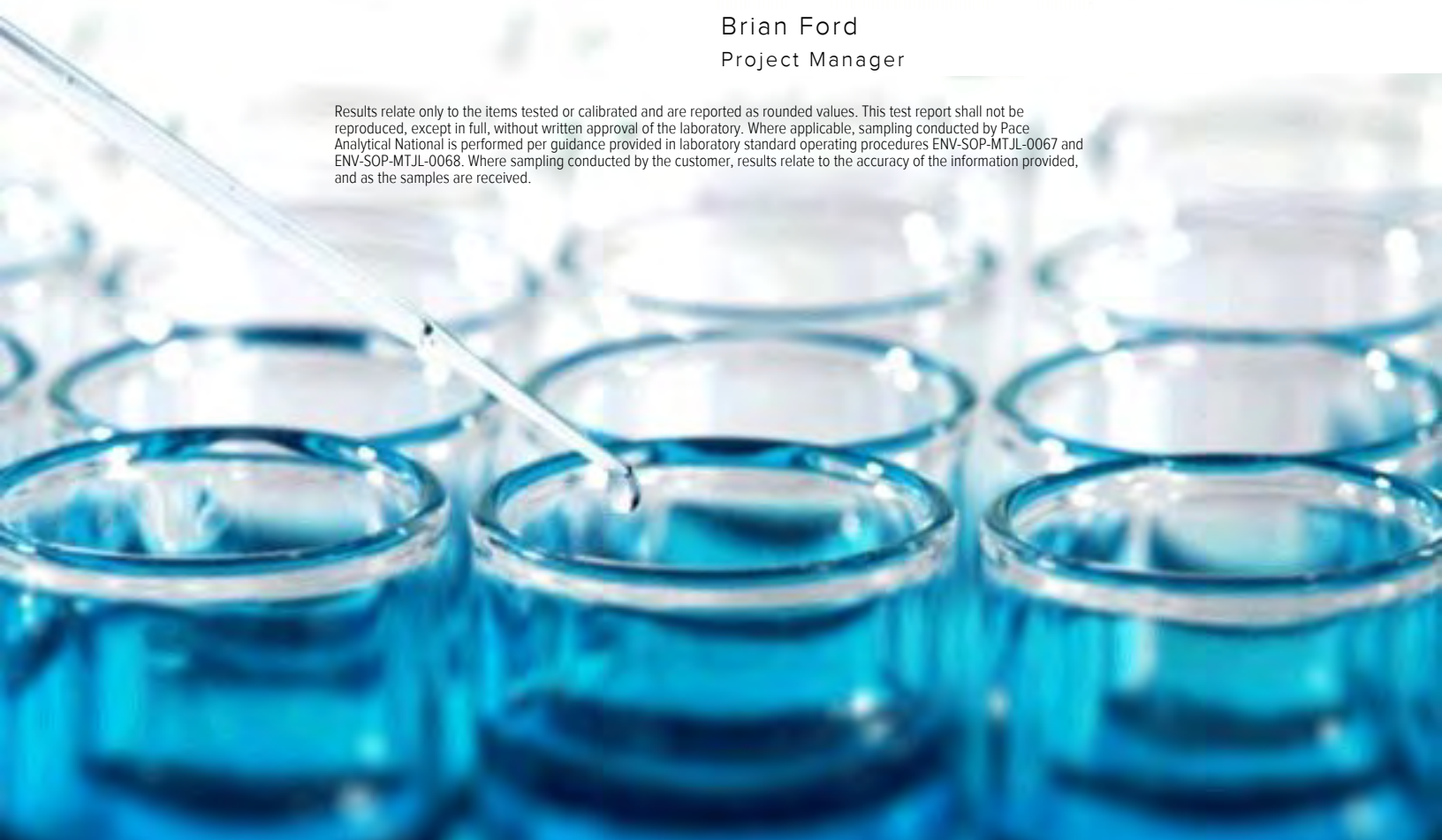
PES Environmental, Inc.- WA

Sample Delivery Group: L1150336
 Samples Received: 10/16/2019
 Project Number: 1413.001.02.501E
 Description: AMERICAN LINEN
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-917-101519 L1150336-01 GW

Collected by KZ/BH/SM/HG
Collected date/time 10/15/19 08:00
Received date/time 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366027	1	10/22/19 05:44	10/22/19 05:44	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 19:05	10/16/19 19:05	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 18:45	10/19/19 18:45	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 14:13	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 15:34	10/17/19 15:34	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368527	1	10/24/19 05:08	10/24/19 05:08	ACG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW109-101519 L1150336-02 GW

Collected by KZ/BH/SM/HG
Collected date/time 10/15/19 09:45
Received date/time 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366027	1	10/22/19 05:51	10/22/19 05:51	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 19:18	10/16/19 19:18	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 19:06	10/19/19 19:06	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 14:48	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 15:37	10/17/19 15:37	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368527	1	10/24/19 05:29	10/24/19 05:29	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369128	20	10/24/19 20:51	10/24/19 20:51	ACG	Mt. Juliet, TN

MW-305-101519 L1150336-03 GW

Collected by KZ/BH/SM/HG
Collected date/time 10/15/19 10:10
Received date/time 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366027	1	10/22/19 05:58	10/22/19 05:58	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 19:31	10/16/19 19:31	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 19:28	10/19/19 19:28	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 14:52	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365317	1	10/18/19 14:44	10/18/19 14:44	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 16:04	10/17/19 16:04	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368527	1	10/24/19 05:50	10/24/19 05:50	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369128	1	10/24/19 21:11	10/24/19 21:11	ACG	Mt. Juliet, TN

MW126-101519 L1150336-04 GW

Collected by KZ/BH/SM/HG
Collected date/time 10/15/19 11:00
Received date/time 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366029	1	10/21/19 23:52	10/21/19 23:52	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 19:44	10/16/19 19:44	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 21:17	10/19/19 21:17	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 14:55	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 15:42	10/17/19 15:42	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368527	1	10/24/19 06:10	10/24/19 06:10	ACG	Mt. Juliet, TN

MW-306-101519 L1150336-05 GW

Collected by KZ/BH/SM/HG
Collected date/time 10/15/19 11:40
Received date/time 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366029	1	10/21/19 23:59	10/21/19 23:59	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 20:22	10/16/19 20:22	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 21:31	10/19/19 21:31	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 14:59	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365317	1	10/18/19 15:07	10/18/19 15:07	BMB	Mt. Juliet, TN



MW-306-101519 L1150336-05 GW

Collected by: KZ/BH/SM/HG
Collected date/time: 10/15/19 11:40
Received date/time: 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 15:44	10/17/19 15:44	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368527	1	10/24/19 06:31	10/24/19 06:31	ACG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

W-MW-01-101519 L1150336-06 GW

Collected by: KZ/BH/SM/HG
Collected date/time: 10/15/19 12:20
Received date/time: 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366029	1	10/22/19 00:07	10/22/19 00:07	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 20:35	10/16/19 20:35	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 22:38	10/19/19 22:38	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 15:03	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365317	1	10/18/19 15:31	10/18/19 15:31	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 15:50	10/17/19 15:50	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368527	1	10/24/19 06:52	10/24/19 06:52	ACG	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

MW110-101519 L1150336-07 GW

Collected by: KZ/BH/SM/HG
Collected date/time: 10/15/19 14:20
Received date/time: 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366029	1	10/22/19 00:15	10/22/19 00:15	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 20:47	10/16/19 20:47	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 23:00	10/19/19 23:00	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 15:07	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 15:53	10/17/19 15:53	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1368527	1	10/24/19 07:12	10/24/19 07:12	ACG	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369128	50	10/24/19 21:32	10/24/19 21:32	ACG	Mt. Juliet, TN

9 Sc

MW-153-101519 L1150336-08 GW

Collected by: KZ/BH/SM/HG
Collected date/time: 10/15/19 14:25
Received date/time: 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366029	1	10/22/19 00:22	10/22/19 00:22	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 21:00	10/16/19 21:00	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 23:20	10/19/19 23:20	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 15:10	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365317	1	10/18/19 18:42	10/18/19 18:42	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365165	1	10/18/19 13:10	10/18/19 13:10	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/25/19 22:30	10/25/19 22:30	ADM	Mt. Juliet, TN

MW-107-101519 L1150336-09 GW

Collected by: KZ/BH/SM/HG
Collected date/time: 10/15/19 14:00
Received date/time: 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366029	1	10/22/19 00:30	10/22/19 00:30	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1363847	1	10/16/19 21:13	10/16/19 21:13	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365601	1	10/19/19 23:45	10/19/19 23:45	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1364631	1	10/21/19 23:59	10/22/19 15:14	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365317	1	10/18/19 19:06	10/18/19 19:06	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1364420	1	10/17/19 15:55	10/17/19 15:55	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365165	10	10/18/19 13:13	10/18/19 13:13	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/25/19 22:50	10/25/19 22:50	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370146	10	10/27/19 15:29	10/27/19 15:29	ACG	Mt. Juliet, TN



TB-101519 L1150336-10 GW

Collected by: KZ/BH/SM/HG
 Collected date/time: 10/15/19 00:00
 Received date/time: 10/16/19 08:30

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365317	1	10/18/19 12:20	10/18/19 12:20	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 14:49	10/26/19 14:49	ACG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	200000		2710	20000	1	10/22/2019 05:44	WG1366027

Sample Narrative:

L1150336-01 WG1366027: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	7780		51.9	1000	1	10/16/2019 19:05	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 19:05	WG1363847
Sulfate	3890	J	77.4	5000	1	10/16/2019 19:05	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5050	B	102	1000	1	10/19/2019 18:45	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	388		15.0	100	1	10/22/2019 14:13	WG1364631
Manganese	327		0.250	5.00	1	10/22/2019 14:13	WG1364631

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	317		0.287	0.678	1	10/17/2019 15:34	WG1364420
Ethane	U		0.296	1.29	1	10/17/2019 15:34	WG1364420
Ethene	U		0.422	1.27	1	10/17/2019 15:34	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.34	J	1.05	25.0	1	10/24/2019 05:08	WG1368527
Acrylonitrile	U		0.873	5.00	1	10/24/2019 05:08	WG1368527
Benzene	U		0.0896	0.500	1	10/24/2019 05:08	WG1368527
Bromobenzene	U		0.133	0.500	1	10/24/2019 05:08	WG1368527
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 05:08	WG1368527
Bromochloromethane	U		0.145	0.500	1	10/24/2019 05:08	WG1368527
Bromoform	U		0.186	0.500	1	10/24/2019 05:08	WG1368527
Bromomethane	U		0.157	2.50	1	10/24/2019 05:08	WG1368527
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 05:08	WG1368527
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 05:08	WG1368527
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 05:08	WG1368527
Carbon disulfide	U		0.101	0.500	1	10/24/2019 05:08	WG1368527
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 05:08	WG1368527
Chlorobenzene	U		0.140	0.500	1	10/24/2019 05:08	WG1368527
Chlorodibromomethane	U	JO	0.128	0.500	1	10/24/2019 05:08	WG1368527
Chloroethane	U		0.141	2.50	1	10/24/2019 05:08	WG1368527
Chloroform	U		0.0860	0.500	1	10/24/2019 05:08	WG1368527
Chloromethane	U		0.153	1.25	1	10/24/2019 05:08	WG1368527
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 05:08	WG1368527
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 05:08	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 08:00

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 05:08	WG1368527
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 05:08	WG1368527
Dibromomethane	U		0.117	0.500	1	10/24/2019 05:08	WG1368527
1,2-Dichlorobenzene	U	JO	0.101	0.500	1	10/24/2019 05:08	WG1368527
1,3-Dichlorobenzene	U	JO J4	0.130	0.500	1	10/24/2019 05:08	WG1368527
1,4-Dichlorobenzene	U	JO J4	0.121	0.500	1	10/24/2019 05:08	WG1368527
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 05:08	WG1368527
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 05:08	WG1368527
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 05:08	WG1368527
1,1-Dichloroethene	U		0.188	0.500	1	10/24/2019 05:08	WG1368527
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/24/2019 05:08	WG1368527
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/24/2019 05:08	WG1368527
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 05:08	WG1368527
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 05:08	WG1368527
1,3-Dichloropropane	U	JO J4	0.147	1.00	1	10/24/2019 05:08	WG1368527
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 05:08	WG1368527
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 05:08	WG1368527
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/24/2019 05:08	WG1368527
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 05:08	WG1368527
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 05:08	WG1368527
Ethylbenzene	U		0.158	0.500	1	10/24/2019 05:08	WG1368527
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 05:08	WG1368527
2-Hexanone	U		0.757	5.00	1	10/24/2019 05:08	WG1368527
n-Hexane	U	JO	0.305	5.00	1	10/24/2019 05:08	WG1368527
Iodomethane	U		0.377	10.0	1	10/24/2019 05:08	WG1368527
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 05:08	WG1368527
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 05:08	WG1368527
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 05:08	WG1368527
Methylene Chloride	U		1.07	2.50	1	10/24/2019 05:08	WG1368527
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 05:08	WG1368527
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 05:08	WG1368527
Naphthalene	U		0.174	2.50	1	10/24/2019 05:08	WG1368527
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 05:08	WG1368527
Styrene	U		0.117	0.500	1	10/24/2019 05:08	WG1368527
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 05:08	WG1368527
1,1,2,2-Tetrachloroethane	U	JO	0.130	0.500	1	10/24/2019 05:08	WG1368527
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 05:08	WG1368527
Tetrachloroethene	U		0.199	0.500	1	10/24/2019 05:08	WG1368527
Toluene	U		0.412	0.500	1	10/24/2019 05:08	WG1368527
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 05:08	WG1368527
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 05:08	WG1368527
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 05:08	WG1368527
1,1,2-Trichloroethane	U	JO J4	0.186	0.500	1	10/24/2019 05:08	WG1368527
Trichloroethene	U		0.153	0.500	1	10/24/2019 05:08	WG1368527
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 05:08	WG1368527
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 05:08	WG1368527
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 05:08	WG1368527
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 05:08	WG1368527
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 05:08	WG1368527
Vinyl acetate	U	JO	0.645	5.00	1	10/24/2019 05:08	WG1368527
Vinyl chloride	U		0.118	0.500	1	10/24/2019 05:08	WG1368527
Xylenes, Total	U		0.316	1.50	1	10/24/2019 05:08	WG1368527
(S) Toluene-d8	99.4			80.0-120		10/24/2019 05:08	WG1368527
(S) 4-Bromofluorobenzene	102			77.0-126		10/24/2019 05:08	WG1368527
(S) 1,2-Dichloroethane-d4	114			70.0-130		10/24/2019 05:08	WG1368527

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	628000		2710	20000	1	10/22/2019 05:51	WG1366027

Sample Narrative:

L1150336-02 WG1366027: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	13700		51.9	1000	1	10/16/2019 19:18	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 19:18	WG1363847
Sulfate	9120		77.4	5000	1	10/16/2019 19:18	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	10400		102	1000	1	10/19/2019 19:06	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	14400		15.0	100	1	10/22/2019 14:48	WG1364631
Manganese	4100		0.250	5.00	1	10/22/2019 14:48	WG1364631

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	4950		0.287	0.678	1	10/17/2019 15:37	WG1364420
Ethane	25.6		0.296	1.29	1	10/17/2019 15:37	WG1364420
Ethene	6.99		0.422	1.27	1	10/17/2019 15:37	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	10/24/2019 05:29	WG1368527
Acrylonitrile	U		0.873	5.00	1	10/24/2019 05:29	WG1368527
Benzene	U		0.0896	0.500	1	10/24/2019 05:29	WG1368527
Bromobenzene	U		0.133	0.500	1	10/24/2019 05:29	WG1368527
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 05:29	WG1368527
Bromochloromethane	U		0.145	0.500	1	10/24/2019 05:29	WG1368527
Bromoform	U		0.186	0.500	1	10/24/2019 05:29	WG1368527
Bromomethane	U		0.157	2.50	1	10/24/2019 05:29	WG1368527
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 05:29	WG1368527
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 05:29	WG1368527
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 05:29	WG1368527
Carbon disulfide	U		0.101	0.500	1	10/24/2019 05:29	WG1368527
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 05:29	WG1368527
Chlorobenzene	U		0.140	0.500	1	10/24/2019 05:29	WG1368527
Chlorodibromomethane	U	<u>JO</u>	0.128	0.500	1	10/24/2019 05:29	WG1368527
Chloroethane	U		0.141	2.50	1	10/24/2019 05:29	WG1368527
Chloroform	U		0.0860	0.500	1	10/24/2019 05:29	WG1368527
Chloromethane	U		0.153	1.25	1	10/24/2019 05:29	WG1368527
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 05:29	WG1368527
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 05:29	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 09:45

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 05:29	WG1368527
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 05:29	WG1368527
Dibromomethane	U		0.117	0.500	1	10/24/2019 05:29	WG1368527
1,2-Dichlorobenzene	U	JO	0.101	0.500	1	10/24/2019 05:29	WG1368527
1,3-Dichlorobenzene	U	JO J4	0.130	0.500	1	10/24/2019 05:29	WG1368527
1,4-Dichlorobenzene	U	JO J4	0.121	0.500	1	10/24/2019 05:29	WG1368527
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 05:29	WG1368527
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 05:29	WG1368527
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 05:29	WG1368527
1,1-Dichloroethene	0.768		0.188	0.500	1	10/24/2019 05:29	WG1368527
cis-1,2-Dichloroethene	397		1.87	10.0	20	10/24/2019 20:51	WG1369128
trans-1,2-Dichloroethene	0.891		0.152	0.500	1	10/24/2019 05:29	WG1368527
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 05:29	WG1368527
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 05:29	WG1368527
1,3-Dichloropropane	U	JO J4	0.147	1.00	1	10/24/2019 05:29	WG1368527
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 05:29	WG1368527
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 05:29	WG1368527
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/24/2019 05:29	WG1368527
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 05:29	WG1368527
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 05:29	WG1368527
Ethylbenzene	U		0.158	0.500	1	10/24/2019 05:29	WG1368527
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 05:29	WG1368527
2-Hexanone	U		0.757	5.00	1	10/24/2019 05:29	WG1368527
n-Hexane	U	JO	0.305	5.00	1	10/24/2019 05:29	WG1368527
Iodomethane	U		0.377	10.0	1	10/24/2019 05:29	WG1368527
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 05:29	WG1368527
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 05:29	WG1368527
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 05:29	WG1368527
Methylene Chloride	U		1.07	2.50	1	10/24/2019 05:29	WG1368527
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 05:29	WG1368527
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 05:29	WG1368527
Naphthalene	U		0.174	2.50	1	10/24/2019 05:29	WG1368527
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 05:29	WG1368527
Styrene	U		0.117	0.500	1	10/24/2019 05:29	WG1368527
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 05:29	WG1368527
1,1,2,2-Tetrachloroethane	U	JO	0.130	0.500	1	10/24/2019 05:29	WG1368527
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 05:29	WG1368527
Tetrachloroethene	U		0.199	0.500	1	10/24/2019 05:29	WG1368527
Toluene	U		0.412	0.500	1	10/24/2019 05:29	WG1368527
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 05:29	WG1368527
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 05:29	WG1368527
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 05:29	WG1368527
1,1,2-Trichloroethane	U	JO J4	0.186	0.500	1	10/24/2019 05:29	WG1368527
Trichloroethene	1.03		0.153	0.500	1	10/24/2019 05:29	WG1368527
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 05:29	WG1368527
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 05:29	WG1368527
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 05:29	WG1368527
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 05:29	WG1368527
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 05:29	WG1368527
Vinyl acetate	U	JO	0.645	5.00	1	10/24/2019 05:29	WG1368527
Vinyl chloride	109		0.118	0.500	1	10/24/2019 05:29	WG1368527
Xylenes, Total	U		0.316	1.50	1	10/24/2019 05:29	WG1368527
(S) Toluene-d8	102			80.0-120		10/24/2019 05:29	WG1368527
(S) Toluene-d8	110			80.0-120		10/24/2019 20:51	WG1369128
(S) 4-Bromofluorobenzene	104			77.0-126		10/24/2019 05:29	WG1368527
(S) 4-Bromofluorobenzene	112			77.0-126		10/24/2019 20:51	WG1369128

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	112			70.0-130		10/24/2019 05:29	WG1368527
(S) 1,2-Dichloroethane-d4	108			70.0-130		10/24/2019 20:51	WG1369128

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 10:10

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	114000		2710	20000	1	10/22/2019 05:58	WG1366027

Sample Narrative:

L1150336-03 WG1366027: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	18000		51.9	1000	1	10/16/2019 19:31	WG1363847
Nitrate	1630		22.7	100	1	10/16/2019 19:31	WG1363847
Sulfate	28000		77.4	5000	1	10/16/2019 19:31	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3340	<u>B</u>	102	1000	1	10/19/2019 19:28	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2580		15.0	100	1	10/22/2019 14:52	WG1364631
Manganese	197		0.250	5.00	1	10/22/2019 14:52	WG1364631

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 14:44	WG1365317
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 14:44	WG1365317

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	10/17/2019 16:04	WG1364420
Ethane	U		0.296	1.29	1	10/17/2019 16:04	WG1364420
Ethene	U		0.422	1.27	1	10/17/2019 16:04	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	10/24/2019 05:50	WG1368527
Acrylonitrile	U		0.873	5.00	1	10/24/2019 05:50	WG1368527
Benzene	U		0.0896	0.500	1	10/24/2019 05:50	WG1368527
Bromobenzene	U		0.133	0.500	1	10/24/2019 05:50	WG1368527
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 05:50	WG1368527
Bromochloromethane	U		0.145	0.500	1	10/24/2019 05:50	WG1368527
Bromoform	U		0.186	0.500	1	10/24/2019 05:50	WG1368527
Bromomethane	U		0.157	2.50	1	10/24/2019 05:50	WG1368527
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 05:50	WG1368527
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 05:50	WG1368527
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 05:50	WG1368527
Carbon disulfide	U		0.101	0.500	1	10/24/2019 05:50	WG1368527
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 05:50	WG1368527

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 10/15/19 10:10

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/24/2019 05:50	WG1368527
Chlorodibromomethane	U	JO	0.128	0.500	1	10/24/2019 05:50	WG1368527
Chloroethane	U		0.141	2.50	1	10/24/2019 05:50	WG1368527
Chloroform	U		0.0860	0.500	1	10/24/2019 05:50	WG1368527
Chloromethane	U		0.153	1.25	1	10/24/2019 05:50	WG1368527
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 05:50	WG1368527
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 05:50	WG1368527
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 05:50	WG1368527
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 05:50	WG1368527
Dibromomethane	U		0.117	0.500	1	10/24/2019 05:50	WG1368527
1,2-Dichlorobenzene	U	JO	0.101	0.500	1	10/24/2019 05:50	WG1368527
1,3-Dichlorobenzene	U	JO J4	0.130	0.500	1	10/24/2019 05:50	WG1368527
1,4-Dichlorobenzene	U	JO J4	0.121	0.500	1	10/24/2019 05:50	WG1368527
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 05:50	WG1368527
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 05:50	WG1368527
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 05:50	WG1368527
1,1-Dichloroethene	U		0.188	0.500	1	10/24/2019 05:50	WG1368527
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/24/2019 21:11	WG1369128
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/24/2019 05:50	WG1368527
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 05:50	WG1368527
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 05:50	WG1368527
1,3-Dichloropropane	U	JO J4	0.147	1.00	1	10/24/2019 05:50	WG1368527
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 05:50	WG1368527
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 05:50	WG1368527
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/24/2019 05:50	WG1368527
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 05:50	WG1368527
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 05:50	WG1368527
Ethylbenzene	U		0.158	0.500	1	10/24/2019 05:50	WG1368527
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 05:50	WG1368527
2-Hexanone	U		0.757	5.00	1	10/24/2019 05:50	WG1368527
n-Hexane	U	JO	0.305	5.00	1	10/24/2019 05:50	WG1368527
Iodomethane	U		0.377	10.0	1	10/24/2019 05:50	WG1368527
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 05:50	WG1368527
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 05:50	WG1368527
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 05:50	WG1368527
Methylene Chloride	U		1.07	2.50	1	10/24/2019 05:50	WG1368527
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 05:50	WG1368527
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 05:50	WG1368527
Naphthalene	U		0.174	2.50	1	10/24/2019 05:50	WG1368527
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 05:50	WG1368527
Styrene	U		0.117	0.500	1	10/24/2019 05:50	WG1368527
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 05:50	WG1368527
1,1,2,2-Tetrachloroethane	U	JO	0.130	0.500	1	10/24/2019 05:50	WG1368527
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 05:50	WG1368527
Tetrachloroethene	U		0.199	0.500	1	10/24/2019 05:50	WG1368527
Toluene	U		0.412	0.500	1	10/24/2019 05:50	WG1368527
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 05:50	WG1368527
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 05:50	WG1368527
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 05:50	WG1368527
1,1,2-Trichloroethane	U	JO J4	0.186	0.500	1	10/24/2019 05:50	WG1368527
Trichloroethene	U		0.153	0.500	1	10/24/2019 05:50	WG1368527
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 05:50	WG1368527
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 05:50	WG1368527
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 05:50	WG1368527
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 05:50	WG1368527
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 05:50	WG1368527

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/15/19 10:10

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/24/2019 05:50	WG1368527
Vinyl chloride	U		0.118	0.500	1	10/24/2019 05:50	WG1368527
Xylenes, Total	U		0.316	1.50	1	10/24/2019 05:50	WG1368527
(S) Toluene-d8	101			80.0-120		10/24/2019 05:50	WG1368527
(S) Toluene-d8	112			80.0-120		10/24/2019 21:11	WG1369128
(S) 4-Bromofluorobenzene	103			77.0-126		10/24/2019 05:50	WG1368527
(S) 4-Bromofluorobenzene	116			77.0-126		10/24/2019 21:11	WG1369128
(S) 1,2-Dichloroethane-d4	113			70.0-130		10/24/2019 05:50	WG1368527
(S) 1,2-Dichloroethane-d4	107			70.0-130		10/24/2019 21:11	WG1369128

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	210000		2710	20000	1	10/21/2019 23:52	WG1366029

Sample Narrative:

L1150336-04 WG1366029: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	7540		51.9	1000	1	10/16/2019 19:44	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 19:44	WG1363847
Sulfate	3620	J	77.4	5000	1	10/16/2019 19:44	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5120	B	102	1000	1	10/19/2019 21:17	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	407		15.0	100	1	10/22/2019 14:55	WG1364631
Manganese	335		0.250	5.00	1	10/22/2019 14:55	WG1364631

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	277		0.287	0.678	1	10/17/2019 15:42	WG1364420
Ethane	U		0.296	1.29	1	10/17/2019 15:42	WG1364420
Ethene	U		0.422	1.27	1	10/17/2019 15:42	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.30	J	1.05	25.0	1	10/24/2019 06:10	WG1368527
Acrylonitrile	U		0.873	5.00	1	10/24/2019 06:10	WG1368527
Benzene	U		0.0896	0.500	1	10/24/2019 06:10	WG1368527
Bromobenzene	U		0.133	0.500	1	10/24/2019 06:10	WG1368527
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 06:10	WG1368527
Bromochloromethane	U		0.145	0.500	1	10/24/2019 06:10	WG1368527
Bromoform	U		0.186	0.500	1	10/24/2019 06:10	WG1368527
Bromomethane	U		0.157	2.50	1	10/24/2019 06:10	WG1368527
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 06:10	WG1368527
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 06:10	WG1368527
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 06:10	WG1368527
Carbon disulfide	U		0.101	0.500	1	10/24/2019 06:10	WG1368527
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 06:10	WG1368527
Chlorobenzene	U		0.140	0.500	1	10/24/2019 06:10	WG1368527
Chlorodibromomethane	U	JO	0.128	0.500	1	10/24/2019 06:10	WG1368527
Chloroethane	U		0.141	2.50	1	10/24/2019 06:10	WG1368527
Chloroform	U		0.0860	0.500	1	10/24/2019 06:10	WG1368527
Chloromethane	U		0.153	1.25	1	10/24/2019 06:10	WG1368527
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 06:10	WG1368527
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 06:10	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 11:00

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 06:10	WG1368527
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 06:10	WG1368527
Dibromomethane	U		0.117	0.500	1	10/24/2019 06:10	WG1368527
1,2-Dichlorobenzene	U	JO	0.101	0.500	1	10/24/2019 06:10	WG1368527
1,3-Dichlorobenzene	U	JO J4	0.130	0.500	1	10/24/2019 06:10	WG1368527
1,4-Dichlorobenzene	U	JO J4	0.121	0.500	1	10/24/2019 06:10	WG1368527
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 06:10	WG1368527
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 06:10	WG1368527
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 06:10	WG1368527
1,1-Dichloroethene	U		0.188	0.500	1	10/24/2019 06:10	WG1368527
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/24/2019 06:10	WG1368527
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/24/2019 06:10	WG1368527
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 06:10	WG1368527
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 06:10	WG1368527
1,3-Dichloropropane	U	JO J4	0.147	1.00	1	10/24/2019 06:10	WG1368527
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 06:10	WG1368527
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 06:10	WG1368527
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/24/2019 06:10	WG1368527
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 06:10	WG1368527
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 06:10	WG1368527
Ethylbenzene	U		0.158	0.500	1	10/24/2019 06:10	WG1368527
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 06:10	WG1368527
2-Hexanone	U		0.757	5.00	1	10/24/2019 06:10	WG1368527
n-Hexane	U	JO	0.305	5.00	1	10/24/2019 06:10	WG1368527
Iodomethane	U		0.377	10.0	1	10/24/2019 06:10	WG1368527
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 06:10	WG1368527
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 06:10	WG1368527
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 06:10	WG1368527
Methylene Chloride	U		1.07	2.50	1	10/24/2019 06:10	WG1368527
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 06:10	WG1368527
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 06:10	WG1368527
Naphthalene	U		0.174	2.50	1	10/24/2019 06:10	WG1368527
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 06:10	WG1368527
Styrene	U		0.117	0.500	1	10/24/2019 06:10	WG1368527
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 06:10	WG1368527
1,1,2,2-Tetrachloroethane	U	JO	0.130	0.500	1	10/24/2019 06:10	WG1368527
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 06:10	WG1368527
Tetrachloroethene	U		0.199	0.500	1	10/24/2019 06:10	WG1368527
Toluene	U		0.412	0.500	1	10/24/2019 06:10	WG1368527
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 06:10	WG1368527
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 06:10	WG1368527
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 06:10	WG1368527
1,1,2-Trichloroethane	U	JO J4	0.186	0.500	1	10/24/2019 06:10	WG1368527
Trichloroethene	U		0.153	0.500	1	10/24/2019 06:10	WG1368527
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 06:10	WG1368527
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 06:10	WG1368527
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 06:10	WG1368527
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 06:10	WG1368527
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 06:10	WG1368527
Vinyl acetate	U	JO	0.645	5.00	1	10/24/2019 06:10	WG1368527
Vinyl chloride	U		0.118	0.500	1	10/24/2019 06:10	WG1368527
Xylenes, Total	U		0.316	1.50	1	10/24/2019 06:10	WG1368527
(S) Toluene-d8	99.8			80.0-120		10/24/2019 06:10	WG1368527
(S) 4-Bromofluorobenzene	104			77.0-126		10/24/2019 06:10	WG1368527
(S) 1,2-Dichloroethane-d4	114			70.0-130		10/24/2019 06:10	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	187000		2710	20000	1	10/21/2019 23:59	WG1366029

Sample Narrative:

L1150336-05 WG1366029: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	8790		51.9	1000	1	10/16/2019 20:22	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 20:22	WG1363847
Sulfate	80900		77.4	5000	1	10/16/2019 20:22	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2320	<u>B</u>	102	1000	1	10/19/2019 21:31	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3810		15.0	100	1	10/22/2019 14:59	WG1364631
Manganese	608		0.250	5.00	1	10/22/2019 14:59	WG1364631

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 15:07	WG1365317
^(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 15:07	WG1365317

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	10/17/2019 15:44	WG1364420
Ethane	U		0.296	1.29	1	10/17/2019 15:44	WG1364420
Ethene	U		0.422	1.27	1	10/17/2019 15:44	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	10/24/2019 06:31	WG1368527
Acrylonitrile	U		0.873	5.00	1	10/24/2019 06:31	WG1368527
Benzene	U		0.0896	0.500	1	10/24/2019 06:31	WG1368527
Bromobenzene	U		0.133	0.500	1	10/24/2019 06:31	WG1368527
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 06:31	WG1368527
Bromochloromethane	U		0.145	0.500	1	10/24/2019 06:31	WG1368527
Bromoform	U		0.186	0.500	1	10/24/2019 06:31	WG1368527
Bromomethane	U		0.157	2.50	1	10/24/2019 06:31	WG1368527
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 06:31	WG1368527
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 06:31	WG1368527
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 06:31	WG1368527
Carbon disulfide	U		0.101	0.500	1	10/24/2019 06:31	WG1368527
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 06:31	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 11:40

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/24/2019 06:31	WG1368527
Chlorodibromomethane	U	JO	0.128	0.500	1	10/24/2019 06:31	WG1368527
Chloroethane	U		0.141	2.50	1	10/24/2019 06:31	WG1368527
Chloroform	U		0.0860	0.500	1	10/24/2019 06:31	WG1368527
Chloromethane	U		0.153	1.25	1	10/24/2019 06:31	WG1368527
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 06:31	WG1368527
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 06:31	WG1368527
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 06:31	WG1368527
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 06:31	WG1368527
Dibromomethane	U		0.117	0.500	1	10/24/2019 06:31	WG1368527
1,2-Dichlorobenzene	U	JO	0.101	0.500	1	10/24/2019 06:31	WG1368527
1,3-Dichlorobenzene	U	JO J4	0.130	0.500	1	10/24/2019 06:31	WG1368527
1,4-Dichlorobenzene	U	JO J4	0.121	0.500	1	10/24/2019 06:31	WG1368527
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 06:31	WG1368527
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 06:31	WG1368527
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 06:31	WG1368527
1,1-Dichloroethene	U		0.188	0.500	1	10/24/2019 06:31	WG1368527
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/24/2019 06:31	WG1368527
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/24/2019 06:31	WG1368527
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 06:31	WG1368527
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 06:31	WG1368527
1,3-Dichloropropane	U	JO J4	0.147	1.00	1	10/24/2019 06:31	WG1368527
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 06:31	WG1368527
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 06:31	WG1368527
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/24/2019 06:31	WG1368527
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 06:31	WG1368527
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 06:31	WG1368527
Ethylbenzene	U		0.158	0.500	1	10/24/2019 06:31	WG1368527
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 06:31	WG1368527
2-Hexanone	U		0.757	5.00	1	10/24/2019 06:31	WG1368527
n-Hexane	U	JO	0.305	5.00	1	10/24/2019 06:31	WG1368527
Iodomethane	U		0.377	10.0	1	10/24/2019 06:31	WG1368527
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 06:31	WG1368527
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 06:31	WG1368527
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 06:31	WG1368527
Methylene Chloride	U		1.07	2.50	1	10/24/2019 06:31	WG1368527
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 06:31	WG1368527
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 06:31	WG1368527
Naphthalene	U		0.174	2.50	1	10/24/2019 06:31	WG1368527
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 06:31	WG1368527
Styrene	U		0.117	0.500	1	10/24/2019 06:31	WG1368527
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 06:31	WG1368527
1,1,2,2-Tetrachloroethane	U	JO	0.130	0.500	1	10/24/2019 06:31	WG1368527
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 06:31	WG1368527
Tetrachloroethene	U		0.199	0.500	1	10/24/2019 06:31	WG1368527
Toluene	U		0.412	0.500	1	10/24/2019 06:31	WG1368527
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 06:31	WG1368527
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 06:31	WG1368527
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 06:31	WG1368527
1,1,2-Trichloroethane	U	JO J4	0.186	0.500	1	10/24/2019 06:31	WG1368527
Trichloroethene	U		0.153	0.500	1	10/24/2019 06:31	WG1368527
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 06:31	WG1368527
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 06:31	WG1368527
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 06:31	WG1368527
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 06:31	WG1368527
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 06:31	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 11:40

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/24/2019 06:31	WG1368527
Vinyl chloride	U		0.118	0.500	1	10/24/2019 06:31	WG1368527
Xylenes, Total	U		0.316	1.50	1	10/24/2019 06:31	WG1368527
<i>(S) Toluene-d8</i>	99.6			80.0-120		10/24/2019 06:31	WG1368527
<i>(S) 4-Bromofluorobenzene</i>	105			77.0-126		10/24/2019 06:31	WG1368527
<i>(S) 1,2-Dichloroethane-d4</i>	114			70.0-130		10/24/2019 06:31	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	239000		2710	20000	1	10/22/2019 00:07	WG1366029

Sample Narrative:

L1150336-06 WG1366029: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	31600		51.9	1000	1	10/16/2019 20:35	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 20:35	WG1363847
Sulfate	73800		77.4	5000	1	10/16/2019 20:35	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2490	<u>B</u>	102	1000	1	10/19/2019 22:38	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1160		15.0	100	1	10/22/2019 15:03	WG1364631
Manganese	320		0.250	5.00	1	10/22/2019 15:03	WG1364631

Volatile Organic Compounds (GC) by Method NWTPHGX

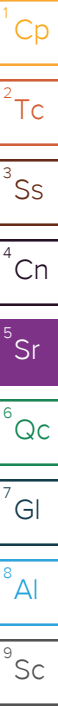
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 15:31	WG1365317
^(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 15:31	WG1365317

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	384		0.287	0.678	1	10/17/2019 15:50	WG1364420
Ethane	U		0.296	1.29	1	10/17/2019 15:50	WG1364420
Ethene	U		0.422	1.27	1	10/17/2019 15:50	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	10/24/2019 06:52	WG1368527
Acrylonitrile	U		0.873	5.00	1	10/24/2019 06:52	WG1368527
Benzene	U		0.0896	0.500	1	10/24/2019 06:52	WG1368527
Bromobenzene	U		0.133	0.500	1	10/24/2019 06:52	WG1368527
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 06:52	WG1368527
Bromochloromethane	U		0.145	0.500	1	10/24/2019 06:52	WG1368527
Bromoform	U		0.186	0.500	1	10/24/2019 06:52	WG1368527
Bromomethane	U		0.157	2.50	1	10/24/2019 06:52	WG1368527
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 06:52	WG1368527
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 06:52	WG1368527
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 06:52	WG1368527
Carbon disulfide	U		0.101	0.500	1	10/24/2019 06:52	WG1368527
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 06:52	WG1368527





Collected date/time: 10/15/19 12:20

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/24/2019 06:52	WG1368527
Chlorodibromomethane	U	JO	0.128	0.500	1	10/24/2019 06:52	WG1368527
Chloroethane	U		0.141	2.50	1	10/24/2019 06:52	WG1368527
Chloroform	U		0.0860	0.500	1	10/24/2019 06:52	WG1368527
Chloromethane	U		0.153	1.25	1	10/24/2019 06:52	WG1368527
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 06:52	WG1368527
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 06:52	WG1368527
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 06:52	WG1368527
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 06:52	WG1368527
Dibromomethane	U		0.117	0.500	1	10/24/2019 06:52	WG1368527
1,2-Dichlorobenzene	U	JO	0.101	0.500	1	10/24/2019 06:52	WG1368527
1,3-Dichlorobenzene	U	JO J4	0.130	0.500	1	10/24/2019 06:52	WG1368527
1,4-Dichlorobenzene	U	JO J4	0.121	0.500	1	10/24/2019 06:52	WG1368527
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 06:52	WG1368527
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 06:52	WG1368527
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 06:52	WG1368527
1,1-Dichloroethene	U		0.188	0.500	1	10/24/2019 06:52	WG1368527
cis-1,2-Dichloroethene	0.408	J	0.0933	0.500	1	10/24/2019 06:52	WG1368527
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/24/2019 06:52	WG1368527
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 06:52	WG1368527
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 06:52	WG1368527
1,3-Dichloropropane	U	JO J4	0.147	1.00	1	10/24/2019 06:52	WG1368527
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 06:52	WG1368527
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 06:52	WG1368527
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/24/2019 06:52	WG1368527
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 06:52	WG1368527
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 06:52	WG1368527
Ethylbenzene	U		0.158	0.500	1	10/24/2019 06:52	WG1368527
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 06:52	WG1368527
2-Hexanone	U		0.757	5.00	1	10/24/2019 06:52	WG1368527
n-Hexane	U	JO	0.305	5.00	1	10/24/2019 06:52	WG1368527
Iodomethane	U		0.377	10.0	1	10/24/2019 06:52	WG1368527
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 06:52	WG1368527
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 06:52	WG1368527
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 06:52	WG1368527
Methylene Chloride	U		1.07	2.50	1	10/24/2019 06:52	WG1368527
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 06:52	WG1368527
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 06:52	WG1368527
Naphthalene	U		0.174	2.50	1	10/24/2019 06:52	WG1368527
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 06:52	WG1368527
Styrene	U		0.117	0.500	1	10/24/2019 06:52	WG1368527
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 06:52	WG1368527
1,1,2,2-Tetrachloroethane	U	JO	0.130	0.500	1	10/24/2019 06:52	WG1368527
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 06:52	WG1368527
Tetrachloroethene	U		0.199	0.500	1	10/24/2019 06:52	WG1368527
Toluene	U		0.412	0.500	1	10/24/2019 06:52	WG1368527
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 06:52	WG1368527
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 06:52	WG1368527
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 06:52	WG1368527
1,1,2-Trichloroethane	U	JO J4	0.186	0.500	1	10/24/2019 06:52	WG1368527
Trichloroethene	0.350	J	0.153	0.500	1	10/24/2019 06:52	WG1368527
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 06:52	WG1368527
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 06:52	WG1368527
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 06:52	WG1368527
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 06:52	WG1368527
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 06:52	WG1368527

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/24/2019 06:52	WG1368527
Vinyl chloride	7.36		0.118	0.500	1	10/24/2019 06:52	WG1368527
Xylenes, Total	U		0.316	1.50	1	10/24/2019 06:52	WG1368527
<i>(S) Toluene-d8</i>	99.4			80.0-120		10/24/2019 06:52	WG1368527
<i>(S) 4-Bromofluorobenzene</i>	102			77.0-126		10/24/2019 06:52	WG1368527
<i>(S) 1,2-Dichloroethane-d4</i>	113			70.0-130		10/24/2019 06:52	WG1368527

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/15/19 14:20

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	465000		2710	20000	1	10/22/2019 00:15	WG1366029

Sample Narrative:

L1150336-07 WG1366029: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	19300		51.9	1000	1	10/16/2019 20:47	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 20:47	WG1363847
Sulfate	73200		77.4	5000	1	10/16/2019 20:47	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	7050		102	1000	1	10/19/2019 23:00	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	1290		15.0	100	1	10/22/2019 15:07	WG1364631
Manganese	3430		0.250	5.00	1	10/22/2019 15:07	WG1364631

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	5020		0.287	0.678	1	10/17/2019 15:53	WG1364420
Ethane	U		0.296	1.29	1	10/17/2019 15:53	WG1364420
Ethene	U		0.422	1.27	1	10/17/2019 15:53	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.11	J	1.05	25.0	1	10/24/2019 07:12	WG1368527
Acrylonitrile	U		0.873	5.00	1	10/24/2019 07:12	WG1368527
Benzene	0.233	J	0.0896	0.500	1	10/24/2019 07:12	WG1368527
Bromobenzene	U		0.133	0.500	1	10/24/2019 07:12	WG1368527
Bromodichloromethane	U		0.0800	0.500	1	10/24/2019 07:12	WG1368527
Bromochloromethane	U		0.145	0.500	1	10/24/2019 07:12	WG1368527
Bromoform	U		0.186	0.500	1	10/24/2019 07:12	WG1368527
Bromomethane	U		0.157	2.50	1	10/24/2019 07:12	WG1368527
n-Butylbenzene	U		0.143	0.500	1	10/24/2019 07:12	WG1368527
sec-Butylbenzene	U		0.134	0.500	1	10/24/2019 07:12	WG1368527
tert-Butylbenzene	U		0.183	0.500	1	10/24/2019 07:12	WG1368527
Carbon disulfide	U		0.101	0.500	1	10/24/2019 07:12	WG1368527
Carbon tetrachloride	U		0.159	0.500	1	10/24/2019 07:12	WG1368527
Chlorobenzene	U		0.140	0.500	1	10/24/2019 07:12	WG1368527
Chlorodibromomethane	U	JO	0.128	0.500	1	10/24/2019 07:12	WG1368527
Chloroethane	U		0.141	2.50	1	10/24/2019 07:12	WG1368527
Chloroform	U		0.0860	0.500	1	10/24/2019 07:12	WG1368527
Chloromethane	U		0.153	1.25	1	10/24/2019 07:12	WG1368527
2-Chlorotoluene	U		0.111	0.500	1	10/24/2019 07:12	WG1368527
4-Chlorotoluene	U		0.0972	0.500	1	10/24/2019 07:12	WG1368527

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 14:20

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/24/2019 07:12	WG1368527
1,2-Dibromoethane	U		0.193	0.500	1	10/24/2019 07:12	WG1368527
Dibromomethane	U		0.117	0.500	1	10/24/2019 07:12	WG1368527
1,2-Dichlorobenzene	U	JO	0.101	0.500	1	10/24/2019 07:12	WG1368527
1,3-Dichlorobenzene	U	JO J4	0.130	0.500	1	10/24/2019 07:12	WG1368527
1,4-Dichlorobenzene	U	JO J4	0.121	0.500	1	10/24/2019 07:12	WG1368527
Dichlorodifluoromethane	U		0.127	2.50	1	10/24/2019 07:12	WG1368527
1,1-Dichloroethane	U		0.114	0.500	1	10/24/2019 07:12	WG1368527
1,2-Dichloroethane	U		0.108	0.500	1	10/24/2019 07:12	WG1368527
1,1-Dichloroethene	5.01		0.188	0.500	1	10/24/2019 07:12	WG1368527
cis-1,2-Dichloroethene	574		4.67	25.0	50	10/24/2019 21:32	WG1369128
trans-1,2-Dichloroethene	3.86		0.152	0.500	1	10/24/2019 07:12	WG1368527
1,2-Dichloropropane	U		0.190	0.500	1	10/24/2019 07:12	WG1368527
1,1-Dichloropropene	U		0.128	0.500	1	10/24/2019 07:12	WG1368527
1,3-Dichloropropane	U	JO J4	0.147	1.00	1	10/24/2019 07:12	WG1368527
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/24/2019 07:12	WG1368527
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/24/2019 07:12	WG1368527
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/24/2019 07:12	WG1368527
2,2-Dichloropropane	U		0.0929	0.500	1	10/24/2019 07:12	WG1368527
Di-isopropyl ether	U		0.0924	0.500	1	10/24/2019 07:12	WG1368527
Ethylbenzene	U		0.158	0.500	1	10/24/2019 07:12	WG1368527
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/24/2019 07:12	WG1368527
2-Hexanone	U		0.757	5.00	1	10/24/2019 07:12	WG1368527
n-Hexane	U	JO	0.305	5.00	1	10/24/2019 07:12	WG1368527
Iodomethane	U		0.377	10.0	1	10/24/2019 07:12	WG1368527
Isopropylbenzene	U		0.126	0.500	1	10/24/2019 07:12	WG1368527
p-Isopropyltoluene	U		0.138	0.500	1	10/24/2019 07:12	WG1368527
2-Butanone (MEK)	U		1.28	5.00	1	10/24/2019 07:12	WG1368527
Methylene Chloride	U		1.07	2.50	1	10/24/2019 07:12	WG1368527
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/24/2019 07:12	WG1368527
Methyl tert-butyl ether	U		0.102	0.500	1	10/24/2019 07:12	WG1368527
Naphthalene	U		0.174	2.50	1	10/24/2019 07:12	WG1368527
n-Propylbenzene	U		0.162	0.500	1	10/24/2019 07:12	WG1368527
Styrene	U		0.117	0.500	1	10/24/2019 07:12	WG1368527
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/24/2019 07:12	WG1368527
1,1,2,2-Tetrachloroethane	U	JO	0.130	0.500	1	10/24/2019 07:12	WG1368527
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/24/2019 07:12	WG1368527
Tetrachloroethene	1180		9.95	25.0	50	10/24/2019 21:32	WG1369128
Toluene	U		0.412	0.500	1	10/24/2019 07:12	WG1368527
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/24/2019 07:12	WG1368527
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/24/2019 07:12	WG1368527
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/24/2019 07:12	WG1368527
1,1,2-Trichloroethane	U	JO J4	0.186	0.500	1	10/24/2019 07:12	WG1368527
Trichloroethene	498		7.65	25.0	50	10/24/2019 21:32	WG1369128
Trichlorofluoromethane	U		0.130	2.50	1	10/24/2019 07:12	WG1368527
1,2,3-Trichloropropane	U		0.247	2.50	1	10/24/2019 07:12	WG1368527
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/24/2019 07:12	WG1368527
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/24/2019 07:12	WG1368527
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/24/2019 07:12	WG1368527
Vinyl acetate	U	JO	0.645	5.00	1	10/24/2019 07:12	WG1368527
Vinyl chloride	0.853		0.118	0.500	1	10/24/2019 07:12	WG1368527
Xylenes, Total	U		0.316	1.50	1	10/24/2019 07:12	WG1368527
(S) Toluene-d8	98.6			80.0-120		10/24/2019 07:12	WG1368527
(S) Toluene-d8	112			80.0-120		10/24/2019 21:32	WG1369128
(S) 4-Bromofluorobenzene	107			77.0-126		10/24/2019 07:12	WG1368527
(S) 4-Bromofluorobenzene	112			77.0-126		10/24/2019 21:32	WG1369128

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	114			70.0-130		10/24/2019 07:12	WG1368527
(S) 1,2-Dichloroethane-d4	110			70.0-130		10/24/2019 21:32	WG1369128

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	174000		2710	20000	1	10/22/2019 00:22	WG1366029

Sample Narrative:

L1150336-08 WG1366029: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10500		51.9	1000	1	10/16/2019 21:00	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 21:00	WG1363847
Sulfate	8290		77.4	5000	1	10/16/2019 21:00	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2320	<u>B</u>	102	1000	1	10/19/2019 23:20	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	6770		15.0	100	1	10/22/2019 15:10	WG1364631
Manganese	420		0.250	5.00	1	10/22/2019 15:10	WG1364631

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 18:42	WG1365317
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 18:42	WG1365317

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	20.2		0.287	0.678	1	10/18/2019 13:10	WG1365165
Ethane	U		0.296	1.29	1	10/18/2019 13:10	WG1365165
Ethene	U		0.422	1.27	1	10/18/2019 13:10	WG1365165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>JO</u>	1.05	25.0	1	10/25/2019 22:30	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/25/2019 22:30	WG1369955
Benzene	U		0.0896	0.500	1	10/25/2019 22:30	WG1369955
Bromobenzene	U	<u>JO</u>	0.133	0.500	1	10/25/2019 22:30	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/25/2019 22:30	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/25/2019 22:30	WG1369955
Bromoform	U		0.186	0.500	1	10/25/2019 22:30	WG1369955
Bromomethane	U		0.157	2.50	1	10/25/2019 22:30	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/25/2019 22:30	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/25/2019 22:30	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/25/2019 22:30	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/25/2019 22:30	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/25/2019 22:30	WG1369955

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 10/15/19 14:25

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/25/2019 22:30	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/25/2019 22:30	WG1369955
Chloroethane	U		0.141	2.50	1	10/25/2019 22:30	WG1369955
Chloroform	U		0.0860	0.500	1	10/25/2019 22:30	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/25/2019 22:30	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/25/2019 22:30	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/25/2019 22:30	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/25/2019 22:30	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/25/2019 22:30	WG1369955
Dibromomethane	U		0.117	0.500	1	10/25/2019 22:30	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/25/2019 22:30	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/25/2019 22:30	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/25/2019 22:30	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/25/2019 22:30	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/25/2019 22:30	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/25/2019 22:30	WG1369955
1,1-Dichloroethene	U		0.188	0.500	1	10/25/2019 22:30	WG1369955
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/25/2019 22:30	WG1369955
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/25/2019 22:30	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/25/2019 22:30	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/25/2019 22:30	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/25/2019 22:30	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/25/2019 22:30	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/25/2019 22:30	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/25/2019 22:30	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/25/2019 22:30	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/25/2019 22:30	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/25/2019 22:30	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/25/2019 22:30	WG1369955
2-Hexanone	U		0.757	5.00	1	10/25/2019 22:30	WG1369955
n-Hexane	U		0.305	5.00	1	10/25/2019 22:30	WG1369955
Iodomethane	U		0.377	10.0	1	10/25/2019 22:30	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/25/2019 22:30	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/25/2019 22:30	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/25/2019 22:30	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/25/2019 22:30	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/25/2019 22:30	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/25/2019 22:30	WG1369955
Naphthalene	U		0.174	2.50	1	10/25/2019 22:30	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/25/2019 22:30	WG1369955
Styrene	U		0.117	0.500	1	10/25/2019 22:30	WG1369955
1,1,1-Tetrachloroethane	U		0.120	0.500	1	10/25/2019 22:30	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/25/2019 22:30	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/25/2019 22:30	WG1369955
Tetrachloroethene	U		0.199	0.500	1	10/25/2019 22:30	WG1369955
Toluene	U		0.412	0.500	1	10/25/2019 22:30	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/25/2019 22:30	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/25/2019 22:30	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/25/2019 22:30	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/25/2019 22:30	WG1369955
Trichloroethene	U		0.153	0.500	1	10/25/2019 22:30	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/25/2019 22:30	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/25/2019 22:30	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/25/2019 22:30	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/25/2019 22:30	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/25/2019 22:30	WG1369955

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/15/19 14:25

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/25/2019 22:30	WG1369955
Vinyl chloride	U		0.118	0.500	1	10/25/2019 22:30	WG1369955
Xylenes, Total	U		0.316	1.50	1	10/25/2019 22:30	WG1369955
<i>(S) Toluene-d8</i>	112			80.0-120		10/25/2019 22:30	WG1369955
<i>(S) 4-Bromofluorobenzene</i>	113			77.0-126		10/25/2019 22:30	WG1369955
<i>(S) 1,2-Dichloroethane-d4</i>	102			70.0-130		10/25/2019 22:30	WG1369955

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	667000		2710	20000	1	10/22/2019 00:30	WG1366029

Sample Narrative:

L1150336-09 WG1366029: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	26100		51.9	1000	1	10/16/2019 21:13	WG1363847
Nitrate	U		22.7	100	1	10/16/2019 21:13	WG1363847
Sulfate	68700		77.4	5000	1	10/16/2019 21:13	WG1363847

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	11300		102	1000	1	10/19/2019 23:45	WG1365601

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	4600		15.0	100	1	10/22/2019 15:14	WG1364631
Manganese	1170		0.250	5.00	1	10/22/2019 15:14	WG1364631

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	365		31.6	100	1	10/18/2019 19:06	WG1365317
(S) a,a,a-Trifluorotoluene(FID)	108			78.0-120		10/18/2019 19:06	WG1365317

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	12900		2.87	6.78	10	10/18/2019 13:13	WG1365165
Ethane	34.1		0.296	1.29	1	10/17/2019 15:55	WG1364420
Ethene	29.6		0.422	1.27	1	10/17/2019 15:55	WG1364420

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.21	J JO	1.05	25.0	1	10/25/2019 22:50	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/25/2019 22:50	WG1369955
Benzene	0.167	J	0.0896	0.500	1	10/25/2019 22:50	WG1369955
Bromobenzene	U	JO	0.133	0.500	1	10/25/2019 22:50	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/25/2019 22:50	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/25/2019 22:50	WG1369955
Bromoform	U		0.186	0.500	1	10/25/2019 22:50	WG1369955
Bromomethane	U		0.157	2.50	1	10/25/2019 22:50	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/25/2019 22:50	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/25/2019 22:50	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/25/2019 22:50	WG1369955
Carbon disulfide	0.342	J	0.101	0.500	1	10/25/2019 22:50	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/25/2019 22:50	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 14:00

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/25/2019 22:50	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/25/2019 22:50	WG1369955
Chloroethane	3.45		0.141	2.50	1	10/25/2019 22:50	WG1369955
Chloroform	U		0.0860	0.500	1	10/25/2019 22:50	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/25/2019 22:50	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/25/2019 22:50	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/25/2019 22:50	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/25/2019 22:50	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/25/2019 22:50	WG1369955
Dibromomethane	U		0.117	0.500	1	10/25/2019 22:50	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/25/2019 22:50	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/25/2019 22:50	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/25/2019 22:50	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/25/2019 22:50	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/25/2019 22:50	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/25/2019 22:50	WG1369955
1,1-Dichloroethene	3.27		0.188	0.500	1	10/25/2019 22:50	WG1369955
cis-1,2-Dichloroethene	333		0.933	5.00	10	10/27/2019 15:29	WG1370146
trans-1,2-Dichloroethene	7.04		0.152	0.500	1	10/25/2019 22:50	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/25/2019 22:50	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/25/2019 22:50	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/25/2019 22:50	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/25/2019 22:50	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/25/2019 22:50	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/25/2019 22:50	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/25/2019 22:50	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/25/2019 22:50	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/25/2019 22:50	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/25/2019 22:50	WG1369955
2-Hexanone	U		0.757	5.00	1	10/25/2019 22:50	WG1369955
n-Hexane	U		0.305	5.00	1	10/25/2019 22:50	WG1369955
Iodomethane	U		0.377	10.0	1	10/25/2019 22:50	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/25/2019 22:50	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/25/2019 22:50	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/25/2019 22:50	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/25/2019 22:50	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/25/2019 22:50	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/25/2019 22:50	WG1369955
Naphthalene	U		0.174	2.50	1	10/25/2019 22:50	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/25/2019 22:50	WG1369955
Styrene	U		0.117	0.500	1	10/25/2019 22:50	WG1369955
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/25/2019 22:50	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/25/2019 22:50	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/25/2019 22:50	WG1369955
Tetrachloroethene	41.7		0.199	0.500	1	10/25/2019 22:50	WG1369955
Toluene	0.572		0.412	0.500	1	10/25/2019 22:50	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/25/2019 22:50	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/25/2019 22:50	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/25/2019 22:50	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/25/2019 22:50	WG1369955
Trichloroethene	138		0.153	0.500	1	10/25/2019 22:50	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/25/2019 22:50	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/25/2019 22:50	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/25/2019 22:50	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/25/2019 22:50	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/25/2019 22:50	WG1369955

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/15/19 14:00

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/25/2019 22:50	WG1369955
Vinyl chloride	216		1.18	5.00	10	10/27/2019 15:29	WG1370146
Xylenes, Total	U		0.316	1.50	1	10/25/2019 22:50	WG1369955
<i>(S) Toluene-d8</i>	111			80.0-120		10/25/2019 22:50	WG1369955
<i>(S) Toluene-d8</i>	95.1			80.0-120		10/27/2019 15:29	WG1370146
<i>(S) 4-Bromofluorobenzene</i>	112			77.0-126		10/25/2019 22:50	WG1369955
<i>(S) 4-Bromofluorobenzene</i>	92.2			77.0-126		10/27/2019 15:29	WG1370146
<i>(S) 1,2-Dichloroethane-d4</i>	104			70.0-130		10/25/2019 22:50	WG1369955
<i>(S) 1,2-Dichloroethane-d4</i>	101			70.0-130		10/27/2019 15:29	WG1370146

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 00:00

L1150336

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/18/2019 12:20	WG1365317
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/18/2019 12:20	WG1365317

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U		1.05	25.0	1	10/26/2019 14:49	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 14:49	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 14:49	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 14:49	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 14:49	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 14:49	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 14:49	WG1370189
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/26/2019 14:49	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 14:49	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 14:49	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 14:49	WG1370189
Carbon disulfide	0.146	<u>J</u>	0.101	0.500	1	10/26/2019 14:49	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 14:49	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 14:49	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 14:49	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 14:49	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 14:49	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 14:49	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 14:49	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 14:49	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 14:49	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 14:49	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 14:49	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 14:49	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 14:49	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 14:49	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 14:49	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 14:49	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 14:49	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 14:49	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 14:49	WG1370189
trans-1,2-Dichloroethene	0.365	<u>J</u>	0.152	0.500	1	10/26/2019 14:49	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 14:49	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 14:49	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 14:49	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 14:49	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 14:49	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 14:49	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 14:49	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 14:49	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 14:49	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 14:49	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 14:49	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 14:49	WG1370189
Iodomethane	U	<u>JO</u>	0.377	10.0	1	10/26/2019 14:49	WG1370189
Isopropylbenzene	U	<u>JO</u>	0.126	0.500	1	10/26/2019 14:49	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 14:49	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 14:49	WG1370189

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/15/19 00:00

L1150336

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/26/2019 14:49	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 14:49	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 14:49	WG1370189
Naphthalene	0.910	<u>BJ</u>	0.174	2.50	1	10/26/2019 14:49	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 14:49	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 14:49	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 14:49	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 14:49	WG1370189
1,1,2-Trichlorotrifluoroethane	U	<u>JO</u>	0.164	0.500	1	10/26/2019 14:49	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 14:49	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 14:49	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 14:49	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 14:49	WG1370189
1,1,1-Trichloroethane	U	<u>JO</u>	0.0940	0.500	1	10/26/2019 14:49	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 14:49	WG1370189
Trichloroethene	U	<u>JO</u>	0.153	0.500	1	10/26/2019 14:49	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 14:49	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 14:49	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 14:49	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 14:49	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 14:49	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 14:49	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 14:49	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 14:49	WG1370189
(S) Toluene-d8	97.4			80.0-120		10/26/2019 14:49	WG1370189
(S) 4-Bromofluorobenzene	94.4			77.0-126		10/26/2019 14:49	WG1370189
(S) 1,2-Dichloroethane-d4	97.1			70.0-130		10/26/2019 14:49	WG1370189

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Method Blank (MB)

(MB) R3463464-1 10/22/19 02:58

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	3910	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1149909-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1149909-01 10/22/19 03:44 • (DUP) R3463464-2 10/22/19 03:51

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	369000	368000	1	0.0475		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

L1150335-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1150335-01 10/22/19 05:21 • (DUP) R3463464-4 10/22/19 05:28

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	532000	533000	1	0.296		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3463464-3 10/22/19 04:14

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	103000	103	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3463428-1 10/21/19 21:12

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	4460	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1150748-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1150748-01 10/21/19 23:29 • (DUP) R3463428-2 10/21/19 23:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	50300	50300	1	0.0876		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

L1150748-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1150748-06 10/22/19 02:05 • (DUP) R3463428-4 10/22/19 02:13

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	33700	33600	1	0.291		20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3463428-3 10/22/19 00:37

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	101000	101	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3461831-1 10/16/19 10:40

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	86.7	J	77.4	5000

L1150320-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1150320-06 10/16/19 15:41 • (DUP) R3461831-3 10/16/19 15:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	10000	9910	1	1.39		15
Nitrate	49.4	47.0	1	4.98	J	15
Sulfate	15300	15200	1	1.07		15

L1150339-10 Original Sample (OS) • Duplicate (DUP)

(OS) L1150339-10 10/16/19 21:26 • (DUP) R3461831-5 10/16/19 21:38

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	72100	72300	1	0.176		15
Nitrate	U	0.000	1	0.000		15

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Laboratory Control Sample (LCS)

(LCS) R3461831-2 10/16/19 10:53

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%		
Chloride	40000	39800	99.5	80.0-120	
Nitrate	8000	8190	102	80.0-120	
Sulfate	40000	40300	101	80.0-120	

L1150320-09 Original Sample (OS) • Matrix Spike (MS)

(OS) L1150320-09 10/16/19 16:06 • (MS) R3461831-4 10/16/19 16:19

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%			
Chloride	50000	26500	75200	97.5	1	80.0-120	
Nitrate	5000	211	5210	100	1	80.0-120	

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.00102.501E

SDG:

L1150336

DATE/TIME:

10/29/19 09:23

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L1150320-09 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Sulfate	50000	45400	93100	95.4	1	80.0-120	

L1150339-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	72100	118000	118000	92.0	91.2	1	80.0-120	E	E	0.350	15
Nitrate	5000	U	5080	5060	102	101	1	80.0-120			0.483	15

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3462895-1	10/19/19 12:52																		
	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL															
Analyte	ug/l		ug/l	ug/l															
TOC (Total Organic Carbon)	581	<u>1</u>	102	1000															

L1150336-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1150336-03	10/19/19 19:28 • (DUP) R3462895-3	10/19/19 19:42																	
	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
Analyte	ug/l	ug/l		%		%													
TOC (Total Organic Carbon)	3340	3330	1	0.450		20													

L1150336-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1150336-09	10/19/19 23:45 • (DUP) R3462895-6	10/20/19 00:08																	
	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits													
Analyte	ug/l	ug/l		%		%													
TOC (Total Organic Carbon)	11300	11200	1	0.979		20													

Laboratory Control Sample (LCS)

(LCS) R3462895-2	10/19/19 13:37																		
	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>														
Analyte	ug/l	ug/l	%	%															
TOC (Total Organic Carbon)	75000	68400	912	85.0-115															

L1150336-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150336-05	10/19/19 21:31 • (MS) R3462895-4	10/19/19 21:54 • (MSD) R3462895-5	10/19/19 22:16																
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits							
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%							
TOC (Total Organic Carbon)	50000	2320	50000	48000	95.4	91.4	1	80.0-120			4.08	20							

L1150505-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150505-08	10/20/19 02:35 • (MS) R3462895-7	10/20/19 02:53 • (MSD) R3462895-8	10/20/19 03:20																
	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits							
Analyte	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%							
TOC (Total Organic Carbon)	50000	843	47200	46900	92.8	92.0	1	80.0-120			0.829	20							

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Metals (ICPMS) by Method 6020B

[L1150336-01.02.03.04.05.06.07.08.09](#)

Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3463726-1 10/22/19 14:02				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.261	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3463726-2 10/22/19 14:05 • (LCSD) R3463726-3 10/22/19 14:09									
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	ug/l	ug/l	ug/l	%	%	%			%	%
Manganese	5000	4950	5110	99.0	102	80.0-120	3.11	20	20	
	50.0	48.7	50.4	97.4	101	80.0-120	3.49	20	20	

L1150336-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

	(OS) L1150336-01 10/22/19 14:13 • (MS) R3463726-5 10/22/19 14:20 • (MSD) R3463726-6 10/22/19 14:24											
Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Manganese	5000	388	5490	5310	102	98.5	1	75.0-125			3.27	20
	50.0	327	385	372	117	90.5	1	75.0-125			3.44	20

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1150336-03.05.06.08.09.10](#)

Method Blank (MB)

(MB) R3462806-3 10/18/19 11:29

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) a,a'-Trifluorotoluene(FID)	108			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3462806-2 10/18/19 10:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5940	108	70.0-124	
^(S) a,a'-Trifluorotoluene(FID)			86.7	78.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1150336-01.02.03.04.05.06.07.09](#)

Method Blank (MB)

(MB) R3462155-1 10/17/19 14:17

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1150299-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1150299-08 10/17/19 14:54 • (DUP) R3462155-2 10/17/19 15:03

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	247	242	1	2.20			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

L1150336-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1150336-03 10/17/19 16:04 • (DUP) R3462155-4 10/17/19 16:09

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%	%		
Methane	U	0.000	1	0.000			20
Ethane	U	0.000	1	0.000			20
Ethene	U	0.000	1	0.000			20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3462155-3 10/17/19 16:00 • (LCSD) R3462155-5 10/17/19 16:12

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%							
Methane	67.8	73.1	69.7	108	103			85.0-115			4.87	20	
Ethane	129	129	127	100	98.1			85.0-115			1.96	20	
Ethene	127	136	133	107	104			85.0-115			2.30	20	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1150336-08.09](#)

Method Blank (MB)

(MB) R3462507-1 10/18/19 13:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1150336-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1150336-08 10/18/19 13:10 • (DUP) R3462507-2 10/18/19 13:33

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	20.2	22.0	1	8.39		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3462507-5 10/18/19 13:50 • (LCSD) R3462507-6 10/18/19 13:56

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	72.3	71.6	107	106	85.0-115			0.913	20
Ethane	129	127	127	98.2	98.7	85.0-115			0.516	20
Ethene	127	133	133	105	105	85.0-115			0.356	20

L1150339-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150339-10 10/18/19 13:42 • (MS) R3462507-3 10/18/19 13:45 • (MSD) R3462507-4 10/18/19 13:47

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Methane	67.8	10400	10600	11000	19.7	74.1	10	85.0-115	V	V	3.43	20
Ethane	129	380	1800	1480	110	85.0	10	85.0-115			19.6	20
Ethene	127	741	2220	1900	116	91.0	10	85.0-115	J5		15.6	20

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Method Blank (MB)

(MB) R3464735-2_10/23/19 22:46

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U	10	0.101	0.500
1,3-Dichlorobenzene	U	10	0.130	0.500
1,4-Dichlorobenzene	U	10	0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U	10	0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U	10	0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3464735-2_10/23/19 22:46

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.419	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U	J0	0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.220	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U	J0	0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.169	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U	J0	0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U	J0	0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	102			80.0-120
(S) 4-Bromofluorobenzene	105			77.0-126
(S) 1,2-Dichloroethane-d4	103			70.0-130

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3464735-1 10/23/19 22:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	102	81.6	19.0-160	
Acrylonitrile	125	108	86.4	55.0-149	
Benzene	25.0	21.5	86.0	70.0-123	
Bromobenzene	25.0	20.0	80.0	73.0-121	
Bromodichloromethane	25.0	24.5	98.0	75.0-120	
Bromochloromethane	25.0	23.0	92.0	76.0-122	
Bromoform	25.0	22.5	90.0	68.0-132	
Bromomethane	25.0	23.5	94.0	10.0-160	
n-Butylbenzene	25.0	21.2	84.8	73.0-125	
sec-Butylbenzene	25.0	21.6	86.4	75.0-125	
tert-Butylbenzene	25.0	22.4	89.6	76.0-124	
Carbon disulfide	25.0	22.0	88.0	61.0-128	
Carbon tetrachloride	25.0	27.9	112	68.0-126	
Chlorobenzene	25.0	20.5	82.0	80.0-121	
Chlorodibromomethane	25.0	19.5	78.0	77.0-125	
Chloroethane	25.0	23.4	93.6	47.0-150	
Chloroform	25.0	22.8	91.2	73.0-120	
Chloromethane	25.0	20.5	82.0	41.0-142	
2-Chlorotoluene	25.0	20.6	82.4	76.0-123	
4-Chlorotoluene	25.0	20.6	82.4	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	20.9	83.6	58.0-134	
1,2-Dibromoethane	25.0	20.3	81.2	80.0-122	
Dibromomethane	25.0	23.6	94.4	80.0-120	
1,2-Dichlorobenzene	25.0	19.9	79.6	79.0-121	<u>JO</u>
1,3-Dichlorobenzene	25.0	19.5	78.0	79.0-120	<u>JO J4</u>
1,4-Dichlorobenzene	25.0	19.7	78.8	79.0-120	<u>JO J4</u>
Dichlorodifluoromethane	25.0	22.8	91.2	51.0-149	
1,1-Dichloroethane	25.0	22.9	91.6	70.0-126	
1,2-Dichloroethane	25.0	21.4	85.6	70.0-128	
1,1-Dichloroethene	25.0	22.8	91.2	71.0-124	
cis-1,2-Dichloroethene	25.0	22.4	89.6	73.0-120	
trans-1,2-Dichloroethene	25.0	21.6	86.4	73.0-120	
1,2-Dichloropropane	25.0	22.1	88.4	77.0-125	
1,1-Dichloropropene	25.0	24.7	98.8	74.0-126	
1,3-Dichloropropene	25.0	19.5	78.0	80.0-120	<u>JO J4</u>
cis-1,3-Dichloropropene	25.0	23.0	92.0	80.0-123	
trans-1,3-Dichloropropene	25.0	20.5	82.0	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.9	71.6	33.0-144	<u>JO</u>
2,2-Dichloropropane	25.0	21.4	85.6	58.0-130	
Di-isopropyl ether	25.0	20.5	82.0	58.0-138	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3464735-1 10/23/19 22:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	20.6	82.4	79.0-123	
Hexachloro-1,3-butadiene	25.0	23.9	95.6	54.0-138	
2-Hexanone	125	109	87.2	67.0-149	
n-Hexane	25.0	18.7	74.8	57.0-133	<u>JO</u>
Iodomethane	125	112	89.6	33.0-147	
Isopropylbenzene	25.0	21.4	85.6	76.0-127	
p-Isopropyltoluene	25.0	22.6	90.4	76.0-125	
2-Butanone (MEK)	125	114	91.2	44.0-160	
Methylene Chloride	25.0	20.8	83.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	101	80.8	68.0-142	
Methyl tert-butyl ether	25.0	21.8	87.2	68.0-125	
Naphthalene	25.0	20.7	82.8	54.0-135	
n-Propylbenzene	25.0	20.8	83.2	77.0-124	
Styrene	25.0	21.5	86.0	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	20.9	83.6	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	18.2	72.8	65.0-130	<u>JO</u>
1,1,2-Trichlorotrifluoroethane	25.0	20.5	82.0	69.0-132	
Tetrachloroethene	25.0	21.9	87.6	72.0-132	
Toluene	25.0	20.3	81.2	79.0-120	
1,2,3-Trichlorobenzene	25.0	21.2	84.8	50.0-138	
1,2,4-Trichlorobenzene	25.0	20.6	82.4	57.0-137	
1,1,1-Trichloroethane	25.0	26.2	105	73.0-124	
1,1,2-Trichloroethane	25.0	19.2	76.8	80.0-120	<u>JO J4</u>
Trichloroethene	25.0	25.9	104	78.0-124	
Trichlorofluoromethane	25.0	27.8	111	59.0-147	
1,2,3-Trichloropropane	25.0	21.1	84.4	73.0-130	
1,2,4-Trimethylbenzene	25.0	20.0	80.0	76.0-121	
1,2,3-Trimethylbenzene	25.0	20.3	81.2	77.0-120	
1,3,5-Trimethylbenzene	25.0	20.7	82.8	76.0-122	
Vinyl acetate	125	59.9	47.9	11.0-160	<u>JO</u>
Vinyl chloride	25.0	23.6	94.4	67.0-131	
Xylenes, Total	75.0	60.9	81.2	79.0-123	
(S) Toluene-d8			96.8	80.0-120	
(S) 4-Bromofluorobenzene			102	77.0-126	
(S) 1,2-Dichloroethane-d4			109	70.0-130	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1150336-02.03.07](#)

Method Blank (MB)

(MB) R3464910-2 10/24/19 18:25

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
cis-1,2-Dichloroethene	U		0.0933	0.500
Tetrachloroethene	U		0.199	0.500
Trichloroethene	U		0.153	0.500
(S) Toluene-d8	113			80.0-120
(S) 4-Bromofluorobenzene	114			77.0-126
(S) 1,2-Dichloroethane-d4	104			70.0-130

Laboratory Control Sample (LCS)

(LCS) R3464910-1 10/24/19 17:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
cis-1,2-Dichloroethene	25.0	22.8	91.2	73.0-120	
Tetrachloroethene	25.0	25.5	102	72.0-132	
Trichloroethene	25.0	25.0	100	78.0-124	
(S) Toluene-d8			111	80.0-120	
(S) 4-Bromofluorobenzene			110	77.0-126	
(S) 1,2-Dichloroethane-d4			109	70.0-130	

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1 Cp
2 Tc
3 Ss
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5 Sr
6 Qc
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9 Sc

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Method Blank (MB)

(MB) R3465284-3 10/25/19 21:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
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Method Blank (MB)

(MB) R3465284-3 10/25/19 21:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.238	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	113			80.0-120
(S) 4-Bromofluorobenzene	114			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

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2 Tc
3 Ss
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Laboratory Control Sample (LCS)

(LCS) R3465284-1 10/25/19 19:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	94.6	75.7	19.0-160	
Acrylonitrile	125	128	102	55.0-149	
Benzene	25.0	23.6	94.4	70.0-123	
Bromobenzene	25.0	20.2	80.8	73.0-121	
Bromodichloromethane	25.0	25.0	100	75.0-120	
Bromochloromethane	25.0	27.5	110	76.0-122	
Bromoform	25.0	30.8	123	68.0-132	
Bromomethane	25.0	26.6	106	10.0-160	
n-Butylbenzene	25.0	22.6	90.4	73.0-125	
sec-Butylbenzene	25.0	22.5	90.0	75.0-125	
tert-Butylbenzene	25.0	24.8	99.2	76.0-124	
Carbon disulfide	25.0	23.7	94.8	61.0-128	
Carbon tetrachloride	25.0	29.8	119	68.0-126	
Chlorobenzene	25.0	26.6	106	80.0-121	
Chlorodibromomethane	25.0	30.2	121	77.0-125	
Chloroethane	25.0	25.9	104	47.0-150	
Chloroform	25.0	23.2	92.8	73.0-120	
Chloromethane	25.0	21.7	86.8	41.0-142	
2-Chlorotoluene	25.0	21.7	86.8	76.0-123	
4-Chlorotoluene	25.0	21.9	87.6	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	26.6	106	58.0-134	
1,2-Dibromoethane	25.0	25.7	103	80.0-122	
Dibromomethane	25.0	25.7	103	80.0-120	
1,2-Dichlorobenzene	25.0	26.6	106	79.0-121	
1,3-Dichlorobenzene	25.0	25.6	102	79.0-120	
1,4-Dichlorobenzene	25.0	23.7	94.8	79.0-120	
trans-1,4-Dichloro-2-butene	25.0	18.8	75.2	33.0-144	
Dichlorodifluoromethane	25.0	22.3	89.2	51.0-149	
1,1-Dichloroethane	25.0	24.4	97.6	70.0-126	
1,2-Dichloroethane	25.0	23.8	95.2	70.0-128	
1,1-Dichloroethene	25.0	26.6	106	71.0-124	
cis-1,2-Dichloroethene	25.0	25.5	102	73.0-120	
trans-1,2-Dichloroethene	25.0	25.6	102	73.0-120	
1,2-Dichloropropane	25.0	23.7	94.8	77.0-125	
1,1-Dichloropropene	25.0	25.3	101	74.0-126	
1,3-Dichloropropene	25.0	24.5	98.0	80.0-120	
cis-1,3-Dichloropropene	25.0	25.2	101	80.0-123	
trans-1,3-Dichloropropene	25.0	25.9	104	78.0-124	
2,2-Dichloropropane	25.0	26.8	107	58.0-130	
Di-isopropyl ether	25.0	25.1	100	58.0-138	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
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Laboratory Control Sample (LCS)

(LCS) R3465284-1 10/25/19 19:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.7	103	79.0-123	
Hexachloro-1,3-butadiene	25.0	25.6	102	54.0-138	
2-Hexanone	125	132	106	67.0-149	
n-Hexane	25.0	23.9	95.6	57.0-133	
Iodomethane	125	145	116	33.0-147	
Isopropylbenzene	25.0	28.4	114	76.0-127	
p-Isopropyltoluene	25.0	24.2	96.8	76.0-125	
2-Butanone (MEK)	125	119	95.2	44.0-160	
Methylene Chloride	25.0	23.2	92.8	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	133	106	68.0-142	
Methyl tert-butyl ether	25.0	26.0	104	68.0-125	
Naphthalene	25.0	25.7	103	54.0-135	
n-Propylbenzene	25.0	22.0	88.0	77.0-124	
Styrene	25.0	28.2	113	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	30.2	121	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	20.9	83.6	65.0-130	
Tetrachloroethene	25.0	29.2	117	72.0-132	
Toluene	25.0	25.2	101	79.0-120	
1,1,2-Trichlorotrifluoroethane	25.0	27.8	111	69.0-132	
1,2,3-Trichlorobenzene	25.0	27.0	108	50.0-138	
1,2,4-Trichlorobenzene	25.0	26.3	105	57.0-137	
1,1,1-Trichloroethane	25.0	28.2	113	73.0-124	
1,1,2-Trichloroethane	25.0	25.8	103	80.0-120	
Trichloroethene	25.0	28.0	112	78.0-124	
Trichlorofluoromethane	25.0	27.9	112	59.0-147	
1,2,3-Trichloropropane	25.0	22.6	90.4	73.0-130	
1,2,3-Trimethylbenzene	25.0	22.7	90.8	77.0-120	
1,2,4-Trimethylbenzene	25.0	22.3	89.2	76.0-121	
1,3,5-Trimethylbenzene	25.0	23.0	92.0	76.0-122	
Vinyl acetate	125	134	107	11.0-160	
Vinyl chloride	25.0	26.1	104	67.0-131	
Xylenes, Total	75.0	80.7	108	79.0-123	
(S) Toluene-d8			112	80.0-120	
(S) 4-Bromofluorobenzene			109	77.0-126	
(S) 1,2-Dichloroethane-d4			107	70.0-130	

1 Cp
2 Tc
3 Ss
4 Cn
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1150336-09](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(MB) R3465605-3 10/27/19 09:18				
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	96.6			80.0-120
(S) 4-Bromofluorobenzene	92.5			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3465605-1 10/27/19 08:19 • (LCSD) R3465605-2 10/27/19 08:38										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	25.0	23.1	22.9	92.4	91.6	73.0-120			0.870	20
Vinyl chloride	25.0	29.8	30.8	119	123	67.0-131			3.30	20
(S) Toluene-d8				97.5	92.4	80.0-120				
(S) 4-Bromofluorobenzene				96.1	91.1	77.0-126				
(S) 1,2-Dichloroethane-d4				101	103	70.0-130				

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Volatile Organic Compounds (GC/MS) by Method 8260C

Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
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Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.982	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.356	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	95.5			80.0-120
(S) 4-Bromofluorobenzene	92.7			77.0-126
(S) 1,2-Dichloroethane-d4	100			70.0-130

1 Cp
2 Tc
3 Ss
4 Cn
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7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	146	117	19.0-160	
Acrylonitrile	125	168	134	55.0-149	
Benzene	25.0	23.8	95.2	70.0-123	
Bromobenzene	25.0	27.7	111	73.0-121	
Bromodichloromethane	25.0	23.4	93.6	75.0-120	
Bromochloromethane	25.0	26.6	106	76.0-122	
Bromoform	25.0	24.6	98.4	68.0-132	
Bromomethane	25.0	16.1	64.4	10.0-160	
n-Butylbenzene	25.0	29.4	118	73.0-125	
sec-Butylbenzene	25.0	26.3	105	75.0-125	
tert-Butylbenzene	25.0	24.7	98.8	76.0-124	
Carbon disulfide	25.0	22.7	90.8	61.0-128	
Carbon tetrachloride	25.0	21.5	86.0	68.0-126	
Chlorobenzene	25.0	24.1	96.4	80.0-121	
Chlorodibromomethane	25.0	24.8	99.2	77.0-125	
Chloroethane	25.0	28.4	114	47.0-150	
Chloroform	25.0	22.7	90.8	73.0-120	
Chloromethane	25.0	25.8	103	41.0-142	
2-Chlorotoluene	25.0	26.9	108	76.0-123	
4-Chlorotoluene	25.0	26.6	106	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	25.6	102	58.0-134	
1,2-Dibromoethane	25.0	25.6	102	80.0-122	
Dibromomethane	25.0	26.4	106	80.0-120	
1,2-Dichlorobenzene	25.0	27.8	111	79.0-121	
1,3-Dichlorobenzene	25.0	28.5	114	79.0-120	
1,4-Dichlorobenzene	25.0	27.8	111	79.0-120	
Dichlorodifluoromethane	25.0	22.5	90.0	51.0-149	
1,1-Dichloroethane	25.0	27.6	110	70.0-126	
1,2-Dichloroethane	25.0	28.4	114	70.0-128	
1,1-Dichloroethene	25.0	24.2	96.8	71.0-124	
cis-1,2-Dichloroethene	25.0	24.0	96.0	73.0-120	
trans-1,2-Dichloroethene	25.0	22.5	90.0	73.0-120	
1,2-Dichloropropane	25.0	29.5	118	77.0-125	
1,1-Dichloropropene	25.0	24.6	98.4	74.0-126	
1,3-Dichloropropene	25.0	27.0	108	80.0-120	
cis-1,3-Dichloropropene	25.0	24.9	99.6	80.0-123	
trans-1,3-Dichloropropene	25.0	26.8	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	33.7	135	33.0-144	
2,2-Dichloropropane	25.0	23.0	92.0	58.0-130	
Di-isopropyl ether	25.0	29.5	118	58.0-138	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PROJECT:

SDG:

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PAGE:

PES Environmental, Inc.- WA

1413.00102.501E

L1150336

10/29/19 09:23

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Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	22.5	90.0	79.0-123	
Hexachloro-1,3-butadiene	25.0	31.4	126	54.0-138	
2-Hexanone	125	172	138	67.0-149	
n-Hexane	25.0	29.8	119	57.0-133	
Iodomethane	125	104	83.2	33.0-147	
Isopropylbenzene	25.0	21.3	85.2	76.0-127	
p-Isopropyltoluene	25.0	27.1	108	76.0-125	
2-Butanone (MEK)	125	139	111	44.0-160	
Methylene Chloride	25.0	22.5	90.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	142	114	68.0-142	
Methyl tert-butyl ether	25.0	25.3	101	68.0-125	
Naphthalene	25.0	23.9	95.6	54.0-135	
n-Propylbenzene	25.0	25.2	101	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	23.3	93.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	25.9	104	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	21.4	85.6	69.0-132	
Tetrachloroethene	25.0	22.9	91.6	72.0-132	
Toluene	25.0	23.7	94.8	79.0-120	
1,2,3-Trichlorobenzene	25.0	27.3	109	50.0-138	
1,2,4-Trichlorobenzene	25.0	30.0	120	57.0-137	
1,1,1-Trichloroethane	25.0	21.4	85.6	73.0-124	
1,1,2-Trichloroethane	25.0	24.5	98.0	80.0-120	
Trichloroethene	25.0	22.2	88.8	78.0-124	
Trichlorofluoromethane	25.0	26.9	108	59.0-147	
1,2,3-Trichloropropane	25.0	26.0	104	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.9	104	76.0-121	
1,2,3-Trimethylbenzene	25.0	26.6	106	77.0-120	
1,3,5-Trimethylbenzene	25.0	25.0	100	76.0-122	
Vinyl acetate	125	164	131	11.0-160	
Vinyl chloride	25.0	32.6	130	67.0-131	
Xylenes, Total	75.0	68.0	90.7	79.0-123	
(S) Toluene-d8			93.8	80.0-120	
(S) 4-Bromofluorobenzene			91.0	77.0-126	
(S) 1,2-Dichloroethane-d4			101	70.0-130	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Public Review Draft

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.00102.501E

SDG:

L1150336

DATE/TIME:

10/29/19 09:23

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J4	The associated batch QC was outside the established quality control range for accuracy.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

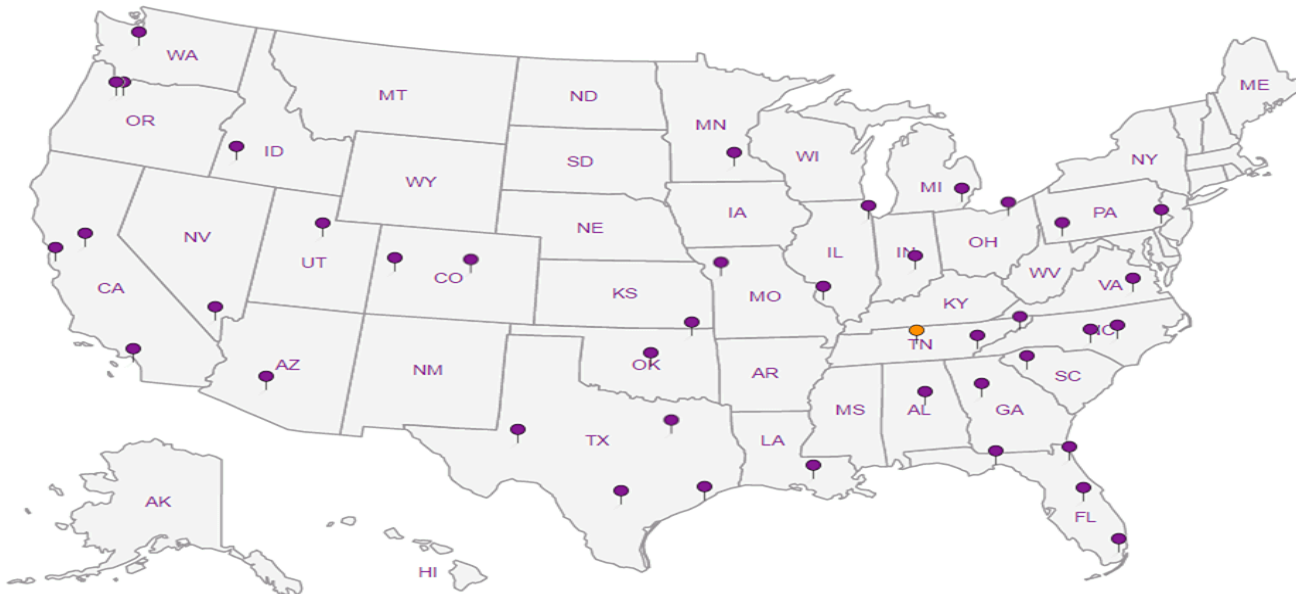
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES-Seattle

Billing Information:
PES-Seattle

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Report to:
Bill Halderman/Brian O'neal

Email To:
on file

Project Description:
American Linen

City/State Seattle, WA

Phone: on file
Fax:

Client Project #
1413.001.02.501E

Lab Project #
PESENVSWA-ALP

Collected by (Print):
L. Rogers/B. Halderman

Site/Facility ID #
American Linen

P.O. #

Collected by (Signature):
[Signature]

Rush? (Lab MUST Be Notified)
Same Day _____ Five Day _____
Next Day _____ 5 Day (Rad Only) _____
Two Day _____ 10 Day (Rad Only) _____
Three Day _____

Quote #

Date Results Needed

No. of
Ctrs

Sample ID

Comp/Grab

Matrix *

Depth

Date

Time

No. of
Ctrs

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Ctrs
MW-017-101519	Grab	GW	90	10/15/19	800	9
MW109-101519		GW	40		945	9
MW-305-101519		GW	30		1010	9
MW126-101519		GW	90		1100	9
MW-306-101519		GW	50		1140	9
W-MW-01-101519		GW	75		1220	9
MW110-101519		GW	40		1420	9
MW-153-101519		GW	125		1425	12
MW107-101519		GW	40		1400	12
TB-101519		GW		10/15/19		1

Analysis / Container / Preservative	Result
NO3,SO4,Chloride48 hour hold	
NWTPHGX	
VOCs (V8260LLC)	
Total Fe Mn 6020	12
TOC	2
Alkalinity	
EEM (RSK175LL)	

12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

Pace Analytical
National Center for Testing & Innovation

L# L1150336
G091

Actnum: F001V00VA
Template:
Prelogin:
TSR: Brian Ford
PB:
Shipped Via:
Remarks

Sample ID	Temp	PH	Flow	Other
MW-017-101519				
MW109-101519				
MW-305-101519				
MW126-101519				
MW-306-101519				
W-MW-01-101519				
MW110-101519				
MW-153-101519				
MW107-101519				
TB-101519				

Sample Receipt Checklist
COC Seal Present/Intact: NP
COC Signed/Accurate: NP
Bottles arrive intact: NP
Correct bottles used: NP
Sufficient volume sent: NP
If Applicable
VOA Zero Headspace: NP
Preservation Correct/Checked: NP
SCREEN: <0.5 mR/hr

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks:
Samples returned via:
UPS _____ Fedex _____ Courier _____

Tracking #
Received by: (Signature)
1803 5774 584

Trip Blank Received: Yes/No
HCL/Meoh
Bottles Received: Yes
Temp: 20-13.9
Date: 10/16/19
Time: 8:30

If preservation required by Login: Date/Time
Hold:
Condition: NCF / OK

Relinquished by: (Signature)
Relinquished by: (Signature)
Relinquished by: (Signature)

Date: 10-15-19
Time: 1630

Date: _____
Time: _____

Date: _____
Time: _____

Received for Lab by: (Signature)
Received by: (Signature)

Date: 10/16/19
Time: 8:30

Temp: 20-13.9
Date: 10/16/19
Time: 8:30

Hold:
Condition: NCF / OK



ANALYTICAL REPORT

October 29, 2019



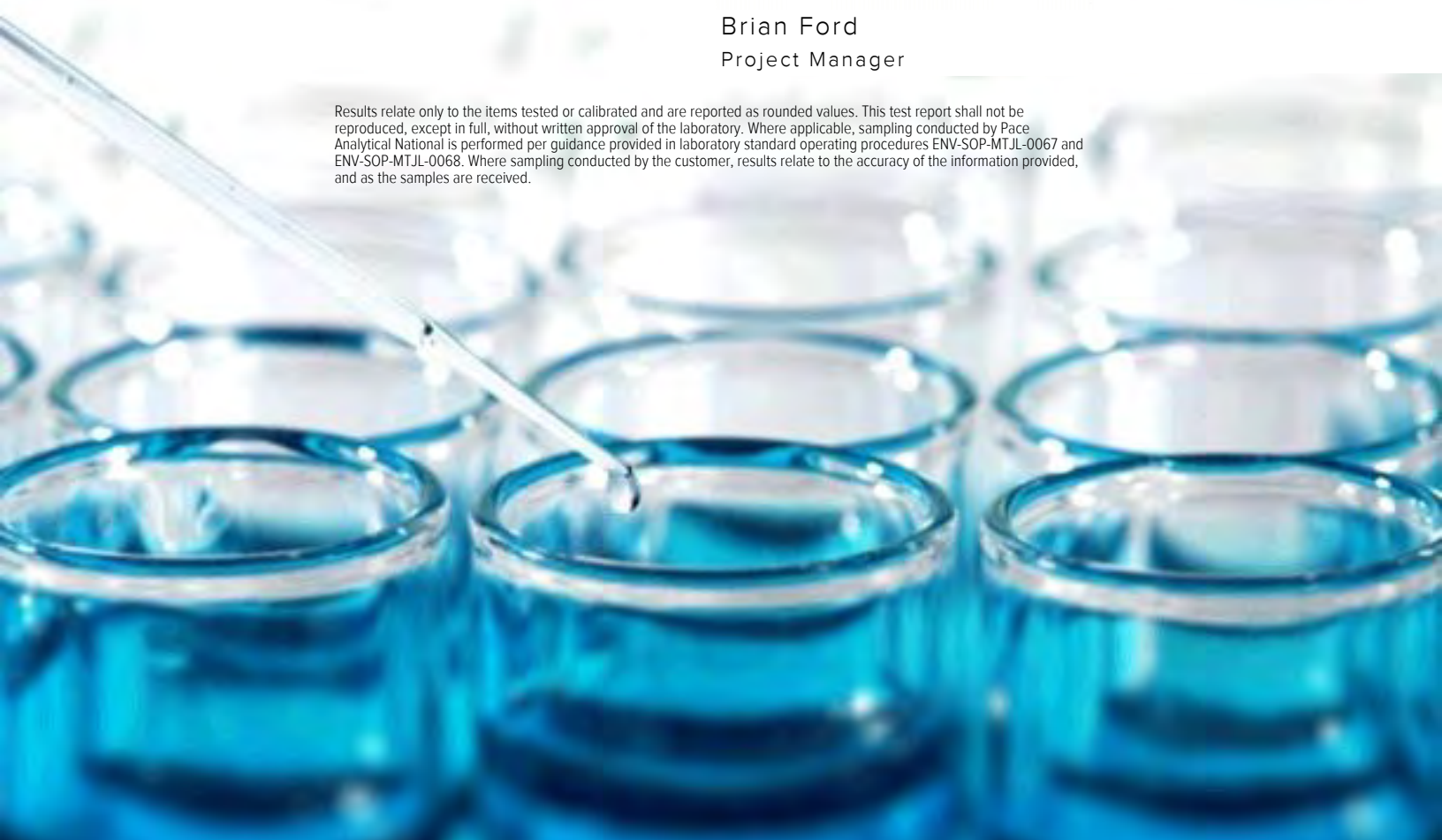
PES Environmental, Inc.- WA

Sample Delivery Group: L1150936
 Samples Received: 10/17/2019
 Project Number: 1413.001.02.501E
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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Cn: Case Narrative	5	
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MW-155-101619 L1150936-01 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 10:15
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366946	1	10/22/19 16:15	10/22/19 16:15	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	1	10/17/19 16:54	10/17/19 16:54	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365383	1	10/18/19 21:14	10/18/19 21:14	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366325	1	10/23/19 07:45	10/23/19 14:11	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 04:53	10/19/19 04:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365164	1	10/18/19 11:50	10/18/19 11:50	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/25/19 23:11	10/25/19 23:11	ADM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

MW-158A-101619 L1150936-02 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 10:30
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366946	1	10/22/19 16:21	10/22/19 16:21	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	1	10/17/19 17:58	10/17/19 17:58	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365383	1	10/18/19 22:18	10/18/19 22:18	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366325	1	10/23/19 07:45	10/23/19 14:47	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 05:17	10/19/19 05:17	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365164	1	10/18/19 11:52	10/18/19 11:52	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/25/19 23:31	10/25/19 23:31	ADM	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

MW-142-101619 L1150936-03 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 10:55
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366946	1	10/22/19 16:38	10/22/19 16:38	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	1	10/17/19 18:11	10/17/19 18:11	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365383	1	10/18/19 22:37	10/18/19 22:37	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366325	1	10/23/19 07:45	10/23/19 14:51	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 05:41	10/19/19 05:41	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365164	1	10/18/19 11:54	10/18/19 11:54	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/25/19 23:51	10/25/19 23:51	ADM	Mt. Juliet, TN

MW-148-101619 L1150936-04 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 12:05
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366946	1	10/22/19 16:45	10/22/19 16:45	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	1	10/17/19 18:23	10/17/19 18:23	ST	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	5	10/17/19 18:36	10/17/19 18:36	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365383	1	10/19/19 00:24	10/19/19 00:24	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366325	1	10/23/19 07:45	10/23/19 14:54	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 06:05	10/19/19 06:05	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365164	1	10/18/19 11:57	10/18/19 11:57	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/26/19 00:12	10/26/19 00:12	ADM	Mt. Juliet, TN

EQ-101619 L1150936-05 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 12:45
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366946	1	10/22/19 16:54	10/22/19 16:54	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	1	10/17/19 18:49	10/17/19 18:49	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365383	1	10/19/19 00:41	10/19/19 00:41	VRP	Mt. Juliet, TN



EQ-101619 L1150936-05 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 12:45
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG1366325	1	10/23/19 07:45	10/23/19 14:58	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 06:29	10/19/19 06:29	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365164	1	10/18/19 12:01	10/18/19 12:01	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/26/19 00:32	10/26/19 00:32	ADM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-157-101619 L1150936-06 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 13:38
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366946	1	10/22/19 17:03	10/22/19 17:03	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	1	10/17/19 19:02	10/17/19 19:02	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365383	1	10/19/19 01:45	10/19/19 01:45	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366325	1	10/23/19 07:45	10/23/19 15:02	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 06:53	10/19/19 06:53	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365164	1	10/18/19 12:04	10/18/19 12:04	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/26/19 00:52	10/26/19 00:52	ADM	Mt. Juliet, TN

MW-143-101619 L1150936-07 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 14:45
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1366946	1	10/22/19 17:10	10/22/19 17:10	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1364616	1	10/17/19 19:14	10/17/19 19:14	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1365383	1	10/19/19 02:08	10/19/19 02:08	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366325	1	10/23/19 07:45	10/23/19 15:05	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 07:17	10/19/19 07:17	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1365165	1	10/18/19 13:25	10/18/19 13:25	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1369955	1	10/26/19 01:13	10/26/19 01:13	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370146	200	10/27/19 15:49	10/27/19 15:49	ACG	Mt. Juliet, TN

TRIP-101619 L1150936-08 GW

Collected by BH/KB/SM
Collected date/time 10/16/19 15:40
Received date/time 10/17/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1365594	1	10/19/19 04:05	10/19/19 04:05	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 15:08	10/26/19 15:08	ACG	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

The following analysis were performed from an unpreserved, insufficiently or inadequately preserved sample.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1150936-01	MW-155-101619	9060A

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/16/19 10:15

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	267000		2710	20000	1	10/22/2019 16:15	WG1366946

Sample Narrative:

L1150936-01 WG1366946: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	16100		51.9	1000	1	10/17/2019 16:54	WG1364616
Nitrate	4120		22.7	100	1	10/17/2019 16:54	WG1364616
Sulfate	94300		77.4	5000	1	10/17/2019 16:54	WG1364616

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	3660	<u>B</u>	102	1000	1	10/18/2019 21:14	WG1365383

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	119		15.0	100	1	10/23/2019 14:11	WG1366325
Manganese	71.6		0.250	5.00	1	10/23/2019 14:11	WG1366325

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/19/2019 04:53	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	108			78.0-120		10/19/2019 04:53	WG1365594

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	36.1		0.287	0.678	1	10/18/2019 11:50	WG1365164
Ethane	17.5		0.296	1.29	1	10/18/2019 11:50	WG1365164
Ethene	U		0.422	1.27	1	10/18/2019 11:50	WG1365164

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.06	<u>J JO</u>	1.05	25.0	1	10/25/2019 23:11	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/25/2019 23:11	WG1369955
Benzene	U		0.0896	0.500	1	10/25/2019 23:11	WG1369955
Bromobenzene	U	<u>JO</u>	0.133	0.500	1	10/25/2019 23:11	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/25/2019 23:11	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/25/2019 23:11	WG1369955
Bromoform	U		0.186	0.500	1	10/25/2019 23:11	WG1369955
Bromomethane	U		0.157	2.50	1	10/25/2019 23:11	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/25/2019 23:11	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/25/2019 23:11	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/25/2019 23:11	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/25/2019 23:11	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/25/2019 23:11	WG1369955

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 10/16/19 10:15

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/25/2019 23:11	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/25/2019 23:11	WG1369955
Chloroethane	U		0.141	2.50	1	10/25/2019 23:11	WG1369955
Chloroform	U		0.0860	0.500	1	10/25/2019 23:11	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/25/2019 23:11	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/25/2019 23:11	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/25/2019 23:11	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/25/2019 23:11	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/25/2019 23:11	WG1369955
Dibromomethane	U		0.117	0.500	1	10/25/2019 23:11	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/25/2019 23:11	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/25/2019 23:11	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/25/2019 23:11	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/25/2019 23:11	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/25/2019 23:11	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/25/2019 23:11	WG1369955
1,1-Dichloroethene	U		0.188	0.500	1	10/25/2019 23:11	WG1369955
cis-1,2-Dichloroethene	36.2		0.0933	0.500	1	10/25/2019 23:11	WG1369955
trans-1,2-Dichloroethene	0.160	J	0.152	0.500	1	10/25/2019 23:11	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/25/2019 23:11	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/25/2019 23:11	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/25/2019 23:11	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/25/2019 23:11	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/25/2019 23:11	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/25/2019 23:11	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/25/2019 23:11	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/25/2019 23:11	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/25/2019 23:11	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/25/2019 23:11	WG1369955
2-Hexanone	U		0.757	5.00	1	10/25/2019 23:11	WG1369955
n-Hexane	U		0.305	5.00	1	10/25/2019 23:11	WG1369955
Iodomethane	U		0.377	10.0	1	10/25/2019 23:11	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/25/2019 23:11	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/25/2019 23:11	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/25/2019 23:11	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/25/2019 23:11	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/25/2019 23:11	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/25/2019 23:11	WG1369955
Naphthalene	U		0.174	2.50	1	10/25/2019 23:11	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/25/2019 23:11	WG1369955
Styrene	U		0.117	0.500	1	10/25/2019 23:11	WG1369955
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/25/2019 23:11	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/25/2019 23:11	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/25/2019 23:11	WG1369955
Tetrachloroethene	121		0.199	0.500	1	10/25/2019 23:11	WG1369955
Toluene	U		0.412	0.500	1	10/25/2019 23:11	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/25/2019 23:11	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/25/2019 23:11	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/25/2019 23:11	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/25/2019 23:11	WG1369955
Trichloroethene	27.6		0.153	0.500	1	10/25/2019 23:11	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/25/2019 23:11	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/25/2019 23:11	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/25/2019 23:11	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/25/2019 23:11	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/25/2019 23:11	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 10:15

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/25/2019 23:11	WG1369955
Vinyl chloride	U		0.118	0.500	1	10/25/2019 23:11	WG1369955
Xylenes, Total	U		0.316	1.50	1	10/25/2019 23:11	WG1369955
<i>(S) Toluene-d8</i>	110			80.0-120		10/25/2019 23:11	WG1369955
<i>(S) 4-Bromofluorobenzene</i>	113			77.0-126		10/25/2019 23:11	WG1369955
<i>(S) 1,2-Dichloroethane-d4</i>	104			70.0-130		10/25/2019 23:11	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	327000		2710	20000	1	10/22/2019 16:21	WG1366946

Sample Narrative:

L1150936-02 WG1366946: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	24500		51.9	1000	1	10/17/2019 17:58	WG1364616
Nitrate	33.0	J	22.7	100	1	10/17/2019 17:58	WG1364616
Sulfate	20400		77.4	5000	1	10/17/2019 17:58	WG1364616

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4460	B	102	1000	1	10/18/2019 22:18	WG1365383

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5460		15.0	100	1	10/23/2019 14:47	WG1366325
Manganese	350		0.250	5.00	1	10/23/2019 14:47	WG1366325

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/19/2019 05:17	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/19/2019 05:17	WG1365594

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	115		0.287	0.678	1	10/18/2019 11:52	WG1365164
Ethane	20.1		0.296	1.29	1	10/18/2019 11:52	WG1365164
Ethene	7.24		0.422	1.27	1	10/18/2019 11:52	WG1365164

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	JO	1.05	25.0	1	10/25/2019 23:31	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/25/2019 23:31	WG1369955
Benzene	U		0.0896	0.500	1	10/25/2019 23:31	WG1369955
Bromobenzene	U	JO	0.133	0.500	1	10/25/2019 23:31	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/25/2019 23:31	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/25/2019 23:31	WG1369955
Bromoform	U		0.186	0.500	1	10/25/2019 23:31	WG1369955
Bromomethane	U		0.157	2.50	1	10/25/2019 23:31	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/25/2019 23:31	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/25/2019 23:31	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/25/2019 23:31	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/25/2019 23:31	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/25/2019 23:31	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 10:30

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/25/2019 23:31	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/25/2019 23:31	WG1369955
Chloroethane	U		0.141	2.50	1	10/25/2019 23:31	WG1369955
Chloroform	U		0.0860	0.500	1	10/25/2019 23:31	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/25/2019 23:31	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/25/2019 23:31	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/25/2019 23:31	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/25/2019 23:31	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/25/2019 23:31	WG1369955
Dibromomethane	U		0.117	0.500	1	10/25/2019 23:31	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/25/2019 23:31	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/25/2019 23:31	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/25/2019 23:31	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/25/2019 23:31	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/25/2019 23:31	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/25/2019 23:31	WG1369955
1,1-Dichloroethene	U		0.188	0.500	1	10/25/2019 23:31	WG1369955
cis-1,2-Dichloroethene	0.848		0.0933	0.500	1	10/25/2019 23:31	WG1369955
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/25/2019 23:31	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/25/2019 23:31	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/25/2019 23:31	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/25/2019 23:31	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/25/2019 23:31	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/25/2019 23:31	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/25/2019 23:31	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/25/2019 23:31	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/25/2019 23:31	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/25/2019 23:31	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/25/2019 23:31	WG1369955
2-Hexanone	U		0.757	5.00	1	10/25/2019 23:31	WG1369955
n-Hexane	U		0.305	5.00	1	10/25/2019 23:31	WG1369955
Iodomethane	U		0.377	10.0	1	10/25/2019 23:31	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/25/2019 23:31	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/25/2019 23:31	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/25/2019 23:31	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/25/2019 23:31	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/25/2019 23:31	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/25/2019 23:31	WG1369955
Naphthalene	U		0.174	2.50	1	10/25/2019 23:31	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/25/2019 23:31	WG1369955
Styrene	U		0.117	0.500	1	10/25/2019 23:31	WG1369955
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/25/2019 23:31	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/25/2019 23:31	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/25/2019 23:31	WG1369955
Tetrachloroethene	U		0.199	0.500	1	10/25/2019 23:31	WG1369955
Toluene	U		0.412	0.500	1	10/25/2019 23:31	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/25/2019 23:31	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/25/2019 23:31	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/25/2019 23:31	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/25/2019 23:31	WG1369955
Trichloroethene	0.318	J	0.153	0.500	1	10/25/2019 23:31	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/25/2019 23:31	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/25/2019 23:31	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/25/2019 23:31	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/25/2019 23:31	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/25/2019 23:31	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/25/2019 23:31	WG1369955
Vinyl chloride	2.18		0.118	0.500	1	10/25/2019 23:31	WG1369955
Xylenes, Total	U		0.316	1.50	1	10/25/2019 23:31	WG1369955
<i>(S) Toluene-d8</i>	110			80.0-120		10/25/2019 23:31	WG1369955
<i>(S) 4-Bromofluorobenzene</i>	111			77.0-126		10/25/2019 23:31	WG1369955
<i>(S) 1,2-Dichloroethane-d4</i>	103			70.0-130		10/25/2019 23:31	WG1369955

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	812000		2710	20000	1	10/22/2019 16:38	WG1366946

Sample Narrative:

L1150936-03 WG1366946: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14900		51.9	1000	1	10/17/2019 18:11	WG1364616
Nitrate	U		22.7	100	1	10/17/2019 18:11	WG1364616
Sulfate	15900		77.4	5000	1	10/17/2019 18:11	WG1364616

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4760	<u>B</u>	102	1000	1	10/18/2019 22:37	WG1365383

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5400		15.0	100	1	10/23/2019 14:51	WG1366325
Manganese	3440		0.250	5.00	1	10/23/2019 14:51	WG1366325

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/19/2019 05:41	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	108			78.0-120		10/19/2019 05:41	WG1365594

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	766		0.287	0.678	1	10/18/2019 11:54	WG1365164
Ethane	47.8		0.296	1.29	1	10/18/2019 11:54	WG1365164
Ethene	U		0.422	1.27	1	10/18/2019 11:54	WG1365164

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.46	<u>J JO</u>	1.05	25.0	1	10/25/2019 23:51	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/25/2019 23:51	WG1369955
Benzene	0.380	<u>J</u>	0.0896	0.500	1	10/25/2019 23:51	WG1369955
Bromobenzene	U	<u>JO</u>	0.133	0.500	1	10/25/2019 23:51	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/25/2019 23:51	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/25/2019 23:51	WG1369955
Bromoform	U		0.186	0.500	1	10/25/2019 23:51	WG1369955
Bromomethane	U		0.157	2.50	1	10/25/2019 23:51	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/25/2019 23:51	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/25/2019 23:51	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/25/2019 23:51	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/25/2019 23:51	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/25/2019 23:51	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 10:55

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/25/2019 23:51	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/25/2019 23:51	WG1369955
Chloroethane	U		0.141	2.50	1	10/25/2019 23:51	WG1369955
Chloroform	U		0.0860	0.500	1	10/25/2019 23:51	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/25/2019 23:51	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/25/2019 23:51	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/25/2019 23:51	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/25/2019 23:51	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/25/2019 23:51	WG1369955
Dibromomethane	U		0.117	0.500	1	10/25/2019 23:51	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/25/2019 23:51	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/25/2019 23:51	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/25/2019 23:51	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/25/2019 23:51	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/25/2019 23:51	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/25/2019 23:51	WG1369955
1,1-Dichloroethene	U		0.188	0.500	1	10/25/2019 23:51	WG1369955
cis-1,2-Dichloroethene	50.4		0.0933	0.500	1	10/25/2019 23:51	WG1369955
trans-1,2-Dichloroethene	0.282	J	0.152	0.500	1	10/25/2019 23:51	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/25/2019 23:51	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/25/2019 23:51	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/25/2019 23:51	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/25/2019 23:51	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/25/2019 23:51	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/25/2019 23:51	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/25/2019 23:51	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/25/2019 23:51	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/25/2019 23:51	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/25/2019 23:51	WG1369955
2-Hexanone	U		0.757	5.00	1	10/25/2019 23:51	WG1369955
n-Hexane	U		0.305	5.00	1	10/25/2019 23:51	WG1369955
Iodomethane	U		0.377	10.0	1	10/25/2019 23:51	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/25/2019 23:51	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/25/2019 23:51	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/25/2019 23:51	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/25/2019 23:51	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/25/2019 23:51	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/25/2019 23:51	WG1369955
Naphthalene	U		0.174	2.50	1	10/25/2019 23:51	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/25/2019 23:51	WG1369955
Styrene	U		0.117	0.500	1	10/25/2019 23:51	WG1369955
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/25/2019 23:51	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/25/2019 23:51	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/25/2019 23:51	WG1369955
Tetrachloroethene	U		0.199	0.500	1	10/25/2019 23:51	WG1369955
Toluene	U		0.412	0.500	1	10/25/2019 23:51	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/25/2019 23:51	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/25/2019 23:51	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/25/2019 23:51	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/25/2019 23:51	WG1369955
Trichloroethene	0.360	J	0.153	0.500	1	10/25/2019 23:51	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/25/2019 23:51	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/25/2019 23:51	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/25/2019 23:51	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/25/2019 23:51	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/25/2019 23:51	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 10:55

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/25/2019 23:51	WG1369955
Vinyl chloride	11.3		0.118	0.500	1	10/25/2019 23:51	WG1369955
Xylenes, Total	U		0.316	1.50	1	10/25/2019 23:51	WG1369955
<i>(S) Toluene-d8</i>	112			80.0-120		10/25/2019 23:51	WG1369955
<i>(S) 4-Bromofluorobenzene</i>	112			77.0-126		10/25/2019 23:51	WG1369955
<i>(S) 1,2-Dichloroethane-d4</i>	102			70.0-130		10/25/2019 23:51	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	163000		2710	20000	1	10/22/2019 16:45	WG1366946

Sample Narrative:

L1150936-04 WG1366946: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	18000		51.9	1000	1	10/17/2019 18:23	WG1364616
Nitrate	32.6	J	22.7	100	1	10/17/2019 18:23	WG1364616
Sulfate	198000		387	25000	5	10/17/2019 18:36	WG1364616

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4480	B	102	1000	1	10/19/2019 00:24	WG1365383

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2240		15.0	100	1	10/23/2019 14:54	WG1366325
Manganese	498		0.250	5.00	1	10/23/2019 14:54	WG1366325

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/19/2019 06:05	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	108			78.0-120		10/19/2019 06:05	WG1365594

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	2050		0.287	0.678	1	10/18/2019 11:57	WG1365164
Ethane	6.03		0.296	1.29	1	10/18/2019 11:57	WG1365164
Ethene	U		0.422	1.27	1	10/18/2019 11:57	WG1365164

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	JO	1.05	25.0	1	10/26/2019 00:12	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/26/2019 00:12	WG1369955
Benzene	U		0.0896	0.500	1	10/26/2019 00:12	WG1369955
Bromobenzene	U	JO	0.133	0.500	1	10/26/2019 00:12	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 00:12	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/26/2019 00:12	WG1369955
Bromoform	U		0.186	0.500	1	10/26/2019 00:12	WG1369955
Bromomethane	U		0.157	2.50	1	10/26/2019 00:12	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 00:12	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 00:12	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 00:12	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/26/2019 00:12	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 00:12	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 12:05

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/26/2019 00:12	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 00:12	WG1369955
Chloroethane	U		0.141	2.50	1	10/26/2019 00:12	WG1369955
Chloroform	U		0.0860	0.500	1	10/26/2019 00:12	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/26/2019 00:12	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 00:12	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 00:12	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 00:12	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 00:12	WG1369955
Dibromomethane	U		0.117	0.500	1	10/26/2019 00:12	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 00:12	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 00:12	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 00:12	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 00:12	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 00:12	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 00:12	WG1369955
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 00:12	WG1369955
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 00:12	WG1369955
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 00:12	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 00:12	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 00:12	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 00:12	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 00:12	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 00:12	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/26/2019 00:12	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 00:12	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 00:12	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/26/2019 00:12	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 00:12	WG1369955
2-Hexanone	U		0.757	5.00	1	10/26/2019 00:12	WG1369955
n-Hexane	U		0.305	5.00	1	10/26/2019 00:12	WG1369955
Iodomethane	U		0.377	10.0	1	10/26/2019 00:12	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/26/2019 00:12	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 00:12	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 00:12	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/26/2019 00:12	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 00:12	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 00:12	WG1369955
Naphthalene	U		0.174	2.50	1	10/26/2019 00:12	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 00:12	WG1369955
Styrene	U		0.117	0.500	1	10/26/2019 00:12	WG1369955
1,1,1-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 00:12	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 00:12	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/26/2019 00:12	WG1369955
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 00:12	WG1369955
Toluene	U		0.412	0.500	1	10/26/2019 00:12	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 00:12	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 00:12	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/26/2019 00:12	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 00:12	WG1369955
Trichloroethene	U		0.153	0.500	1	10/26/2019 00:12	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 00:12	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 00:12	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 00:12	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 00:12	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 00:12	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 12:05

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/26/2019 00:12	WG1369955
Vinyl chloride	0.463	↓	0.118	0.500	1	10/26/2019 00:12	WG1369955
Xylenes, Total	U		0.316	1.50	1	10/26/2019 00:12	WG1369955
<i>(S) Toluene-d8</i>	110			80.0-120		10/26/2019 00:12	WG1369955
<i>(S) 4-Bromofluorobenzene</i>	110			77.0-126		10/26/2019 00:12	WG1369955
<i>(S) 1,2-Dichloroethane-d4</i>	104			70.0-130		10/26/2019 00:12	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	11100	<u>B</u> <u>J</u>	2710	20000	1	10/22/2019 16:54	WG1366946

Sample Narrative:

L1150936-05 WG1366946: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	405	<u>B</u> <u>J</u>	51.9	1000	1	10/17/2019 18:49	WG1364616
Nitrate	U		22.7	100	1	10/17/2019 18:49	WG1364616
Sulfate	129	<u>B</u> <u>J</u>	77.4	5000	1	10/17/2019 18:49	WG1364616

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	418	<u>B</u> <u>J</u>	102	1000	1	10/19/2019 00:41	WG1365383

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	17.9	<u>J</u>	15.0	100	1	10/23/2019 14:58	WG1366325
Manganese	0.655	<u>J</u>	0.250	5.00	1	10/23/2019 14:58	WG1366325

Volatile Organic Compounds (GC) by Method NWTPHGX

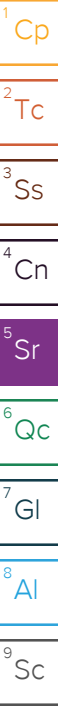
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/19/2019 06:29	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/19/2019 06:29	WG1365594

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	10/18/2019 12:01	WG1365164
Ethane	U		0.296	1.29	1	10/18/2019 12:01	WG1365164
Ethene	U		0.422	1.27	1	10/18/2019 12:01	WG1365164

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.84	<u>J</u> <u>JO</u>	1.05	25.0	1	10/26/2019 00:32	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/26/2019 00:32	WG1369955
Benzene	U		0.0896	0.500	1	10/26/2019 00:32	WG1369955
Bromobenzene	U	<u>JO</u>	0.133	0.500	1	10/26/2019 00:32	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 00:32	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/26/2019 00:32	WG1369955
Bromoform	U		0.186	0.500	1	10/26/2019 00:32	WG1369955
Bromomethane	U		0.157	2.50	1	10/26/2019 00:32	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 00:32	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 00:32	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 00:32	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/26/2019 00:32	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 00:32	WG1369955





Collected date/time: 10/16/19 12:45

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/26/2019 00:32	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 00:32	WG1369955
Chloroethane	U		0.141	2.50	1	10/26/2019 00:32	WG1369955
Chloroform	0.385	J	0.0860	0.500	1	10/26/2019 00:32	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/26/2019 00:32	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 00:32	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 00:32	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 00:32	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 00:32	WG1369955
Dibromomethane	U		0.117	0.500	1	10/26/2019 00:32	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 00:32	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 00:32	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 00:32	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 00:32	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 00:32	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 00:32	WG1369955
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 00:32	WG1369955
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 00:32	WG1369955
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 00:32	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 00:32	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 00:32	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 00:32	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 00:32	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 00:32	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/26/2019 00:32	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 00:32	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 00:32	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/26/2019 00:32	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 00:32	WG1369955
2-Hexanone	U		0.757	5.00	1	10/26/2019 00:32	WG1369955
n-Hexane	U		0.305	5.00	1	10/26/2019 00:32	WG1369955
Iodomethane	U		0.377	10.0	1	10/26/2019 00:32	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/26/2019 00:32	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 00:32	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 00:32	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/26/2019 00:32	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 00:32	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 00:32	WG1369955
Naphthalene	U		0.174	2.50	1	10/26/2019 00:32	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 00:32	WG1369955
Styrene	U		0.117	0.500	1	10/26/2019 00:32	WG1369955
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 00:32	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 00:32	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/26/2019 00:32	WG1369955
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 00:32	WG1369955
Toluene	U		0.412	0.500	1	10/26/2019 00:32	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 00:32	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 00:32	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/26/2019 00:32	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 00:32	WG1369955
Trichloroethene	U		0.153	0.500	1	10/26/2019 00:32	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 00:32	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 00:32	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 00:32	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 00:32	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 00:32	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/26/2019 00:32	WG1369955
Vinyl chloride	U		0.118	0.500	1	10/26/2019 00:32	WG1369955
Xylenes, Total	U		0.316	1.50	1	10/26/2019 00:32	WG1369955
(S) Toluene-d8	112			80.0-120		10/26/2019 00:32	WG1369955
(S) 4-Bromofluorobenzene	113			77.0-126		10/26/2019 00:32	WG1369955
(S) 1,2-Dichloroethane-d4	106			70.0-130		10/26/2019 00:32	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	408000		2710	20000	1	10/22/2019 17:03	WG1366946

Sample Narrative:

L1150936-06 WG1366946: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	22800		51.9	1000	1	10/17/2019 19:02	WG1364616
Nitrate	441		22.7	100	1	10/17/2019 19:02	WG1364616
Sulfate	5720		77.4	5000	1	10/17/2019 19:02	WG1364616

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	7170		102	1000	1	10/19/2019 01:45	WG1365383

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1680		15.0	100	1	10/23/2019 15:02	WG1366325
Manganese	403		0.250	5.00	1	10/23/2019 15:02	WG1366325

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/19/2019 06:53	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	107			78.0-120		10/19/2019 06:53	WG1365594

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	4670		0.287	0.678	1	10/18/2019 12:04	WG1365164
Ethane	78.6		0.296	1.29	1	10/18/2019 12:04	WG1365164
Ethene	U		0.422	1.27	1	10/18/2019 12:04	WG1365164

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	JO	1.05	25.0	1	10/26/2019 00:52	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/26/2019 00:52	WG1369955
Benzene	U		0.0896	0.500	1	10/26/2019 00:52	WG1369955
Bromobenzene	U	JO	0.133	0.500	1	10/26/2019 00:52	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 00:52	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/26/2019 00:52	WG1369955
Bromoform	U		0.186	0.500	1	10/26/2019 00:52	WG1369955
Bromomethane	U		0.157	2.50	1	10/26/2019 00:52	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 00:52	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 00:52	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 00:52	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/26/2019 00:52	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 00:52	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 13:38

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/26/2019 00:52	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 00:52	WG1369955
Chloroethane	U		0.141	2.50	1	10/26/2019 00:52	WG1369955
Chloroform	U		0.0860	0.500	1	10/26/2019 00:52	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/26/2019 00:52	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 00:52	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 00:52	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 00:52	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 00:52	WG1369955
Dibromomethane	U		0.117	0.500	1	10/26/2019 00:52	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 00:52	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 00:52	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 00:52	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 00:52	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 00:52	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 00:52	WG1369955
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 00:52	WG1369955
cis-1,2-Dichloroethene	0.188	U	0.0933	0.500	1	10/26/2019 00:52	WG1369955
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 00:52	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 00:52	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 00:52	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 00:52	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 00:52	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 00:52	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/26/2019 00:52	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 00:52	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 00:52	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/26/2019 00:52	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 00:52	WG1369955
2-Hexanone	U		0.757	5.00	1	10/26/2019 00:52	WG1369955
n-Hexane	U		0.305	5.00	1	10/26/2019 00:52	WG1369955
Iodomethane	U		0.377	10.0	1	10/26/2019 00:52	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/26/2019 00:52	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 00:52	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 00:52	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/26/2019 00:52	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 00:52	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 00:52	WG1369955
Naphthalene	U		0.174	2.50	1	10/26/2019 00:52	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 00:52	WG1369955
Styrene	0.141	U	0.117	0.500	1	10/26/2019 00:52	WG1369955
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 00:52	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 00:52	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/26/2019 00:52	WG1369955
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 00:52	WG1369955
Toluene	0.561		0.412	0.500	1	10/26/2019 00:52	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 00:52	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 00:52	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/26/2019 00:52	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 00:52	WG1369955
Trichloroethene	U		0.153	0.500	1	10/26/2019 00:52	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 00:52	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 00:52	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 00:52	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 00:52	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 00:52	WG1369955

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/16/19 13:38

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/26/2019 00:52	WG1369955
Vinyl chloride	U		0.118	0.500	1	10/26/2019 00:52	WG1369955
Xylenes, Total	U		0.316	1.50	1	10/26/2019 00:52	WG1369955
<i>(S) Toluene-d8</i>	112			80.0-120		10/26/2019 00:52	WG1369955
<i>(S) 4-Bromofluorobenzene</i>	112			77.0-126		10/26/2019 00:52	WG1369955
<i>(S) 1,2-Dichloroethane-d4</i>	102			70.0-130		10/26/2019 00:52	WG1369955

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 14:45

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	518000		2710	20000	1	10/22/2019 17:10	WG1366946

Sample Narrative:

L1150936-07 WG1366946: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	35800		51.9	1000	1	10/17/2019 19:14	WG1364616
Nitrate	U		22.7	100	1	10/17/2019 19:14	WG1364616
Sulfate	67700		77.4	5000	1	10/17/2019 19:14	WG1364616

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	20900		102	1000	1	10/19/2019 02:08	WG1365383

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	8540		15.0	100	1	10/23/2019 15:05	WG1366325
Manganese	2090		0.250	5.00	1	10/23/2019 15:05	WG1366325

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	2000		31.6	100	1	10/19/2019 07:17	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	109			78.0-120		10/19/2019 07:17	WG1365594

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	5780		0.287	0.678	1	10/18/2019 13:25	WG1365165
Ethane	62.6		0.296	1.29	1	10/18/2019 13:25	WG1365165
Ethene	110		0.422	1.27	1	10/18/2019 13:25	WG1365165

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.18	J JO	1.05	25.0	1	10/26/2019 01:13	WG1369955
Acrylonitrile	U		0.873	5.00	1	10/26/2019 01:13	WG1369955
Benzene	0.211	J	0.0896	0.500	1	10/26/2019 01:13	WG1369955
Bromobenzene	U	JO	0.133	0.500	1	10/26/2019 01:13	WG1369955
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 01:13	WG1369955
Bromochloromethane	U		0.145	0.500	1	10/26/2019 01:13	WG1369955
Bromoform	U		0.186	0.500	1	10/26/2019 01:13	WG1369955
Bromomethane	U		0.157	2.50	1	10/26/2019 01:13	WG1369955
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 01:13	WG1369955
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 01:13	WG1369955
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 01:13	WG1369955
Carbon disulfide	U		0.101	0.500	1	10/26/2019 01:13	WG1369955
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 01:13	WG1369955

1 Cp
 2 Tc
 3 Ss
 4 Cn
 5 Sr
 6 Qc
 7 Gl
 8 Al
 9 Sc



Collected date/time: 10/16/19 14:45

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/26/2019 01:13	WG1369955
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 01:13	WG1369955
Chloroethane	U		0.141	2.50	1	10/26/2019 01:13	WG1369955
Chloroform	U		0.0860	0.500	1	10/26/2019 01:13	WG1369955
Chloromethane	U	JO	0.153	1.25	1	10/26/2019 01:13	WG1369955
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 01:13	WG1369955
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 01:13	WG1369955
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 01:13	WG1369955
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 01:13	WG1369955
Dibromomethane	U		0.117	0.500	1	10/26/2019 01:13	WG1369955
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 01:13	WG1369955
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 01:13	WG1369955
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 01:13	WG1369955
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 01:13	WG1369955
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 01:13	WG1369955
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 01:13	WG1369955
1,1-Dichloroethene	8.47		0.188	0.500	1	10/26/2019 01:13	WG1369955
cis-1,2-Dichloroethene	2510		18.7	100	200	10/27/2019 15:49	WG1370146
trans-1,2-Dichloroethene	11.0		0.152	0.500	1	10/26/2019 01:13	WG1369955
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 01:13	WG1369955
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 01:13	WG1369955
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 01:13	WG1369955
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 01:13	WG1369955
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 01:13	WG1369955
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/26/2019 01:13	WG1369955
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 01:13	WG1369955
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 01:13	WG1369955
Ethylbenzene	U		0.158	0.500	1	10/26/2019 01:13	WG1369955
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 01:13	WG1369955
2-Hexanone	U		0.757	5.00	1	10/26/2019 01:13	WG1369955
n-Hexane	U		0.305	5.00	1	10/26/2019 01:13	WG1369955
Iodomethane	U		0.377	10.0	1	10/26/2019 01:13	WG1369955
Isopropylbenzene	U		0.126	0.500	1	10/26/2019 01:13	WG1369955
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 01:13	WG1369955
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 01:13	WG1369955
Methylene Chloride	U		1.07	2.50	1	10/26/2019 01:13	WG1369955
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 01:13	WG1369955
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 01:13	WG1369955
Naphthalene	U		0.174	2.50	1	10/26/2019 01:13	WG1369955
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 01:13	WG1369955
Styrene	U		0.117	0.500	1	10/26/2019 01:13	WG1369955
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 01:13	WG1369955
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 01:13	WG1369955
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/26/2019 01:13	WG1369955
Tetrachloroethene	2.35		0.199	0.500	1	10/26/2019 01:13	WG1369955
Toluene	U		0.412	0.500	1	10/26/2019 01:13	WG1369955
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 01:13	WG1369955
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 01:13	WG1369955
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/26/2019 01:13	WG1369955
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 01:13	WG1369955
Trichloroethene	28.0		0.153	0.500	1	10/26/2019 01:13	WG1369955
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 01:13	WG1369955
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 01:13	WG1369955
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 01:13	WG1369955
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 01:13	WG1369955
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 01:13	WG1369955

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/16/19 14:45

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/26/2019 01:13	WG1369955
Vinyl chloride	1180		23.6	100	200	10/27/2019 15:49	WG1370146
Xylenes, Total	U		0.316	1.50	1	10/26/2019 01:13	WG1369955
(S) Toluene-d8	111			80.0-120		10/26/2019 01:13	WG1369955
(S) Toluene-d8	94.2			80.0-120		10/27/2019 15:49	WG1370146
(S) 4-Bromofluorobenzene	112			77.0-126		10/26/2019 01:13	WG1369955
(S) 4-Bromofluorobenzene	92.6			77.0-126		10/27/2019 15:49	WG1370146
(S) 1,2-Dichloroethane-d4	105			70.0-130		10/26/2019 01:13	WG1369955
(S) 1,2-Dichloroethane-d4	103			70.0-130		10/27/2019 15:49	WG1370146

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/16/19 15:40

L1150936

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/19/2019 04:05	WG1365594
(S) a,a,a-Trifluorotoluene(FID)	108			78.0-120		10/19/2019 04:05	WG1365594

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	1.29	J	1.05	25.0	1	10/26/2019 15:08	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 15:08	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 15:08	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 15:08	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 15:08	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 15:08	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 15:08	WG1370189
Bromomethane	U	JO	0.157	2.50	1	10/26/2019 15:08	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 15:08	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 15:08	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 15:08	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 15:08	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 15:08	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 15:08	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 15:08	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 15:08	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 15:08	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 15:08	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 15:08	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 15:08	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 15:08	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 15:08	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 15:08	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 15:08	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 15:08	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 15:08	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 15:08	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 15:08	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 15:08	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 15:08	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 15:08	WG1370189
trans-1,2-Dichloroethene	0.228	J	0.152	0.500	1	10/26/2019 15:08	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 15:08	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 15:08	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 15:08	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 15:08	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 15:08	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 15:08	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 15:08	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 15:08	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 15:08	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 15:08	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 15:08	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 15:08	WG1370189
Iodomethane	U	JO	0.377	10.0	1	10/26/2019 15:08	WG1370189
Isopropylbenzene	U	JO	0.126	0.500	1	10/26/2019 15:08	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 15:08	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 15:08	WG1370189



Collected date/time: 10/16/19 15:40

L1150936

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/26/2019 15:08	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 15:08	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 15:08	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 15:08	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 15:08	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 15:08	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 15:08	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 15:08	WG1370189
1,1,2-Trichlorotrifluoroethane	U	<u>JO</u>	0.164	0.500	1	10/26/2019 15:08	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 15:08	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 15:08	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 15:08	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 15:08	WG1370189
1,1,1-Trichloroethane	U	<u>JO</u>	0.0940	0.500	1	10/26/2019 15:08	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 15:08	WG1370189
Trichloroethene	U	<u>JO</u>	0.153	0.500	1	10/26/2019 15:08	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 15:08	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 15:08	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 15:08	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 15:08	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 15:08	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 15:08	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 15:08	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 15:08	WG1370189
(S) Toluene-d8	97.0			80.0-120		10/26/2019 15:08	WG1370189
(S) 4-Bromofluorobenzene	91.4			77.0-126		10/26/2019 15:08	WG1370189
(S) 1,2-Dichloroethane-d4	98.3			70.0-130		10/26/2019 15:08	WG1370189

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3463802-1 10/22/19 15:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	3840	J	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1150905-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1150905-05 10/22/19 15:19 • (DUP) R3463802-3 10/22/19 15:27

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	284000	286000	1	0.672		20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3463802-5 10/22/19 16:29

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	102000	102	85.0-115	

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3462289-1 10/17/19 10:45

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Chloride	112	J	519	1000
Nitrate	U	U	22.7	100
Sulfate	80.2	J	77.4	5000

L1150920-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1150920-01 10/17/19 16:16 • (DUP) R3462289-3 10/17/19 16:28

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	234000	232000	1	0.799	E	15
Nitrate	241	240	1	0.541		15
Sulfate	2280	2250	1	1.21	J	15

L1151015-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1151015-06 10/17/19 21:48 • (DUP) R3462289-6 10/17/19 22:00

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits
Chloride	55600	54400	1	2.09		15
Nitrate	U	0.000	1	0.000		15
Sulfate	4790	4690	1	2.08	J	15

Laboratory Control Sample (LCS)

(LCS) R3462289-2 10/17/19 10:57

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Chloride	40000	39000	97.4	80.0-120	
Nitrate	8000	7870	98.4	80.0-120	
Sulfate	40000	39000	97.6	80.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.00102.501E

SDG:

L1150936

DATE/TIME:

10/29/19 09:23

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L1150936-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150936-01 10/17/19 16:54 • (MS) R3462289-4 10/17/19 17:07 • (MSD) R3462289-5 10/17/19 17:20

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	16100	65200	64700	98.3	97.3	1	80.0-120	1	1	0.762	15
Nitrate	5000	4120	8920	8880	96.1	95.2	1	80.0-120	1	1	0.503	15
Sulfate	50000	94300	137000	139000	85.5	88.6	1	80.0-120	1	1	1.15	15

L1151015-06 Original Sample (OS) • Matrix Spike (MS)

(OS) L1151015-06 10/17/19 21:48 • (MS) R3462289-7 10/17/19 22:13

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	55600	102000	92.5	1	80.0-120	E
Nitrate	5000	U	4880	97.6	1	80.0-120	
Sulfate	50000	4790	53300	96.9	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3462716-1 10/18/19 13:21	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l	ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	666	<u>1</u>	102	1000

L1150675-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1150675-03 10/18/19 15:46 • (DUP) R3462716-3 10/18/19 16:05	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	26200	26000	1	0.958		20

L1150936-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1150936-03 10/18/19 22:37 • (DUP) R3462716-6 10/18/19 22:57	Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%	%
TOC (Total Organic Carbon)	4760	4610	1	3.35		20

Laboratory Control Sample (LCS)

(LCS) R3462716-2 10/18/19 14:02	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>
Analyte	ug/l	ug/l	%	%	%
TOC (Total Organic Carbon)	75000	67000	89.4	85.0-115	

L1150936-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150936-01 10/18/19 21:14 • (MS) R3462716-4 10/18/19 21:37 • (MSD) R3462716-5 10/18/19 21:59	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	3660	50800	50900	94.3	94.4	1	80.0-120			0.118	20

L1150936-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150936-05 10/19/19 00:41 • (MS) R3462716-7 10/19/19 01:05 • (MSD) R3462716-8 10/19/19 01:27	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%	%
TOC (Total Organic Carbon)	50000	418	48800	47400	96.7	94.0	1	80.0-120			2.79	20

1 Cp
2 Tc
3 Ss
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6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Iron	U	ug/l	15.0	100
Manganese	U	ug/l	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	Spike Amount	ug/l	ug/l	ug/l							
Iron	5000	5010	5250	5250	100	105	80.0-120			4.59	20
Manganese	50.0	49.4	52.4	52.4	98.7	105	80.0-120			5.91	20

L1150936-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	OS		MS		MSD		Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	Spike Amount	ug/l	Original Result	MS Result	MSD Result	MS Rec.						
Iron	5000	119	5280	5440	103	107	1	75.0-125			2.98	20
Manganese	50.0	71.6	122	124	101	106	1	75.0-125			1.86	20

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1150936-01.02.03.04.05.06.07.08](#)

Method Blank (MB)

(MB) R3464595-2 10/19/19 03:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100

^(S) <i>a,a</i> -Trifluorotoluene(FID)	107			78.0-120
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Laboratory Control Sample (LCS)

(LCS) R3464595-1 10/19/19 02:53

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	6120	111	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			92.0	78.0-120	

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Volatile Organic Compounds (GC) by Method RSK175

[L1150936-01.02.03.04.05.06](#)

Method Blank (MB)

(MB) R3462472-1 10/18/19 10:58

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1150860-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1150860-01 10/18/19 11:07 • (DUP) R3462472-2 10/18/19 11:42

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	ND	0.000	1	0.000		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3462472-3 10/18/19 12:53 • (LCSD) R3462472-4 10/18/19 12:56

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	70.5	71.7	104	106	85.0-115			1.72	20
Ethane	129	126	130	97.5	101	85.0-115			3.61	20
Ethene	127	132	136	104	107	85.0-115			2.99	20

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Volatile Organic Compounds (GC) by Method RSK175

[L1150936-07](#)

Method Blank (MB)

(MB) R3462507-1 10/18/19 13:05

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1150336-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1150336-08 10/18/19 13:10 • (DUP) R3462507-2 10/18/19 13:33

Analyte	Original Result		DUP Result	Dilution	DUP RPD	DUP Qualifier		DUP RPD Limits
	ug/l	%				%	%	
Methane	20.2	22.0	1	1	8.39		20	
Ethane	U	0.000	1	1	0.000		20	
Ethene	U	0.000	1	1	0.000		20	

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3462507-5 10/18/19 13:50 • (LCSD) R3462507-6 10/18/19 13:56

Analyte	Spike Amount		LCS Result		LCSD Result		LCS Rec.		LCSD Rec.		Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	%	ug/l	%	ug/l	%	%	%	%	%					
Methane	67.8	72.3	71.6	107	106	106	85.0-115	0.913	20						
Ethane	129	127	127	98.2	98.7	98.7	85.0-115	0.516	20						
Ethene	127	133	133	105	105	105	85.0-115	0.356	20						

L1150339-10 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1150339-10 10/18/19 13:42 • (MS) R3462507-3 10/18/19 13:45 • (MSD) R3462507-4 10/18/19 13:47

Analyte	Spike Amount		Original Result		MS Result		MSD Result		MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	%	ug/l	%	ug/l	%	ug/l	%								
Methane	67.8	10400	10600	11000	19.7	74.1	10	85.0-115			10	85.0-115	V	V	3.43	20
Ethane	129	380	1800	1480	110	85.0	10	85.0-115			10	85.0-115			19.6	20
Ethene	127	741	2220	1900	116	91.0	10	85.0-115			10	85.0-115	J5		15.6	20

1 Cp
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Method Blank (MB)

(MB) R3465284-3 10/25/19 21:00

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
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Method Blank (MB)

(MB) R3465284-3 10/25/19 21:00

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	0.238	J	0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	113			80.0-120
(S) 4-Bromofluorobenzene	114			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

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Laboratory Control Sample (LCS)

(LCS) R3465284-1 10/25/19 19:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	94.6	75.7	19.0-160	
Acrylonitrile	125	128	102	55.0-149	
Benzene	25.0	23.6	94.4	70.0-123	
Bromobenzene	25.0	20.2	80.8	73.0-121	
Bromodichloromethane	25.0	25.0	100	75.0-120	
Bromochloromethane	25.0	27.5	110	76.0-122	
Bromoform	25.0	30.8	123	68.0-132	
Bromomethane	25.0	26.6	106	10.0-160	
n-Butylbenzene	25.0	22.6	90.4	73.0-125	
sec-Butylbenzene	25.0	22.5	90.0	75.0-125	
tert-Butylbenzene	25.0	24.8	99.2	76.0-124	
Carbon disulfide	25.0	23.7	94.8	61.0-128	
Carbon tetrachloride	25.0	29.8	119	68.0-126	
Chlorobenzene	25.0	26.6	106	80.0-121	
Chlorodibromomethane	25.0	30.2	121	77.0-125	
Chloroethane	25.0	25.9	104	47.0-150	
Chloroform	25.0	23.2	92.8	73.0-120	
Chloromethane	25.0	21.7	86.8	41.0-142	
2-Chlorotoluene	25.0	21.7	86.8	76.0-123	
4-Chlorotoluene	25.0	21.9	87.6	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	26.6	106	58.0-134	
1,2-Dibromoethane	25.0	25.7	103	80.0-122	
Dibromomethane	25.0	25.7	103	80.0-120	
1,2-Dichlorobenzene	25.0	26.6	106	79.0-121	
1,3-Dichlorobenzene	25.0	25.6	102	79.0-120	
1,4-Dichlorobenzene	25.0	23.7	94.8	79.0-120	
trans-1,4-Dichloro-2-butene	25.0	18.8	75.2	33.0-144	
Dichlorodifluoromethane	25.0	22.3	89.2	51.0-149	
1,1-Dichloroethane	25.0	24.4	97.6	70.0-126	
1,2-Dichloroethane	25.0	23.8	95.2	70.0-128	
1,1-Dichloroethene	25.0	26.6	106	71.0-124	
cis-1,2-Dichloroethene	25.0	25.5	102	73.0-120	
trans-1,2-Dichloroethene	25.0	25.6	102	73.0-120	
1,2-Dichloropropane	25.0	23.7	94.8	77.0-125	
1,1-Dichloropropene	25.0	25.3	101	74.0-126	
1,3-Dichloropropene	25.0	24.5	98.0	80.0-120	
cis-1,3-Dichloropropene	25.0	25.2	101	80.0-123	
trans-1,3-Dichloropropene	25.0	25.9	104	78.0-124	
2,2-Dichloropropane	25.0	26.8	107	58.0-130	
Di-isopropyl ether	25.0	25.1	100	58.0-138	

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1 Cp
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Laboratory Control Sample (LCS)

(LCS) R3465284-1 10/25/19 19:59

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	25.7	103	79.0-123	
Hexachloro-1,3-butadiene	25.0	25.6	102	54.0-138	
2-Hexanone	125	132	106	67.0-149	
n-Hexane	25.0	23.9	95.6	57.0-133	
Iodomethane	125	145	116	33.0-147	
Isopropylbenzene	25.0	28.4	114	76.0-127	
p-Isopropyltoluene	25.0	24.2	96.8	76.0-125	
2-Butanone (MEK)	125	119	95.2	44.0-160	
Methylene Chloride	25.0	23.2	92.8	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	133	106	68.0-142	
Methyl tert-butyl ether	25.0	26.0	104	68.0-125	
Naphthalene	25.0	25.7	103	54.0-135	
n-Propylbenzene	25.0	22.0	88.0	77.0-124	
Styrene	25.0	28.2	113	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	30.2	121	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	20.9	83.6	65.0-130	
Tetrachloroethene	25.0	29.2	117	72.0-132	
Toluene	25.0	25.2	101	79.0-120	
1,1,2-Trichlorotrifluoroethane	25.0	27.8	111	69.0-132	
1,2,3-Trichlorobenzene	25.0	27.0	108	50.0-138	
1,2,4-Trichlorobenzene	25.0	26.3	105	57.0-137	
1,1,1-Trichloroethane	25.0	28.2	113	73.0-124	
1,1,2-Trichloroethane	25.0	25.8	103	80.0-120	
Trichloroethene	25.0	28.0	112	78.0-124	
Trichlorofluoromethane	25.0	27.9	112	59.0-147	
1,2,3-Trichloropropane	25.0	22.6	90.4	73.0-130	
1,2,3-Trimethylbenzene	25.0	22.7	90.8	77.0-120	
1,2,4-Trimethylbenzene	25.0	22.3	89.2	76.0-121	
1,3,5-Trimethylbenzene	25.0	23.0	92.0	76.0-122	
Vinyl acetate	125	134	107	11.0-160	
Vinyl chloride	25.0	26.1	104	67.0-131	
Xylenes, Total	75.0	80.7	108	79.0-123	
(S) Toluene-d8			112	80.0-120	
(S) 4-Bromofluorobenzene			109	77.0-126	
(S) 1,2-Dichloroethane-d4			107	70.0-130	

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1 Cp
2 Tc
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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1150936-07](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(MB) R3465605-3 10/27/19 09:18				
cis-1,2-Dichloroethene	U		0.0933	0.500
Vinyl chloride	U		0.118	0.500
(S) Toluene-d8	96.6			80.0-120
(S) 4-Bromofluorobenzene	92.5			77.0-126
(S) 1,2-Dichloroethane-d4	102			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3465605-1 10/27/19 08:19 • (LCSD) R3465605-2 10/27/19 08:38										
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	25.0	23.1	22.9	92.4	91.6	73.0-120			0.870	20
Vinyl chloride	25.0	29.8	30.8	119	123	67.0-131			3.30	20
(S) Toluene-d8				97.5	92.4	80.0-120				
(S) 4-Bromofluorobenzene				96.1	91.1	77.0-126				
(S) 1,2-Dichloroethane-d4				101	103	70.0-130				

Public Review Draft

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Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.982	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.356	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	95.5			80.0-120
(S) 4-Bromofluorobenzene	92.7			77.0-126
(S) 1,2-Dichloroethane-d4	100			70.0-130

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Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	146	117	19.0-160	
Acrylonitrile	125	168	134	55.0-149	
Benzene	25.0	23.8	95.2	70.0-123	
Bromobenzene	25.0	27.7	111	73.0-121	
Bromodichloromethane	25.0	23.4	93.6	75.0-120	
Bromochloromethane	25.0	26.6	106	76.0-122	
Bromoform	25.0	24.6	98.4	68.0-132	
Bromomethane	25.0	16.1	64.4	10.0-160	
n-Butylbenzene	25.0	29.4	118	73.0-125	
sec-Butylbenzene	25.0	26.3	105	75.0-125	
tert-Butylbenzene	25.0	24.7	98.8	76.0-124	
Carbon disulfide	25.0	22.7	90.8	61.0-128	
Carbon tetrachloride	25.0	21.5	86.0	68.0-126	
Chlorobenzene	25.0	24.1	96.4	80.0-121	
Chlorodibromomethane	25.0	24.8	99.2	77.0-125	
Chloroethane	25.0	28.4	114	47.0-150	
Chloroform	25.0	22.7	90.8	73.0-120	
Chloromethane	25.0	25.8	103	41.0-142	
2-Chlorotoluene	25.0	26.9	108	76.0-123	
4-Chlorotoluene	25.0	26.6	106	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	25.6	102	58.0-134	
1,2-Dibromoethane	25.0	25.6	102	80.0-122	
Dibromomethane	25.0	26.4	106	80.0-120	
1,2-Dichlorobenzene	25.0	27.8	111	79.0-121	
1,3-Dichlorobenzene	25.0	28.5	114	79.0-120	
1,4-Dichlorobenzene	25.0	27.8	111	79.0-120	
Dichlorodifluoromethane	25.0	22.5	90.0	51.0-149	
1,1-Dichloroethane	25.0	27.6	110	70.0-126	
1,2-Dichloroethane	25.0	28.4	114	70.0-128	
1,1-Dichloroethene	25.0	24.2	96.8	71.0-124	
cis-1,2-Dichloroethene	25.0	24.0	96.0	73.0-120	
trans-1,2-Dichloroethene	25.0	22.5	90.0	73.0-120	
1,2-Dichloropropane	25.0	29.5	118	77.0-125	
1,1-Dichloropropene	25.0	24.6	98.4	74.0-126	
1,3-Dichloropropene	25.0	27.0	108	80.0-120	
cis-1,3-Dichloropropene	25.0	24.9	99.6	80.0-123	
trans-1,3-Dichloropropene	25.0	26.8	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	33.7	135	33.0-144	
2,2-Dichloropropane	25.0	23.0	92.0	58.0-130	
Di-isopropyl ether	25.0	29.5	118	58.0-138	

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Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	22.5	90.0	79.0-123	
Hexachloro-1,3-butadiene	25.0	31.4	126	54.0-138	
2-Hexanone	125	172	138	67.0-149	
n-Hexane	25.0	29.8	119	57.0-133	
Iodomethane	125	104	83.2	33.0-147	
Isopropylbenzene	25.0	21.3	85.2	76.0-127	
p-Isopropyltoluene	25.0	27.1	108	76.0-125	
2-Butanone (MEK)	125	139	111	44.0-160	
Methylene Chloride	25.0	22.5	90.0	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	142	114	68.0-142	
Methyl tert-butyl ether	25.0	25.3	101	68.0-125	
Naphthalene	25.0	23.9	95.6	54.0-135	
n-Propylbenzene	25.0	25.2	101	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	23.3	93.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	25.9	104	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	21.4	85.6	69.0-132	
Tetrachloroethene	25.0	22.9	91.6	72.0-132	
Toluene	25.0	23.7	94.8	79.0-120	
1,2,3-Trichlorobenzene	25.0	27.3	109	50.0-138	
1,2,4-Trichlorobenzene	25.0	30.0	120	57.0-137	
1,1,1-Trichloroethane	25.0	21.4	85.6	73.0-124	
1,1,2-Trichloroethane	25.0	24.5	98.0	80.0-120	
Trichloroethene	25.0	22.2	88.8	78.0-124	
Trichlorofluoromethane	25.0	26.9	108	59.0-147	
1,2,3-Trichloropropane	25.0	26.0	104	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.9	104	76.0-121	
1,2,3-Trimethylbenzene	25.0	26.6	106	77.0-120	
1,3,5-Trimethylbenzene	25.0	25.0	100	76.0-122	
Vinyl acetate	125	164	131	11.0-160	
Vinyl chloride	25.0	32.6	130	67.0-131	
Xylenes, Total	75.0	68.0	90.7	79.0-123	
(S) Toluene-d8			93.8	80.0-120	
(S) 4-Bromofluorobenzene			91.0	77.0-126	
(S) 1,2-Dichloroethane-d4			101	70.0-130	

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
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Qualifier	Description
B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J5	The sample matrix interfered with the ability to make any accurate determination; spike value is high.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

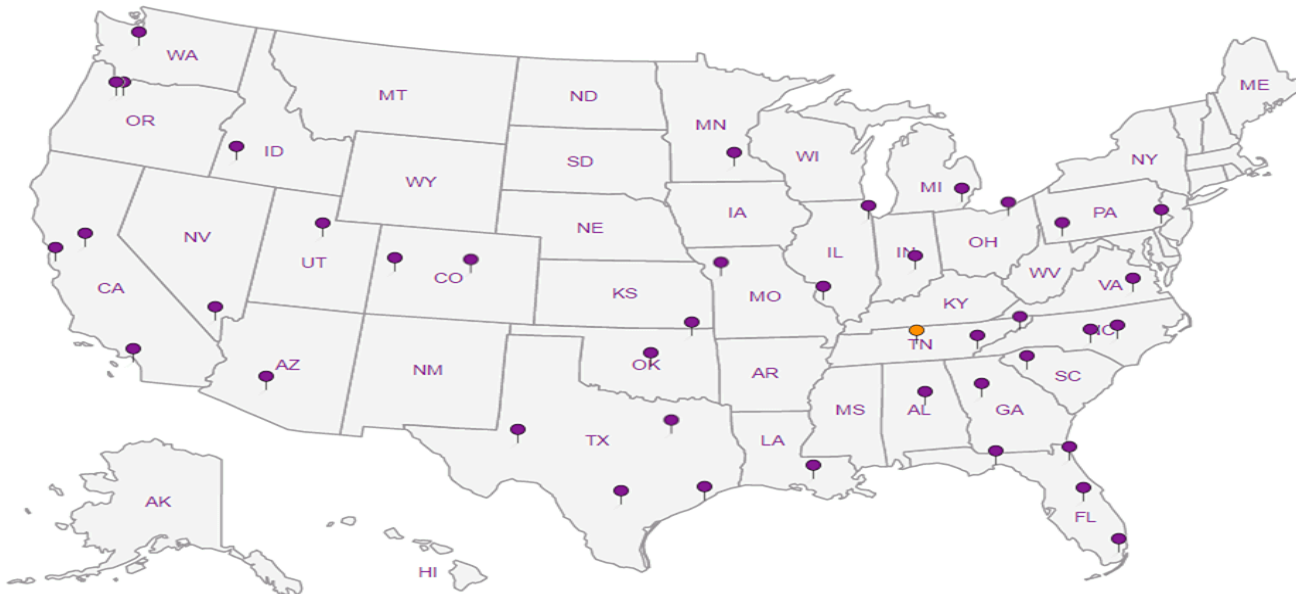
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Report to: Bill Haldeman/Brian O'neal Email To: on file

Project: American Linn City/State Seattle, WA

Description: Client Project # 1413-04-02-201E

Phone: on file Lab Project # PESENVSWA-ALP

Fax: Site/Facility ID # P.O. #

Collected by (print): Ben H. Kears & Shannon Quote #

Collected by (signature): *Ben H. Kears & Shannon* Date Results Needed

Immediately Packed on ice N Y Date: **STAT**

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Analysis / Container / Preservative
MW-155-101619	Grab	GW	27	10/16/19	1015	12	**NO3,SO4,Chloride**48 hour hold
MW-1584-101619		GW	95		1030	12	NWTPHGX
MW-142-101619		GW	45		1055	12	VOCs (V8260LLC)
MW-148-101619		GW	75		1205	12	Total Fe Mn 6020
EQ-101619		GW	-		1245	12	TOC
MW-157-101619		GW	75		1338	12	Alkalinity
MW-143-101619		GW	75		1445	12	EEM (RSK175LL)
TRIP-101619		GW	-		1540	1	
15H-10-16-19		GW					

* Matrix: SS - Soil AIR - Air F - Filter
 GW - Groundwater B - Blossay
 DW - Drinking Water
 OT - Other

Remarks: Samples returned via: UPS FedEx Courier

Relinquished by: (Signature) *[Signature]* Date: 10-16-19 Time: 16:30

Relinquished by: (Signature) *[Signature]* Date: Date: Time:

Relinquished by: (Signature) Date: Time:

Tracking # 1203 5799 6573

Received by: (Signature) *[Signature]*

Received for lab by: (Signature) *[Signature]*

Trip Blank Received: Yes No

Temp: 34.0 °C Bottles Received: 84

Date: 10/17/19 Time: 8:45

Flow: _____ Other: _____

PH: _____ Temp: _____

Sample Receipt Checklist:

COC Seal Present/Intact: NP Y

COC Signed/Accurate: NP Y

Bottles arrive intact: NP Y

Correct bottles used: NP Y

Sufficient volume sent: NP Y

If Applicable

VOC Zero Headspace: Y N

Preservation Correct/Checked: Y N

Hold: 10/17/19 @ 1000 *[Signature]* Condition: NCP / OK

12055 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

Face Analytical
 National Center for Testing & Inspection

L# 1150936
 G124

Actnum: PESENVSWA

Template:

Prelogin: TSR: Brian Ford

PG:

Shipped Via:

Remarks: Sample # (lab only)



ANALYTICAL REPORT

October 29, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

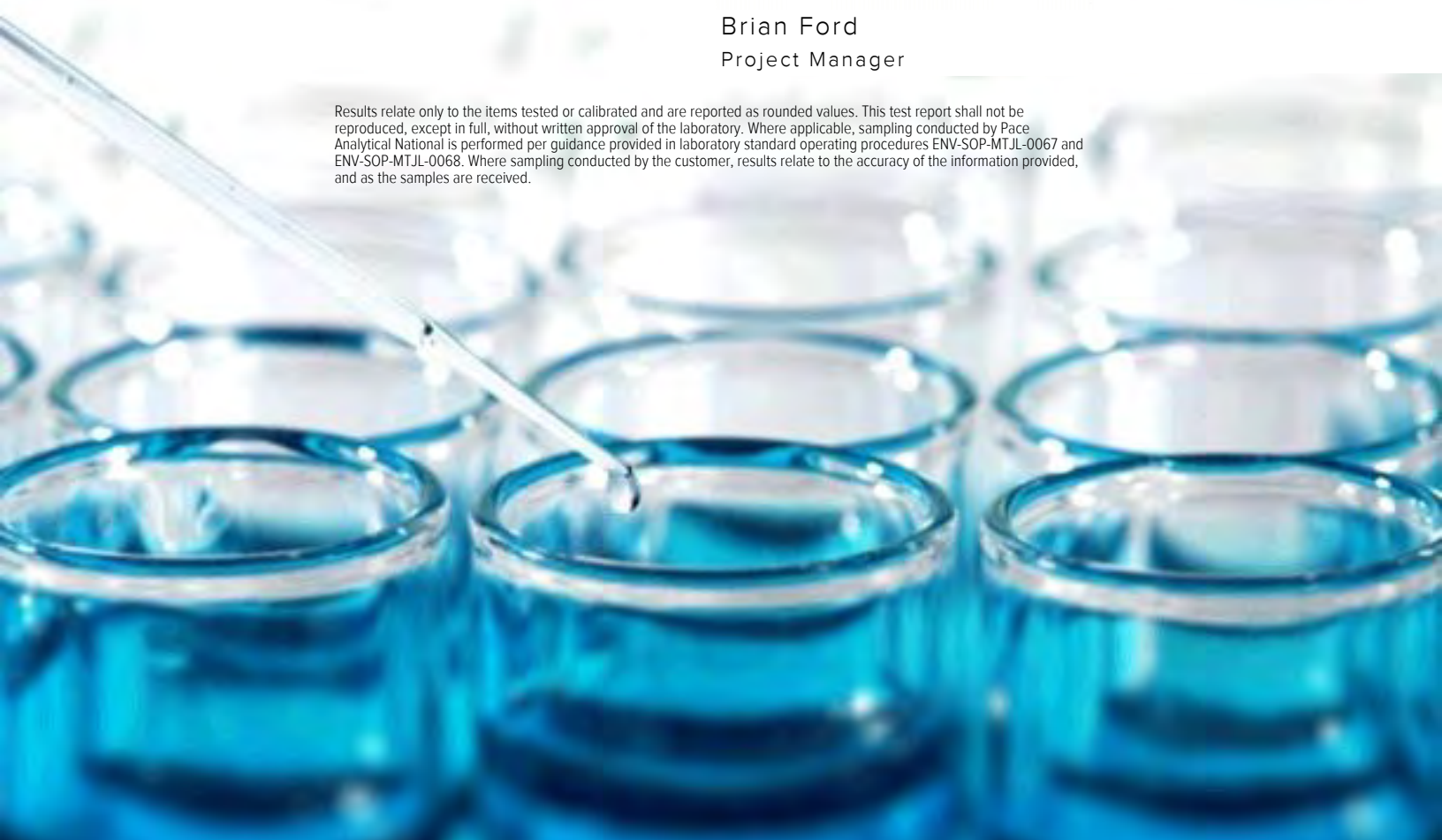
PES Environmental, Inc.- WA

Sample Delivery Group: L1151886
Samples Received: 10/19/2019
Project Number: 1413.001.02.501E
Description: American Linen
Site: AMERICAN LINEN
Report To: Brian O'Neal/Bill Haldeman
1215 Fourth Ave., Suite 1350
Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





Cp: Cover Page	1	¹Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	²Tc
Cn: Case Narrative	5	
Sr: Sample Results	6	³Ss
MW-123-101819 L1151886-01	6	
MW-125-101819 L1151886-02	8	⁴Cn
W-MW-02-101819 L1151886-03	11	⁵Sr
MW-104-101819 L1151886-04	14	
MW-106-101819 L1151886-05	17	⁶Qc
TB-101819 L1151886-06	20	
Qc: Quality Control Summary	22	⁷Gl
Wet Chemistry by Method 2320 B-2011	22	
Wet Chemistry by Method 9056A	23	⁸Al
Wet Chemistry by Method 9060A	25	
Metals (ICPMS) by Method 6020B	26	⁹Sc
Volatile Organic Compounds (GC) by Method NWTPHGX	27	
Volatile Organic Compounds (GC) by Method RSK175	28	
Volatile Organic Compounds (GC/MS) by Method 8260C	30	
Gl: Glossary of Terms	34	
Al: Accreditations & Locations	35	
Sc: Sample Chain of Custody	36	



MW-123-101819 L1151886-01 GW

Collected by K. Zygus
Collected date/time 10/18/19 09:55
Received date/time 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 17:52	10/24/19 17:52	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 15:43	10/19/19 15:43	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 13:47	10/25/19 13:47	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	10	10/25/19 08:01	10/28/19 11:15	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:04	10/22/19 08:04	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 19:23	10/26/19 19:23	ACG	Mt. Juliet, TN

¹ Cp

² Tc

³ Ss

⁴ Cn

MW-125-101819 L1151886-02 GW

Collected by K. Zygus
Collected date/time 10/18/19 11:05
Received date/time 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:00	10/24/19 18:00	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 16:34	10/19/19 16:34	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 14:06	10/25/19 14:06	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	20	10/25/19 08:01	10/28/19 11:19	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/24/19 23:09	10/24/19 23:09	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:07	10/22/19 08:07	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 19:43	10/26/19 19:43	ACG	Mt. Juliet, TN

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

W-MW-02-101819 L1151886-03 GW

Collected by K. Zygus
Collected date/time 10/18/19 12:10
Received date/time 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:07	10/24/19 18:07	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 17:00	10/19/19 17:00	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 14:25	10/25/19 14:25	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	20	10/25/19 08:01	10/28/19 11:22	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	10	10/24/19 23:55	10/24/19 23:55	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	10	10/22/19 08:59	10/22/19 08:59	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 20:02	10/26/19 20:02	ACG	Mt. Juliet, TN

MW-104-101819 L1151886-04 GW

Collected by K. Zygus
Collected date/time 10/18/19 13:00
Received date/time 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:16	10/24/19 18:16	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 17:26	10/19/19 17:26	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 15:55	10/25/19 15:55	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	10	10/25/19 08:01	10/28/19 11:25	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/25/19 00:23	10/25/19 00:23	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:26	10/22/19 08:26	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 20:22	10/26/19 20:22	ACG	Mt. Juliet, TN

MW-106-101819 L1151886-05 GW

Collected by K. Zygus
Collected date/time 10/18/19 15:15
Received date/time 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1368516	1	10/24/19 18:24	10/24/19 18:24	GB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1365799	1	10/19/19 17:38	10/19/19 17:38	ST	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1368322	1	10/25/19 16:09	10/25/19 16:09	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1366331	10	10/25/19 08:01	10/28/19 11:29	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/25/19 00:50	10/25/19 00:50	ADM	Mt. Juliet, TN



MW-106-101819 L1151886-05 GW

Collected by: K. Zygas
 Collected date/time: 10/18/19 15:15
 Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method RSK175	WG1366962	1	10/22/19 08:30	10/22/19 08:30	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 20:42	10/26/19 20:42	ACG	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

TB-101819 L1151886-06 GW

Collected by: K. Zygas
 Collected date/time: 10/18/19 15:30
 Received date/time: 10/19/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1368064	1	10/24/19 19:11	10/24/19 19:11	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1370189	1	10/26/19 15:48	10/26/19 15:48	ACG	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Sample Delivery Group (SDG) Narrative

VOC pH outside of method requirement.

<u>Lab Sample ID</u>	<u>Project Sample ID</u>	<u>Method</u>
L1151886-03	W-MW-02-101819	8260C

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	409000		2710	20000	1	10/24/2019 17:52	WG1368516

Sample Narrative:

L1151886-01 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	22900		51.9	1000	1	10/19/2019 15:43	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 15:43	WG1365799
Sulfate	5610		77.4	5000	1	10/19/2019 15:43	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5560		102	1000	1	10/25/2019 13:47	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	5140		150	1000	10	10/28/2019 11:15	WG1366331
Manganese	1860		2.50	50.0	10	10/28/2019 11:15	WG1366331

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	4380		0.287	0.678	1	10/22/2019 08:04	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:04	WG1366962
Ethene	U		0.422	1.27	1	10/22/2019 08:04	WG1366962

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	3.19	<u>J</u>	1.05	25.0	1	10/26/2019 19:23	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 19:23	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 19:23	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 19:23	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 19:23	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 19:23	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 19:23	WG1370189
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/26/2019 19:23	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 19:23	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 19:23	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 19:23	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 19:23	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 19:23	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 19:23	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 19:23	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 19:23	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 19:23	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 19:23	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 19:23	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 19:23	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/18/19 09:55

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 19:23	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 19:23	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 19:23	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 19:23	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 19:23	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 19:23	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 19:23	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 19:23	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 19:23	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 19:23	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 19:23	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 19:23	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 19:23	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 19:23	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 19:23	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 19:23	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 19:23	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 19:23	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 19:23	WG1370189
Di-isopropyl ether	0.163	<u>J</u>	0.0924	0.500	1	10/26/2019 19:23	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 19:23	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 19:23	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 19:23	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 19:23	WG1370189
Iodomethane	U	<u>JO</u>	0.377	10.0	1	10/26/2019 19:23	WG1370189
Isopropylbenzene	U	<u>JO</u>	0.126	0.500	1	10/26/2019 19:23	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 19:23	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 19:23	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 19:23	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 19:23	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 19:23	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 19:23	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 19:23	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 19:23	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 19:23	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 19:23	WG1370189
1,1,2-Trichlorotrifluoroethane	U	<u>JO</u>	0.164	0.500	1	10/26/2019 19:23	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 19:23	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 19:23	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 19:23	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 19:23	WG1370189
1,1,1-Trichloroethane	U	<u>JO</u>	0.0940	0.500	1	10/26/2019 19:23	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 19:23	WG1370189
Trichloroethene	U	<u>JO</u>	0.153	0.500	1	10/26/2019 19:23	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 19:23	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 19:23	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 19:23	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 19:23	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 19:23	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 19:23	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 19:23	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 19:23	WG1370189
(S) Toluene-d8	97.6			80.0-120		10/26/2019 19:23	WG1370189
(S) 4-Bromofluorobenzene	93.7			77.0-126		10/26/2019 19:23	WG1370189
(S) 1,2-Dichloroethane-d4	101			70.0-130		10/26/2019 19:23	WG1370189

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/18/19 11:05

Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	481000		2710	20000	1	10/24/2019 18:00	WG1368516

Sample Narrative:

L1151886-02 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	10900		51.9	1000	1	10/19/2019 16:34	WG1365799
Nitrate	31.9	J	22.7	100	1	10/19/2019 16:34	WG1365799
Sulfate	17100		77.4	5000	1	10/19/2019 16:34	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	15300		102	1000	1	10/25/2019 14:06	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	11700		300	2000	20	10/28/2019 11:19	WG1366331
Manganese	3670		5.00	100	20	10/28/2019 11:19	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/24/2019 23:09	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	96.7			78.0-120		10/24/2019 23:09	WG1368064

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	997		0.287	0.678	1	10/22/2019 08:07	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:07	WG1366962
Ethene	U		0.422	1.27	1	10/22/2019 08:07	WG1366962

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.79	J	1.05	25.0	1	10/26/2019 19:43	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 19:43	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 19:43	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 19:43	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 19:43	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 19:43	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 19:43	WG1370189
Bromomethane	U	JO	0.157	2.50	1	10/26/2019 19:43	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 19:43	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 19:43	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 19:43	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 19:43	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 19:43	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/18/19 11:05

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/26/2019 19:43	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 19:43	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 19:43	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 19:43	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 19:43	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 19:43	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 19:43	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 19:43	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 19:43	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 19:43	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 19:43	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 19:43	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 19:43	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 19:43	WG1370189
cis-1,2-Dichloroethene	0.496	U	0.0933	0.500	1	10/26/2019 19:43	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 19:43	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 19:43	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 19:43	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 19:43	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 19:43	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 19:43	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 19:43	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 19:43	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 19:43	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 19:43	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 19:43	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 19:43	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 19:43	WG1370189
Iodomethane	U	JO	0.377	10.0	1	10/26/2019 19:43	WG1370189
Isopropylbenzene	U	JO	0.126	0.500	1	10/26/2019 19:43	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 19:43	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 19:43	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 19:43	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 19:43	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 19:43	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 19:43	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 19:43	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 19:43	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 19:43	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 19:43	WG1370189
1,1,2-Trichlorotrifluoroethane	U	JO	0.164	0.500	1	10/26/2019 19:43	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 19:43	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 19:43	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 19:43	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 19:43	WG1370189
1,1,1-Trichloroethane	U	JO	0.0940	0.500	1	10/26/2019 19:43	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 19:43	WG1370189
Trichloroethene	U	JO	0.153	0.500	1	10/26/2019 19:43	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 19:43	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 19:43	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 19:43	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 19:43	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 19:43	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/18/19 11:05

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/26/2019 19:43	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 19:43	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 19:43	WG1370189
<i>(S) Toluene-d8</i>	95.8			80.0-120		10/26/2019 19:43	WG1370189
<i>(S) 4-Bromofluorobenzene</i>	91.8			77.0-126		10/26/2019 19:43	WG1370189
<i>(S) 1,2-Dichloroethane-d4</i>	101			70.0-130		10/26/2019 19:43	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	1230000		2710	20000	1	10/24/2019 18:07	WG1368516

Sample Narrative:

L1151886-03 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	89500		51.9	1000	1	10/19/2019 17:00	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 17:00	WG1365799
Sulfate	U		77.4	5000	1	10/19/2019 17:00	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	37600		102	1000	1	10/25/2019 14:25	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	20500		300	2000	20	10/28/2019 11:22	WG1366331
Manganese	3820		5.00	100	20	10/28/2019 11:22	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		316	1000	10	10/24/2019 23:55	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	97.4			78.0-120		10/24/2019 23:55	WG1368064

Sample Narrative:

L1151886-03 WG1368064: Elevated RL due to foamy matrix.

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	32100		2.87	6.78	10	10/22/2019 08:59	WG1366962
Ethane	42.0		2.96	12.9	10	10/22/2019 08:59	WG1366962
Ethene	U		4.22	12.7	10	10/22/2019 08:59	WG1366962

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.54	J	1.05	25.0	1	10/26/2019 20:02	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 20:02	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 20:02	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 20:02	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 20:02	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 20:02	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 20:02	WG1370189
Bromomethane	U	JO	0.157	2.50	1	10/26/2019 20:02	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 20:02	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 20:02	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/18/19 12:10

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 20:02	WG1370189
Carbon disulfide	0.262	J	0.101	0.500	1	10/26/2019 20:02	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 20:02	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 20:02	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 20:02	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 20:02	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 20:02	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 20:02	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 20:02	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 20:02	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 20:02	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 20:02	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 20:02	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 20:02	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 20:02	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 20:02	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 20:02	WG1370189
cis-1,2-Dichloroethene	2.07		0.0933	0.500	1	10/26/2019 20:02	WG1370189
trans-1,2-Dichloroethene	0.278	J	0.152	0.500	1	10/26/2019 20:02	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 20:02	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 20:02	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 20:02	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 20:02	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 20:02	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 20:02	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 20:02	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 20:02	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 20:02	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 20:02	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 20:02	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 20:02	WG1370189
Iodomethane	U	JO	0.377	10.0	1	10/26/2019 20:02	WG1370189
Isopropylbenzene	U	JO	0.126	0.500	1	10/26/2019 20:02	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 20:02	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 20:02	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 20:02	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 20:02	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 20:02	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 20:02	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 20:02	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 20:02	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 20:02	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 20:02	WG1370189
1,1,2-Trichlorotrifluoroethane	U	JO	0.164	0.500	1	10/26/2019 20:02	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 20:02	WG1370189
Toluene	1.79		0.412	0.500	1	10/26/2019 20:02	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 20:02	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 20:02	WG1370189
1,1,1-Trichloroethane	U	JO	0.0940	0.500	1	10/26/2019 20:02	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 20:02	WG1370189
Trichloroethene	U	JO	0.153	0.500	1	10/26/2019 20:02	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 20:02	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 20:02	WG1370189

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/18/19 12:10

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 20:02	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 20:02	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 20:02	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 20:02	WG1370189
Vinyl chloride	3.56		0.118	0.500	1	10/26/2019 20:02	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 20:02	WG1370189
(S) Toluene-d8	91.6			80.0-120		10/26/2019 20:02	WG1370189
(S) 4-Bromofluorobenzene	89.3			77.0-126		10/26/2019 20:02	WG1370189
(S) 1,2-Dichloroethane-d4	106			70.0-130		10/26/2019 20:02	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	203000		2710	20000	1	10/24/2019 18:16	WG1368516

Sample Narrative:

L1151886-04 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	13500		51.9	1000	1	10/19/2019 17:26	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 17:26	WG1365799
Sulfate	5970		77.4	5000	1	10/19/2019 17:26	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2300	<u>B</u>	102	1000	1	10/25/2019 15:55	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	1330		150	1000	10	10/28/2019 11:25	WG1366331
Manganese	268		2.50	50.0	10	10/28/2019 11:25	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/25/2019 00:23	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	96.6			78.0-120		10/25/2019 00:23	WG1368064

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	316		0.287	0.678	1	10/22/2019 08:26	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:26	WG1366962
Ethene	23.7		0.422	1.27	1	10/22/2019 08:26	WG1366962

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.88	<u>J</u>	1.05	25.0	1	10/26/2019 20:22	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 20:22	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 20:22	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 20:22	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 20:22	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 20:22	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 20:22	WG1370189
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/26/2019 20:22	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 20:22	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 20:22	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 20:22	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 20:22	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 20:22	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/18/19 13:00

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/26/2019 20:22	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 20:22	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 20:22	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 20:22	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 20:22	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 20:22	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 20:22	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 20:22	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 20:22	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 20:22	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 20:22	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 20:22	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 20:22	WG1370189
1,1-Dichloroethene	0.799		0.188	0.500	1	10/26/2019 20:22	WG1370189
cis-1,2-Dichloroethene	16.3		0.0933	0.500	1	10/26/2019 20:22	WG1370189
trans-1,2-Dichloroethene	0.329	J	0.152	0.500	1	10/26/2019 20:22	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 20:22	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 20:22	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 20:22	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 20:22	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 20:22	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 20:22	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 20:22	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 20:22	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 20:22	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 20:22	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 20:22	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 20:22	WG1370189
Iodomethane	U	JO	0.377	10.0	1	10/26/2019 20:22	WG1370189
Isopropylbenzene	U	JO	0.126	0.500	1	10/26/2019 20:22	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 20:22	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 20:22	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 20:22	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 20:22	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 20:22	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 20:22	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 20:22	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 20:22	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 20:22	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 20:22	WG1370189
1,1,2-Trichlorotrifluoroethane	U	JO	0.164	0.500	1	10/26/2019 20:22	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 20:22	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 20:22	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 20:22	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 20:22	WG1370189
1,1,1-Trichloroethane	U	JO	0.0940	0.500	1	10/26/2019 20:22	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 20:22	WG1370189
Trichloroethene	1.54	JO	0.153	0.500	1	10/26/2019 20:22	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 20:22	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 20:22	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 20:22	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 20:22	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 20:22	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/18/19 13:00

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/26/2019 20:22	WG1370189
Vinyl chloride	33.2		0.118	0.500	1	10/26/2019 20:22	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 20:22	WG1370189
<i>(S) Toluene-d8</i>	94.7			80.0-120		10/26/2019 20:22	WG1370189
<i>(S) 4-Bromofluorobenzene</i>	91.6			77.0-126		10/26/2019 20:22	WG1370189
<i>(S) 1,2-Dichloroethane-d4</i>	101			70.0-130		10/26/2019 20:22	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	276000		2710	20000	1	10/24/2019 18:24	WG1368516

Sample Narrative:

L1151886-05 WG1368516: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	25800		51.9	1000	1	10/19/2019 17:38	WG1365799
Nitrate	U		22.7	100	1	10/19/2019 17:38	WG1365799
Sulfate	17000		77.4	5000	1	10/19/2019 17:38	WG1365799

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2320	<u>B</u>	102	1000	1	10/25/2019 16:09	WG1368322

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2640		150	1000	10	10/28/2019 11:29	WG1366331
Manganese	792		2.50	50.0	10	10/28/2019 11:29	WG1366331

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/25/2019 00:50	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	94.0			78.0-120		10/25/2019 00:50	WG1368064

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	47.2		0.287	0.678	1	10/22/2019 08:30	WG1366962
Ethane	U		0.296	1.29	1	10/22/2019 08:30	WG1366962
Ethene	U		0.422	1.27	1	10/22/2019 08:30	WG1366962

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.01	<u>J</u>	1.05	25.0	1	10/26/2019 20:42	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 20:42	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 20:42	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 20:42	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 20:42	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 20:42	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 20:42	WG1370189
Bromomethane	U	<u>JO</u>	0.157	2.50	1	10/26/2019 20:42	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 20:42	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 20:42	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 20:42	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 20:42	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 20:42	WG1370189

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/18/19 15:15

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/26/2019 20:42	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 20:42	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 20:42	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 20:42	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 20:42	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 20:42	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 20:42	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 20:42	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 20:42	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 20:42	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 20:42	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 20:42	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 20:42	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 20:42	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 20:42	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 20:42	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 20:42	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 20:42	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 20:42	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 20:42	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 20:42	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 20:42	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 20:42	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 20:42	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 20:42	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 20:42	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 20:42	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 20:42	WG1370189
Iodomethane	U	JO	0.377	10.0	1	10/26/2019 20:42	WG1370189
Isopropylbenzene	U	JO	0.126	0.500	1	10/26/2019 20:42	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 20:42	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 20:42	WG1370189
Methylene Chloride	U		1.07	2.50	1	10/26/2019 20:42	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 20:42	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 20:42	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 20:42	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 20:42	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 20:42	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 20:42	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 20:42	WG1370189
1,1,2-Trichlorotrifluoroethane	U	JO	0.164	0.500	1	10/26/2019 20:42	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 20:42	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 20:42	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 20:42	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 20:42	WG1370189
1,1,1-Trichloroethane	U	JO	0.0940	0.500	1	10/26/2019 20:42	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 20:42	WG1370189
Trichloroethene	U	JO	0.153	0.500	1	10/26/2019 20:42	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 20:42	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 20:42	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 20:42	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 20:42	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 20:42	WG1370189

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/18/19 15:15

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/26/2019 20:42	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 20:42	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 20:42	WG1370189
<i>(S) Toluene-d8</i>	94.4			80.0-120		10/26/2019 20:42	WG1370189
<i>(S) 4-Bromofluorobenzene</i>	92.6			77.0-126		10/26/2019 20:42	WG1370189
<i>(S) 1,2-Dichloroethane-d4</i>	105			70.0-130		10/26/2019 20:42	WG1370189

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/18/19 15:30

L1151886

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Gasoline Range Organics-NWTPH	U		31.6	100	1	10/24/2019 19:11	WG1368064
(S) a,a,a-Trifluorotoluene(FID)	96.1			78.0-120		10/24/2019 19:11	WG1368064

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U		1.05	25.0	1	10/26/2019 15:48	WG1370189
Acrylonitrile	U		0.873	5.00	1	10/26/2019 15:48	WG1370189
Benzene	U		0.0896	0.500	1	10/26/2019 15:48	WG1370189
Bromobenzene	U		0.133	0.500	1	10/26/2019 15:48	WG1370189
Bromodichloromethane	U		0.0800	0.500	1	10/26/2019 15:48	WG1370189
Bromochloromethane	U		0.145	0.500	1	10/26/2019 15:48	WG1370189
Bromoform	U		0.186	0.500	1	10/26/2019 15:48	WG1370189
Bromomethane	U	JO	0.157	2.50	1	10/26/2019 15:48	WG1370189
n-Butylbenzene	U		0.143	0.500	1	10/26/2019 15:48	WG1370189
sec-Butylbenzene	U		0.134	0.500	1	10/26/2019 15:48	WG1370189
tert-Butylbenzene	U		0.183	0.500	1	10/26/2019 15:48	WG1370189
Carbon disulfide	U		0.101	0.500	1	10/26/2019 15:48	WG1370189
Carbon tetrachloride	U		0.159	0.500	1	10/26/2019 15:48	WG1370189
Chlorobenzene	U		0.140	0.500	1	10/26/2019 15:48	WG1370189
Chlorodibromomethane	U		0.128	0.500	1	10/26/2019 15:48	WG1370189
Chloroethane	U		0.141	2.50	1	10/26/2019 15:48	WG1370189
Chloroform	U		0.0860	0.500	1	10/26/2019 15:48	WG1370189
Chloromethane	U		0.153	1.25	1	10/26/2019 15:48	WG1370189
2-Chlorotoluene	U		0.111	0.500	1	10/26/2019 15:48	WG1370189
4-Chlorotoluene	U		0.0972	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/26/2019 15:48	WG1370189
1,2-Dibromoethane	U		0.193	0.500	1	10/26/2019 15:48	WG1370189
Dibromomethane	U		0.117	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dichlorobenzene	U		0.101	0.500	1	10/26/2019 15:48	WG1370189
1,3-Dichlorobenzene	U		0.130	0.500	1	10/26/2019 15:48	WG1370189
1,4-Dichlorobenzene	U		0.121	0.500	1	10/26/2019 15:48	WG1370189
Dichlorodifluoromethane	U		0.127	2.50	1	10/26/2019 15:48	WG1370189
1,1-Dichloroethane	U		0.114	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dichloroethane	U		0.108	0.500	1	10/26/2019 15:48	WG1370189
1,1-Dichloroethene	U		0.188	0.500	1	10/26/2019 15:48	WG1370189
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/26/2019 15:48	WG1370189
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/26/2019 15:48	WG1370189
1,2-Dichloropropane	U		0.190	0.500	1	10/26/2019 15:48	WG1370189
1,1-Dichloropropene	U		0.128	0.500	1	10/26/2019 15:48	WG1370189
1,3-Dichloropropane	U		0.147	1.00	1	10/26/2019 15:48	WG1370189
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/26/2019 15:48	WG1370189
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/26/2019 15:48	WG1370189
trans-1,4-Dichloro-2-butene	U		0.257	5.00	1	10/26/2019 15:48	WG1370189
2,2-Dichloropropane	U		0.0929	0.500	1	10/26/2019 15:48	WG1370189
Di-isopropyl ether	U		0.0924	0.500	1	10/26/2019 15:48	WG1370189
Ethylbenzene	U		0.158	0.500	1	10/26/2019 15:48	WG1370189
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/26/2019 15:48	WG1370189
2-Hexanone	U		0.757	5.00	1	10/26/2019 15:48	WG1370189
n-Hexane	U		0.305	5.00	1	10/26/2019 15:48	WG1370189
Iodomethane	U	JO	0.377	10.0	1	10/26/2019 15:48	WG1370189
Isopropylbenzene	U	JO	0.126	0.500	1	10/26/2019 15:48	WG1370189
p-Isopropyltoluene	U		0.138	0.500	1	10/26/2019 15:48	WG1370189
2-Butanone (MEK)	U		1.28	5.00	1	10/26/2019 15:48	WG1370189



Collected date/time: 10/18/19 15:30

L1151886

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/26/2019 15:48	WG1370189
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/26/2019 15:48	WG1370189
Methyl tert-butyl ether	U		0.102	0.500	1	10/26/2019 15:48	WG1370189
Naphthalene	U		0.174	2.50	1	10/26/2019 15:48	WG1370189
n-Propylbenzene	U		0.162	0.500	1	10/26/2019 15:48	WG1370189
Styrene	U		0.117	0.500	1	10/26/2019 15:48	WG1370189
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/26/2019 15:48	WG1370189
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/26/2019 15:48	WG1370189
1,1,2-Trichlorotrifluoroethane	U	<u>JO</u>	0.164	0.500	1	10/26/2019 15:48	WG1370189
Tetrachloroethene	U		0.199	0.500	1	10/26/2019 15:48	WG1370189
Toluene	U		0.412	0.500	1	10/26/2019 15:48	WG1370189
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/26/2019 15:48	WG1370189
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/26/2019 15:48	WG1370189
1,1,1-Trichloroethane	U	<u>JO</u>	0.0940	0.500	1	10/26/2019 15:48	WG1370189
1,1,2-Trichloroethane	U		0.186	0.500	1	10/26/2019 15:48	WG1370189
Trichloroethene	U	<u>JO</u>	0.153	0.500	1	10/26/2019 15:48	WG1370189
Trichlorofluoromethane	U		0.130	2.50	1	10/26/2019 15:48	WG1370189
1,2,3-Trichloropropane	U		0.247	2.50	1	10/26/2019 15:48	WG1370189
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/26/2019 15:48	WG1370189
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/26/2019 15:48	WG1370189
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/26/2019 15:48	WG1370189
Vinyl acetate	U		0.645	5.00	1	10/26/2019 15:48	WG1370189
Vinyl chloride	U		0.118	0.500	1	10/26/2019 15:48	WG1370189
Xylenes, Total	U		0.316	1.50	1	10/26/2019 15:48	WG1370189
(S) Toluene-d8	93.2			80.0-120		10/26/2019 15:48	WG1370189
(S) 4-Bromofluorobenzene	91.8			77.0-126		10/26/2019 15:48	WG1370189
(S) 1,2-Dichloroethane-d4	103			70.0-130		10/26/2019 15:48	WG1370189

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Method Blank (MB)

(MB) R3464818-1 10/24/19 17:06

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	U	ug/l	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1152061-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152061-01 10/24/19 18:41 • (DUP) R3464818-3 10/24/19 18:49

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	469000	470000	1	0.229	%	20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1152362-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152362-01 10/24/19 20:25 • (DUP) R3464818-4 10/24/19 20:33

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	265000	265000	1	0.149	%	20

Sample Narrative:

OS: Endpoint pH 4.5 HEADSPACE
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3464818-2 10/24/19 18:32

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	98700	98.7	85.0-115	%

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3462972-1 10/19/19 09:09

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1151823-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1151823-01 10/19/19 12:44 • (DUP) R3462972-3 10/19/19 12:57

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Chloride	171000	175000	1	2.03	E	15
Nitrate	2750	2820	1	2.74		15
Sulfate	322000	325000	1	0.903	E	15

L1151886-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1151886-05 10/19/19 17:38 • (DUP) R3462972-6 10/19/19 17:51

Analyte	Original Result		Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l				
Chloride	25800	25000	1	3.14		15
Nitrate	U	0.000	1	0.000		15
Sulfate	17000	16600	1	2.28		15

Laboratory Control Sample (LCS)

(LCS) R3462972-2 10/19/19 09:22

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	40300	101	80.0-120	
Nitrate	8000	8290	104	80.0-120	
Sulfate	40000	40500	101	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1151823-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Chloride	50000	702000	717000	713000	29.2	20.9	1	80.0-120	E V	E V	0.580	15
Nitrate	5000	ND	4940	4900	98.7	98.1	1	80.0-120	E V	E V	0.638	15
Sulfate	50000	461000	474000	471000	25.0	20.1	1	80.0-120	E V	E V	0.519	15

L1151886-05 Original Sample (OS) • Matrix Spike (MS)

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MS Rec. %	Dilution	Rec. Limits %	MS Qualifier
Chloride	50000	25800	72800	94.0	1	80.0-120	
Nitrate	5000	U	4980	99.6	1	80.0-120	
Sulfate	50000	17000	64700	95.5	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3465280-1	10/25/19 12:26	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	375	<u>1</u>	102	1000	

L1151886-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1151886-03	10/25/19 14:25 • (DUP) R3465280-3	10/25/19 14:44			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	37600	37200	1	0.882	20

L1152055-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1152055-05	10/25/19 17:41 • (DUP) R3465280-6	10/25/19 17:53			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	3590	3600	1	0.445	20

Laboratory Control Sample (LCS)

(LCS) R3465280-2	10/25/19 12:54				
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>	
Analyte	ug/l	ug/l	%	%	
TOC	75000	73300	97.7	85.0-115	

L1152055-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-01	10/25/19 16:24 • (MS) R3465280-4	10/25/19 16:43 • (MSD) R3465280-5	10/25/19 16:59		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	1950	50400	96.8	96.9
		Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>
		1	80.0-120	%	0.0794
				RPD	RPD Limits
				%	%

L1152055-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-02	10/25/19 19:48 • (MS) R3465280-7	10/25/19 20:04 • (MSD) R3465280-8	10/25/19 20:20		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	1900	51400	99.0	98.5
		Dilution	Rec. Limits	<u>MS Qualifier</u>	<u>MSD Qualifier</u>
		1	80.0-120	%	0.468
				RPD	RPD Limits
				%	%

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

	MB Result	MB Qualifier	MB MDL	MB RDL
(MB) R3465732-1 10/27/19 22:22				
Analyte	ug/l		ug/l	ug/l
Iron	U		15.0	100
Manganese	0.390	J	0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

	(LCS) R3465732-2 10/27/19 22:25 • (LCSD) R3465732-3 10/27/19 22:29		(OS) L1151885-05 10/27/19 22:32 • (MS) R3465732-5 10/27/19 22:39 • (MSD) R3465732-6 10/27/19 22:43							
Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Iron	5000	4830	4960	96.6	99.3	80.0-120			2.79	20
Manganese	50.0	49.7	51.1	99.3	102	80.0-120			2.82	20

L1151885-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Iron	5000	103	5010	4950	98.1	96.9	1	75.0-125			1.14	20
Manganese	50.0	8.50	57.3	57.0	97.5	97.0	1	75.0-125			0.462	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L1151886-02.03.04.05.06](#)

Method Blank (MB)

(MB) R3464797-2 10/24/19 15:39

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	U		316	100
^(S) <i>o,a</i> -Trifluorotoluene(FID)	96.4			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3464797-1 10/24/19 14:52

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5930	108	70.0-124	
^(S) <i>o,a</i> -Trifluorotoluene(FID)			105	78.0-120	

Public Review Draft

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1151886-01.02.03.04.05](#)

Method Blank (MB)

(MB) R3463477-1 10/22/19 07:49

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l	ug/l	ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1151886-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1151886-04 10/22/19 08:26 • (DUP) R3463477-2 10/22/19 08:46

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l	%	%	%	%
Methane	316	321	1	1.61		20
Ethane	U	0.000	1	0.000		20
Ethene	23.7	23.2	1	1.94		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3463477-7 10/22/19 09:11 • (LCSD) R3463477-8 10/22/19 09:15

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Methane	67.8	74.2	72.1	109	106	85.0-115			2.95	20
Ethane	129	130	129	101	99.8	85.0-115			1.02	20
Ethene	127	135	133	107	104	85.0-115			2.16	20

L1152024-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152024-01 10/22/19 07:52 • (MS) R3463477-3 10/22/19 09:01 • (MSD) R3463477-4 10/22/19 09:04

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
Methane	67.8	U	73.2	78.3	108	115	1	85.0-115			6.81	20
Ethane	129	U	124	134	95.7	104	1	85.0-115			7.96	20
Ethene	127	U	130	140	102	110	1	85.0-115			7.32	20

L1152055-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-02 10/22/19 08:40 • (MS) R3463477-5 10/22/19 09:06 • (MSD) R3463477-6 10/22/19 09:08

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
Methane	67.8	756	758	774	3.08	26.5	1	85.0-115	Y	Y	2.08	20
Ethane	129	U	133	129	103	100	1	85.0-115			2.41	20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1151886-01.02.03.04.05](#)

L1152055-02 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152055-02 10/22/19 08:40 • (MS) R3463477-5 10/22/19 09:06 • (MSD) R3463477-6 10/22/19 09:08

Analyte	Spike Amount ug/l	Original Result ug/l	MS Result ug/l	MSD Result ug/l	MS Rec. %	MSD Rec. %	Dilution	Rec. Limits %	MS Qualifier	MSD Qualifier	RPD %	RPD Limits %
Ethene	127	U	138	135	109	106	1	85.0-115			2.50	20

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3465451-2 10/26/19 12:44

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	0.982	J	0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	0.356	J	0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	95.5			80.0-120
(S) 4-Bromofluorobenzene	92.7			77.0-126
(S) 1,2-Dichloroethane-d4	100			70.0-130

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

Public Review Draft



Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	146	117	19.0-160	1 Cp
Acrylonitrile	125	168	134	55.0-149	2 Tc
Benzene	25.0	23.8	95.2	70.0-123	3 Ss
Bromobenzene	25.0	27.7	111	73.0-121	4 Cn
Bromodichloromethane	25.0	23.4	93.6	75.0-120	5 Sr
Bromochloromethane	25.0	26.6	106	76.0-122	6 Qc
Bromoform	25.0	24.6	98.4	68.0-132	7 Gl
Bromomethane	25.0	16.1	64.4	10.0-160	8 Al
n-Butylbenzene	25.0	29.4	118	73.0-125	9 Sc
sec-Butylbenzene	25.0	26.3	105	75.0-125	
tert-Butylbenzene	25.0	24.7	98.8	76.0-124	
Carbon disulfide	25.0	22.7	90.8	61.0-128	
Carbon tetrachloride	25.0	21.5	86.0	68.0-126	
Chlorobenzene	25.0	24.1	96.4	80.0-121	
Chlorodibromomethane	25.0	24.8	99.2	77.0-125	
Chloroethane	25.0	28.4	114	47.0-150	
Chloroform	25.0	22.7	90.8	73.0-120	
Chloromethane	25.0	25.8	103	41.0-142	
2-Chlorotoluene	25.0	26.9	108	76.0-123	
4-Chlorotoluene	25.0	26.6	106	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	25.6	102	58.0-134	
1,2-Dibromoethane	25.0	25.6	102	80.0-122	
Dibromomethane	25.0	26.4	106	80.0-120	
1,2-Dichlorobenzene	25.0	27.8	111	79.0-121	
1,3-Dichlorobenzene	25.0	28.5	114	79.0-120	
1,4-Dichlorobenzene	25.0	27.8	111	79.0-120	
Dichlorodifluoromethane	25.0	22.5	90.0	51.0-149	
1,1-Dichloroethane	25.0	27.6	110	70.0-126	
1,2-Dichloroethane	25.0	28.4	114	70.0-128	
cis-1,2-Dichloroethene	25.0	24.2	96.8	71.0-124	
trans-1,2-Dichloroethene	25.0	24.0	96.0	73.0-120	
1,2-Dichloropropane	25.0	22.5	90.0	73.0-120	
1,1-Dichloropropene	25.0	29.5	118	77.0-125	
1,3-Dichloropropene	25.0	24.6	98.4	74.0-126	
cis-1,3-Dichloropropene	25.0	27.0	108	80.0-120	
trans-1,3-Dichloropropene	25.0	24.9	99.6	80.0-123	
trans-1,4-Dichloro-2-butene	25.0	26.8	107	78.0-124	
2,2-Dichloropropane	25.0	33.7	135	33.0-144	
Di-isopropyl ether	25.0	23.0	92.0	58.0-130	
	25.0	29.5	118	58.0-138	

Public Review Draft

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.00102.501E

SDG:

L1151886

DATE/TIME:

10/29/19 15:07

PAGE:

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1151886-01.02.03.04.05.06](#)

Laboratory Control Sample (LCS)

(LCS) R3465451-1 10/26/19 12:05

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	22.5	90.0	79.0-123	1 Cp
Hexachloro-1,3-butadiene	25.0	31.4	126	54.0-138	3 Ss
2-Hexanone	125	172	138	67.0-149	2 Tc
n-Hexane	25.0	29.8	119	57.0-133	4 Cn
Iodomethane	125	104	83.2	33.0-147	5 Sr
Isopropylbenzene	25.0	21.3	85.2	76.0-127	6 Qc
p-Isopropyltoluene	25.0	27.1	108	76.0-125	7 Gl
2-Butanone (MEK)	125	139	111	44.0-160	8 Al
Methylene Chloride	25.0	22.5	90.0	67.0-120	9 Sc
4-Methyl-2-pentanone (MIBK)	125	142	114	68.0-142	
Methyl tert-butyl ether	25.0	25.3	101	68.0-125	
Naphthalene	25.0	23.9	95.6	54.0-135	
n-Propylbenzene	25.0	25.2	101	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	23.3	93.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	25.9	104	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	21.4	85.6	69.0-132	
Tetrachloroethene	25.0	22.9	91.6	72.0-132	
Toluene	25.0	23.7	94.8	79.0-120	
1,2,3-Trichlorobenzene	25.0	27.3	109	50.0-138	
1,2,4-Trichlorobenzene	25.0	30.0	120	57.0-137	
1,1,1-Trichloroethane	25.0	21.4	85.6	73.0-124	
1,1,2-Trichloroethane	25.0	24.5	98.0	80.0-120	
Trichloroethene	25.0	22.2	88.8	78.0-124	
Trichlorofluoromethane	25.0	26.9	108	59.0-147	
1,2,3-Trichloropropane	25.0	26.0	104	73.0-130	
1,2,4-Trimethylbenzene	25.0	25.9	104	76.0-121	
1,2,3-Trimethylbenzene	25.0	26.6	106	77.0-120	
1,3,5-Trimethylbenzene	25.0	25.0	100	76.0-122	
Vinyl acetate	125	164	131	11.0-160	
Vinyl chloride	25.0	32.6	130	67.0-131	
Xylenes, Total	75.0	68.0	90.7	79.0-123	
(S) Toluene-d8			93.8	80.0-120	
(S) 4-Bromofluorobenzene			91.0	77.0-126	
(S) 1,2-Dichloroethane-d4			101	70.0-130	

Public Review Draft

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.00102.501E

SDG:

L1151886

DATE/TIME:

10/29/19 15:07

PAGE:

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Qualifier Description

B	The same analyte is found in the associated blank.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL).
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
V	The sample concentration is too high to evaluate accurate spike recoveries.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

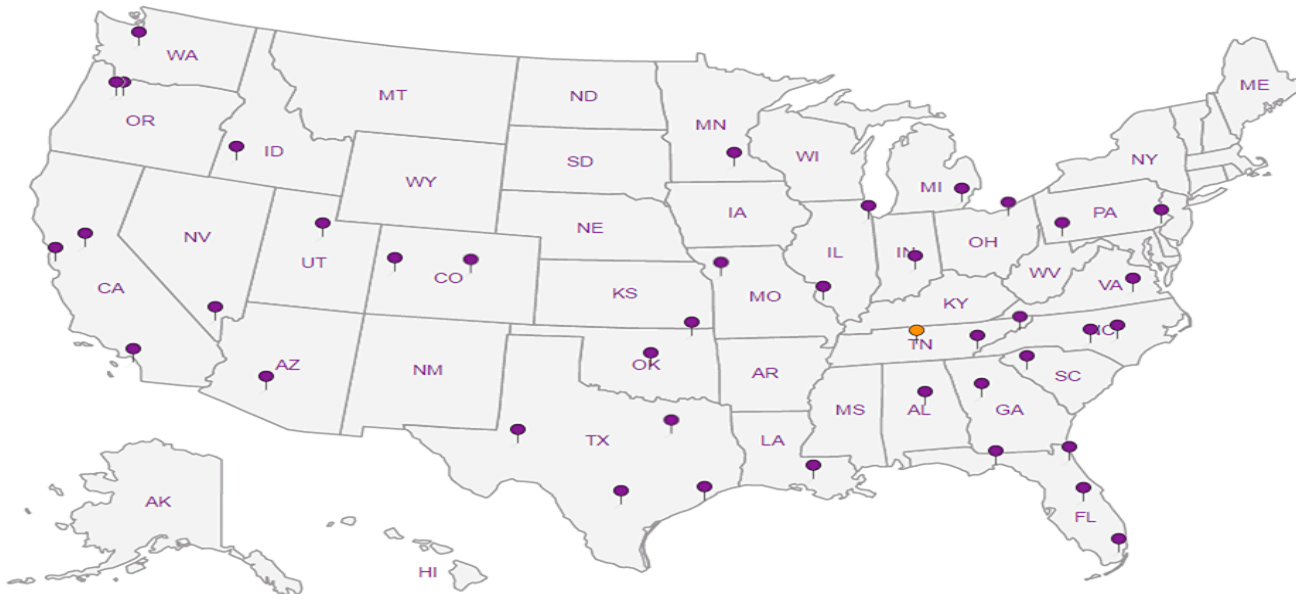
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

PES-Seattle

Billing Information:
PES-Seattle

Analysis / Container / Preservative

Chain of Custody Page 1 of 1

Report to: Bill Haldeman/Brian O'neal
Email To: on file

Project: American Linn
Description: American Linn
City/State: Seattle, WA

Client Project #: 1413.001.02.501E
Lab Project #: PESENVSWA-ALP

Phone: on file
Fax: P.O. #

Collected by (print): K. Zygas
Site/Facility ID #: American Linn

Collected by (signature): *K. Zygas*
Quote #

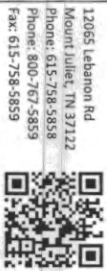
Immediately Packed on Ice N Y
Date Results Needed

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cnts
MW-123-101819	Grab	GW	75	10/18/19	0955	12
MW-125-101819		GW	28		1105	12
W-MW-02-101819		GW	75		1210	12
MW-104-101819		GW	124		1300	12
MW-106-101819		GW	135		1515	12
TB-101819		GW			1530	1

NO3,SO4,Chloride48 hour hold

NWTPHGX
VOCs (V8260LLC)
Total Fe Mn 6020
TOC
Alkalinity
EEM (RSK175LL)

LL
LL



12065 Lebanon Rd
Mount Juliet, TN 37122
Phone: 615-758-5858
Phone: 800-767-5859
Fax: 615-758-5859

L# 151886
E127

Accrnum: PESENVSWA
Template:
Prelogin:
TSR: Brian Ford
PB:
Shipped Via:
Remarks

* Matrix:
SS - Soil AIR - Air F - Filter
GW - Groundwater B - Bioassay
WW - Wastewater
DW - Drinking Water
OT - Other

Remarks:
Samples returned via:
UPS Fedex Courier

Tracking # 1775 8600 7238
Received by: (Signature)
Temp: 1
pH Temp
Flow Other

Sample Receipt Checklist
COC Seal Present/Intact: X NP
COC Signed/Accurate: X NP
Bottles arrive intact: X NP
Correct bottles used: X NP
Sufficient volume sent: X NP
If Applicable
VOR Zero Headspace: X NP
Preservation Correct/Checked: X NP
RAD SCREEN: <0.5 mP/h

Relinquished by: (Signature) *[Signature]*
Date: 10/18/19
Time: 1600
Relinquished by: (Signature) *[Signature]*
Date:
Time:
Received for lab by: (Signature) *[Signature]*
Date: 10/19/19
Time: 8:45

Received by: (Signature) *[Signature]*
Temp: 5.1-2=49 57
Date: 10/19/19
Time: 8:45
Hold:
Condition: NCF 10K



ANALYTICAL REPORT

November 04, 2019

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

PES Environmental, Inc.- WA

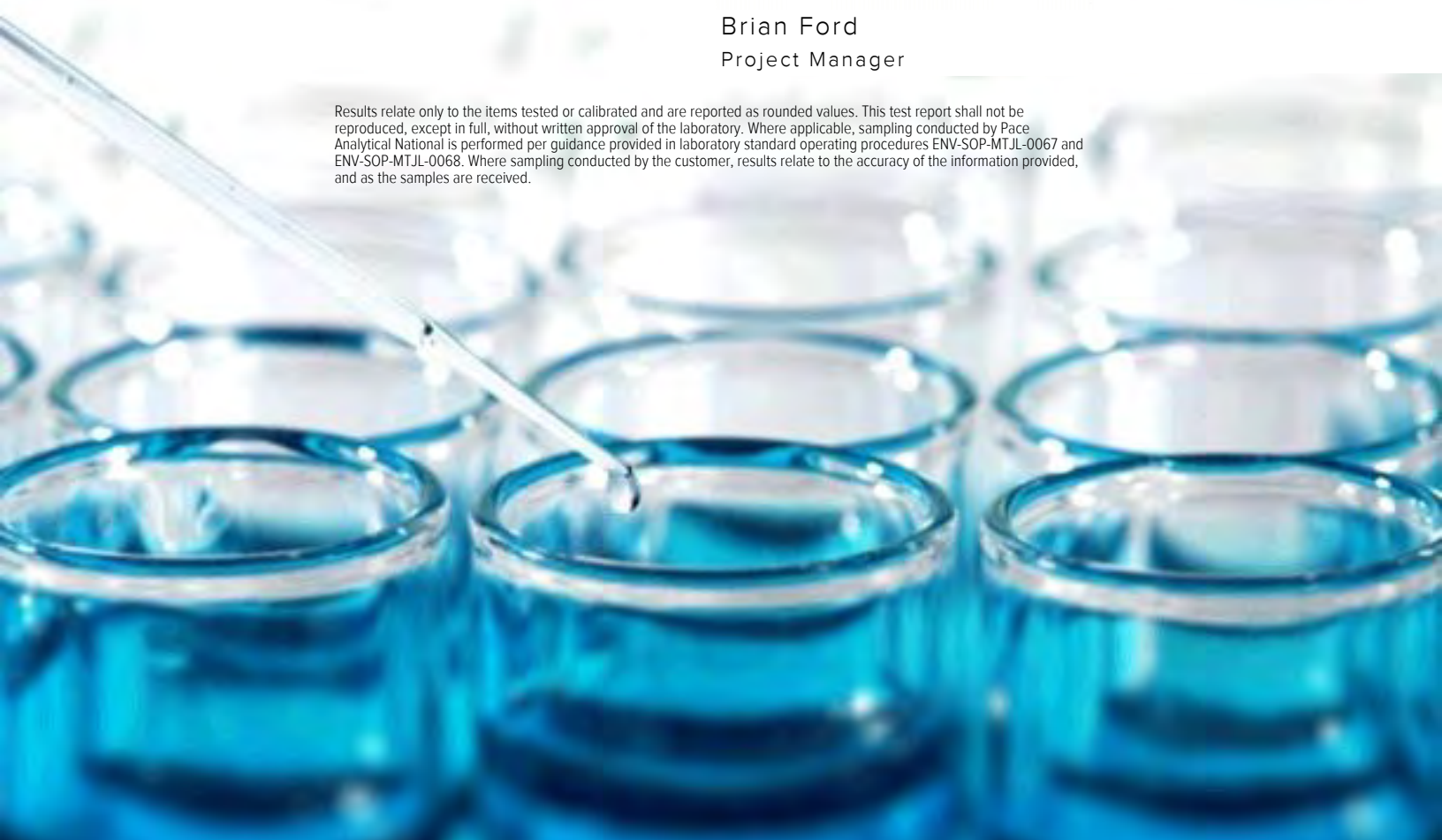
Sample Delivery Group: L1152340
 Samples Received: 10/22/2019
 Project Number: 1413.001.02.501E
 Description: American Linen

Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161










Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





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MW-138-102119 L1152340-01 GW

Collected by Chris Deboer
Collected date/time 10/21/19 10:05
Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:03	10/24/19 22:03	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 04:10	10/23/19 04:10	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 12:44	10/26/19 12:44	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:35	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/02/19 23:56	11/02/19 23:56	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:40	10/23/19 13:40	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 07:04	10/29/19 07:04	ADM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

MW-302-102119 L1152340-02 GW

Collected by Chris Deboer
Collected date/time 10/21/19 11:25
Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:11	10/24/19 22:11	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 04:26	10/23/19 04:26	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:00	10/26/19 13:00	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:39	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 04:46	10/31/19 04:46	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:42	10/23/19 13:42	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 07:24	10/29/19 07:24	ADM	Mt. Juliet, TN

6 Qc

7 Gl

8 Al

9 Sc

MW-304-102119 L1152340-03 GW

Collected by Chris Deboer
Collected date/time 10/21/19 12:50
Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:20	10/24/19 22:20	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 05:32	10/23/19 05:32	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:15	10/26/19 13:15	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:42	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 05:08	10/31/19 05:08	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 13:57	10/23/19 13:57	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 07:44	10/29/19 07:44	ADM	Mt. Juliet, TN

MW-303-102119 L1152340-04 GW

Collected by Chris Deboer
Collected date/time 10/21/19 13:15
Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:29	10/24/19 22:29	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 05:48	10/23/19 05:48	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:28	10/26/19 13:28	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:46	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 05:29	10/31/19 05:29	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 14:00	10/23/19 14:00	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 08:05	10/29/19 08:05	ADM	Mt. Juliet, TN

R-MW5-102119 L1152340-05 GW

Collected by Chris Deboer
Collected date/time 10/21/19 10:25
Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:47	10/24/19 22:47	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 06:05	10/23/19 06:05	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 13:45	10/26/19 13:45	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:49	JPD	Mt. Juliet, TN



R-MW5-102119 L1152340-05 GW

Collected by Chris Deboer
 Collected date/time 10/21/19 10:25
 Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 05:51	10/31/19 05:51	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 14:04	10/23/19 14:04	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 08:25	10/29/19 08:25	ADM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

TRIP BLANK-102119 L1152340-06 GW

Collected by Chris Deboer
 Collected date/time 10/21/19 00:00
 Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/30/19 23:45	10/30/19 23:45	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 04:22	10/29/19 04:22	ADM	Mt. Juliet, TN

4 Cn

5 Sr

6 Qc

FMW-129-102119 L1152340-07 GW

Collected by Chris Deboer
 Collected date/time 10/21/19 12:25
 Received date/time 10/22/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 22:55	10/24/19 22:55	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367181	1	10/23/19 06:21	10/23/19 06:21	NJM	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370125	1	10/26/19 15:12	10/26/19 15:12	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368592	1	10/24/19 14:45	10/26/19 16:52	JPD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/03/19 00:18	11/03/19 00:18	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1367825	1	10/23/19 14:07	10/23/19 14:07	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 08:45	10/29/19 08:45	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	10	10/29/19 19:10	10/29/19 19:10	ADM	Mt. Juliet, TN

7 Gl

8 Al

9 Sc



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	129000		2710	20000	1	10/24/2019 22:03	WG1369144

Sample Narrative:

L1152340-01 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	14200		51.9	1000	1	10/23/2019 04:10	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 04:10	WG1367181
Sulfate	51900		77.4	5000	1	10/23/2019 04:10	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1100	<u>B</u>	102	1000	1	10/26/2019 12:44	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3830		15.0	100	1	10/26/2019 16:35	WG1368592
Manganese	504		0.250	5.00	1	10/26/2019 16:35	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	92.7	<u>B, J</u>	31.6	100	1	11/02/2019 23:56	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	96.4			78.0-120		11/02/2019 23:56	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	101		0.287	0.678	1	10/23/2019 13:40	WG1367825
Ethane	U		0.296	1.29	1	10/23/2019 13:40	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:40	WG1367825

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.23	<u>J, J4</u>	1.05	25.0	1	10/29/2019 07:04	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 07:04	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 07:04	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 07:04	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 07:04	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 07:04	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 07:04	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 07:04	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 07:04	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 07:04	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 07:04	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 07:04	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 07:04	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 10:05

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 07:04	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 07:04	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 07:04	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 07:04	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 07:04	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 07:04	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 07:04	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 07:04	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 07:04	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 07:04	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 07:04	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 07:04	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 07:04	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 07:04	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 07:04	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 07:04	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 07:04	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 07:04	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 07:04	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 07:04	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 07:04	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 07:04	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 07:04	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 07:04	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 07:04	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 07:04	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 07:04	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 07:04	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 07:04	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 07:04	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 07:04	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 07:04	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 07:04	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 07:04	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 07:04	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 07:04	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 07:04	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 07:04	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 07:04	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 07:04	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 07:04	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 07:04	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 07:04	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 07:04	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 07:04	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 07:04	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 07:04	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 07:04	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 07:04	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 07:04	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 07:04	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 07:04	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 07:04	WG1371177

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Cp

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Collected date/time: 10/21/19 10:05

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 07:04	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 07:04	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 07:04	WG1371177
<i>(S) Toluene-d8</i>	100			80.0-120		10/29/2019 07:04	WG1371177
<i>(S) 4-Bromofluorobenzene</i>	109			77.0-126		10/29/2019 07:04	WG1371177
<i>(S) 1,2-Dichloroethane-d4</i>	101			70.0-130		10/29/2019 07:04	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	311000		2710	20000	1	10/24/2019 22:11	WG1369144

Sample Narrative:

L1152340-02 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	20200		51.9	1000	1	10/23/2019 04:26	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 04:26	WG1367181
Sulfate	26800		77.4	5000	1	10/23/2019 04:26	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	8100		102	1000	1	10/26/2019 13:00	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2260		15.0	100	1	10/26/2019 16:39	WG1368592
Manganese	295		0.250	5.00	1	10/26/2019 16:39	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	98.5	<u>B</u>	31.6	100	1	10/31/2019 04:46	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	96.1			78.0-120		10/31/2019 04:46	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	129		0.287	0.678	1	10/23/2019 13:42	WG1367825
Ethane	3.74		0.296	1.29	1	10/23/2019 13:42	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:42	WG1367825

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.19	<u>J</u> <u>J4</u>	1.05	25.0	1	10/29/2019 07:24	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 07:24	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 07:24	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 07:24	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 07:24	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 07:24	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 07:24	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 07:24	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 07:24	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 07:24	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 07:24	WG1371177
Carbon disulfide	0.357	<u>J</u>	0.101	0.500	1	10/29/2019 07:24	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 07:24	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 11:25

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chlorobenzene	U		0.140	0.500	1	10/29/2019 07:24	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 07:24	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 07:24	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 07:24	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 07:24	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 07:24	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 07:24	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 07:24	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 07:24	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 07:24	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 07:24	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 07:24	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 07:24	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 07:24	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 07:24	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 07:24	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 07:24	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 07:24	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 07:24	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 07:24	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 07:24	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 07:24	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 07:24	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 07:24	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 07:24	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 07:24	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 07:24	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 07:24	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 07:24	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 07:24	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 07:24	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 07:24	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 07:24	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 07:24	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 07:24	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 07:24	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 07:24	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 07:24	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 07:24	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 07:24	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 07:24	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 07:24	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 07:24	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 07:24	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 07:24	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 07:24	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 07:24	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 07:24	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 07:24	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 07:24	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 07:24	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 07:24	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 07:24	WG1371177

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/21/19 11:25

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 07:24	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 07:24	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 07:24	WG1371177
<i>(S) Toluene-d8</i>	101			80.0-120		10/29/2019 07:24	WG1371177
<i>(S) 4-Bromofluorobenzene</i>	106			77.0-126		10/29/2019 07:24	WG1371177
<i>(S) 1,2-Dichloroethane-d4</i>	98.8			70.0-130		10/29/2019 07:24	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	153000		2710	20000	1	10/24/2019 22:20	WG1369144

Sample Narrative:

L1152340-03 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	12100		51.9	1000	1	10/23/2019 05:32	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 05:32	WG1367181
Sulfate	16200		77.4	5000	1	10/23/2019 05:32	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4240		102	1000	1	10/26/2019 13:15	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	5820		15.0	100	1	10/26/2019 16:42	WG1368592
Manganese	455		0.250	5.00	1	10/26/2019 16:42	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	97.9	<u>B</u>	31.6	100	1	10/31/2019 05:08	WG1371615
(S) <i>a,a,a</i> -Trifluorotoluene(FID)	95.9			78.0-120		10/31/2019 05:08	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	31.9		0.287	0.678	1	10/23/2019 13:57	WG1367825
Ethane	U		0.296	1.29	1	10/23/2019 13:57	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 13:57	WG1367825

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.66	<u>J</u> <u>J4</u>	1.05	25.0	1	10/29/2019 07:44	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 07:44	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 07:44	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 07:44	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 07:44	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 07:44	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 07:44	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 07:44	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 07:44	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 07:44	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 07:44	WG1371177
Carbon disulfide	0.290	<u>J</u>	0.101	0.500	1	10/29/2019 07:44	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 07:44	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 12:50

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 07:44	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 07:44	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 07:44	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 07:44	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 07:44	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 07:44	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 07:44	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 07:44	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 07:44	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 07:44	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 07:44	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 07:44	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 07:44	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 07:44	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 07:44	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 07:44	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 07:44	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 07:44	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 07:44	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 07:44	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 07:44	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 07:44	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 07:44	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 07:44	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 07:44	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 07:44	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 07:44	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 07:44	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 07:44	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 07:44	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 07:44	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 07:44	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 07:44	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 07:44	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 07:44	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 07:44	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 07:44	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 07:44	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 07:44	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 07:44	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 07:44	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 07:44	WG1371177
Toluene	0.728		0.412	0.500	1	10/29/2019 07:44	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 07:44	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 07:44	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 07:44	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 07:44	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 07:44	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 07:44	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 07:44	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 07:44	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 07:44	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 07:44	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 12:50

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 07:44	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 07:44	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 07:44	WG1371177
(S) Toluene-d8	102			80.0-120		10/29/2019 07:44	WG1371177
(S) 4-Bromofluorobenzene	111			77.0-126		10/29/2019 07:44	WG1371177
(S) 1,2-Dichloroethane-d4	99.7			70.0-130		10/29/2019 07:44	WG1371177

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	144000		2710	20000	1	10/24/2019 22:29	WG1369144

Sample Narrative:

L1152340-04 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	15200		51.9	1000	1	10/23/2019 05:48	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 05:48	WG1367181
Sulfate	62200		77.4	5000	1	10/23/2019 05:48	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4760		102	1000	1	10/26/2019 13:28	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3060		15.0	100	1	10/26/2019 16:46	WG1368592
Manganese	289		0.250	5.00	1	10/26/2019 16:46	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	99.6	<u>B</u>	31.6	100	1	10/31/2019 05:29	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	96.2			78.0-120		10/31/2019 05:29	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	95.7		0.287	0.678	1	10/23/2019 14:00	WG1367825
Ethane	6.17		0.296	1.29	1	10/23/2019 14:00	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 14:00	WG1367825

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.03	<u>J</u> <u>J4</u>	1.05	25.0	1	10/29/2019 08:05	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 08:05	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 08:05	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 08:05	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 08:05	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 08:05	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 08:05	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 08:05	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 08:05	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 08:05	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 08:05	WG1371177
Carbon disulfide	0.224	<u>J</u>	0.101	0.500	1	10/29/2019 08:05	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 08:05	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 13:15

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 08:05	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 08:05	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 08:05	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 08:05	WG1371177
Chloromethane	U	<u>JO</u>	0.153	1.25	1	10/29/2019 08:05	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 08:05	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 08:05	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 08:05	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 08:05	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 08:05	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 08:05	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 08:05	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 08:05	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 08:05	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 08:05	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 08:05	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 08:05	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 08:05	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 08:05	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 08:05	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 08:05	WG1371177
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	10/29/2019 08:05	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 08:05	WG1371177
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	10/29/2019 08:05	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 08:05	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 08:05	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 08:05	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 08:05	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 08:05	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 08:05	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 08:05	WG1371177
2-Butanone (MEK)	1.48	<u>JJO</u>	1.28	5.00	1	10/29/2019 08:05	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 08:05	WG1371177
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	10/29/2019 08:05	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 08:05	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 08:05	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 08:05	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 08:05	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 08:05	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 08:05	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 08:05	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 08:05	WG1371177
Toluene	1.63		0.412	0.500	1	10/29/2019 08:05	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 08:05	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 08:05	WG1371177
1,1,1-Trichloroethane	U	<u>J4</u>	0.0940	0.500	1	10/29/2019 08:05	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 08:05	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 08:05	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 08:05	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 08:05	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 08:05	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 08:05	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 08:05	WG1371177

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/21/19 13:15

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 08:05	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 08:05	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 08:05	WG1371177
<i>(S) Toluene-d8</i>	99.7			80.0-120		10/29/2019 08:05	WG1371177
<i>(S) 4-Bromofluorobenzene</i>	104			77.0-126		10/29/2019 08:05	WG1371177
<i>(S) 1,2-Dichloroethane-d4</i>	98.2			70.0-130		10/29/2019 08:05	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	112000		2710	20000	1	10/24/2019 22:47	WG1369144

Sample Narrative:

L1152340-05 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	41400		51.9	1000	1	10/23/2019 06:05	WG1367181
Nitrate	U		22.7	100	1	10/23/2019 06:05	WG1367181
Sulfate	18600		77.4	5000	1	10/23/2019 06:05	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4440		102	1000	1	10/26/2019 13:45	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3000		15.0	100	1	10/26/2019 16:49	WG1368592
Manganese	1200		0.250	5.00	1	10/26/2019 16:49	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

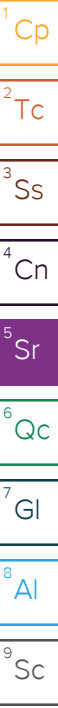
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	95.3	<u>B</u>	31.6	100	1	10/31/2019 05:51	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	96.2			78.0-120		10/31/2019 05:51	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	194		0.287	0.678	1	10/23/2019 14:04	WG1367825
Ethane	U		0.296	1.29	1	10/23/2019 14:04	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 14:04	WG1367825

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>J4</u>	1.05	25.0	1	10/29/2019 08:25	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 08:25	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 08:25	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 08:25	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 08:25	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 08:25	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 08:25	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 08:25	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 08:25	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 08:25	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 08:25	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 08:25	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 08:25	WG1371177





Collected date/time: 10/21/19 10:25

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 08:25	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 08:25	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 08:25	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 08:25	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 08:25	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 08:25	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 08:25	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 08:25	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 08:25	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 08:25	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 08:25	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 08:25	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 08:25	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 08:25	WG1371177
cis-1,2-Dichloroethene	0.302	J	0.0933	0.500	1	10/29/2019 08:25	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 08:25	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 08:25	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 08:25	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 08:25	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 08:25	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 08:25	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 08:25	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 08:25	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 08:25	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 08:25	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 08:25	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 08:25	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 08:25	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 08:25	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 08:25	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 08:25	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 08:25	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 08:25	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 08:25	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 08:25	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 08:25	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 08:25	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 08:25	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 08:25	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 08:25	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 08:25	WG1371177
Tetrachloroethene	0.523		0.199	0.500	1	10/29/2019 08:25	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 08:25	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 08:25	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 08:25	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 08:25	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 08:25	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 08:25	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 08:25	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 08:25	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 08:25	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 08:25	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 08:25	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 10:25

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 08:25	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 08:25	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 08:25	WG1371177
<i>(S) Toluene-d8</i>	100			80.0-120		10/29/2019 08:25	WG1371177
<i>(S) 4-Bromofluorobenzene</i>	105			77.0-126		10/29/2019 08:25	WG1371177
<i>(S) 1,2-Dichloroethane-d4</i>	97.9			70.0-130		10/29/2019 08:25	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 00:00

L1152340

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	97.4	<u>B</u> <u>J</u>	31.6	100	1	10/30/2019 23:45	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	97.5			78.0-120		10/30/2019 23:45	WG1371615

1 Cp

2 Tc

3 Ss

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Acetone	U	<u>J4</u>	1.05	25.0	1	10/29/2019 04:22	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 04:22	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 04:22	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 04:22	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 04:22	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 04:22	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 04:22	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 04:22	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 04:22	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 04:22	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 04:22	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 04:22	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 04:22	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 04:22	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 04:22	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 04:22	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 04:22	WG1371177
Chloromethane	U	<u>JO</u>	0.153	1.25	1	10/29/2019 04:22	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 04:22	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 04:22	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 04:22	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 04:22	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 04:22	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 04:22	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 04:22	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 04:22	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 04:22	WG1371177
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/29/2019 04:22	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 04:22	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 04:22	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 04:22	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 04:22	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 04:22	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 04:22	WG1371177
trans-1,4-Dichloro-2-butene	U	<u>JO</u>	0.257	5.00	1	10/29/2019 04:22	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 04:22	WG1371177
Di-isopropyl ether	U	<u>JO</u>	0.0924	0.500	1	10/29/2019 04:22	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 04:22	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 04:22	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 04:22	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 04:22	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 04:22	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 04:22	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 04:22	WG1371177
2-Butanone (MEK)	U	<u>JO</u>	1.28	5.00	1	10/29/2019 04:22	WG1371177

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 00:00

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Methylene Chloride	U		1.07	2.50	1	10/29/2019 04:22	WG1371177
4-Methyl-2-pentanone (MIBK)	U	<u>JO</u>	0.823	5.00	1	10/29/2019 04:22	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 04:22	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 04:22	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 04:22	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 04:22	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 04:22	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 04:22	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 04:22	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 04:22	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 04:22	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 04:22	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 04:22	WG1371177
1,1,1-Trichloroethane	U	<u>J4</u>	0.0940	0.500	1	10/29/2019 04:22	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 04:22	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 04:22	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 04:22	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 04:22	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 04:22	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 04:22	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 04:22	WG1371177
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 04:22	WG1371177
Vinyl chloride	U		0.118	0.500	1	10/29/2019 04:22	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 04:22	WG1371177
(S) Toluene-d8	97.5			80.0-120		10/29/2019 04:22	WG1371177
(S) 4-Bromofluorobenzene	106			77.0-126		10/29/2019 04:22	WG1371177
(S) 1,2-Dichloroethane-d4	97.1			70.0-130		10/29/2019 04:22	WG1371177

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	209000		2710	20000	1	10/24/2019 22:55	WG1369144

Sample Narrative:

L1152340-07 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	23600		51.9	1000	1	10/23/2019 06:21	WG1367181
Nitrate	639		22.7	100	1	10/23/2019 06:21	WG1367181
Sulfate	82400		77.4	5000	1	10/23/2019 06:21	WG1367181

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	1520	<u>B</u>	102	1000	1	10/26/2019 15:12	WG1370125

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	18900		15.0	100	1	10/26/2019 16:52	WG1368592
Manganese	648		0.250	5.00	1	10/26/2019 16:52	WG1368592

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	141	<u>B</u>	31.6	100	1	11/03/2019 00:18	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	96.5			78.0-120		11/03/2019 00:18	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	53.5		0.287	0.678	1	10/23/2019 14:07	WG1367825
Ethane	5.31		0.296	1.29	1	10/23/2019 14:07	WG1367825
Ethene	U		0.422	1.27	1	10/23/2019 14:07	WG1367825

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	U	<u>J4</u>	1.05	25.0	1	10/29/2019 08:45	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 08:45	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 08:45	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 08:45	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 08:45	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 08:45	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 08:45	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 08:45	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 08:45	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 08:45	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 08:45	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 08:45	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 08:45	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/21/19 12:25

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 08:45	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 08:45	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 08:45	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 08:45	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 08:45	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 08:45	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 08:45	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 08:45	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 08:45	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 08:45	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 08:45	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 08:45	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 08:45	WG1371177
1,1-Dichloroethene	1.62		0.188	0.500	1	10/29/2019 08:45	WG1371177
cis-1,2-Dichloroethene	350		0.933	5.00	10	10/29/2019 19:10	WG1371769
trans-1,2-Dichloroethene	1.61		0.152	0.500	1	10/29/2019 08:45	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 08:45	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 08:45	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 08:45	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 08:45	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 08:45	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 08:45	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 08:45	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 08:45	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 08:45	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 08:45	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 08:45	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 08:45	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 08:45	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 08:45	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 08:45	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 08:45	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 08:45	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 08:45	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 08:45	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 08:45	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 08:45	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 08:45	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 08:45	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 08:45	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 08:45	WG1371177
Tetrachloroethene	114		0.199	0.500	1	10/29/2019 08:45	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 08:45	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 08:45	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 08:45	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 08:45	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 08:45	WG1371177
Trichloroethene	198		0.153	0.500	1	10/29/2019 08:45	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 08:45	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 08:45	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 08:45	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 08:45	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 08:45	WG1371177

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/21/19 12:25

L1152340

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 08:45	WG1371177
Vinyl chloride	0.259	<u>J</u>	0.118	0.500	1	10/29/2019 08:45	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 08:45	WG1371177
(S) Toluene-d8	98.7			80.0-120		10/29/2019 08:45	WG1371177
(S) Toluene-d8	105			80.0-120		10/29/2019 19:10	WG1371769
(S) 4-Bromofluorobenzene	108			77.0-126		10/29/2019 08:45	WG1371177
(S) 4-Bromofluorobenzene	99.1			77.0-126		10/29/2019 19:10	WG1371769
(S) 1,2-Dichloroethane-d4	98.1			70.0-130		10/29/2019 08:45	WG1371177
(S) 1,2-Dichloroethane-d4	102			70.0-130		10/29/2019 19:10	WG1371769

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Method Blank (MB)

(MB) R3464935-1 10/24/19 21:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	U	ug/l	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1152333-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-01 10/24/19 21:24 • (DUP) R3464935-2 10/24/19 21:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	589000	589000	1	0.0563	%	20

Sample Narrative:

OS: Endpoint pH 4.5

DUP: Endpoint pH 4.5

L1152791-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152791-01 10/24/19 23:11 • (DUP) R3464935-4 10/24/19 23:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	519000	520000	1	0.243	%	20

Sample Narrative:

OS: Endpoint pH 4.5 headspace

DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3464935-3 10/24/19 22:38

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	98500	98.5	85.0-115	%

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3463970-1 10/22/19 09:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1152322-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152322-01 10/22/19 14:34 • (DUP) R3463970-9 10/23/19 03:53

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	6100	6720	1	9.68		15
Nitrate	210	233	1	10.7		15
Sulfate	89600	0.000	1	200	J3	15

L1152340-02 Original Sample (OS) • Duplicate (DUP)

(OS) L1152340-02 10/23/19 04:26 • (DUP) R3463970-10 10/23/19 05:15

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Chloride	20200	19800	1	1.66		15
Nitrate	U	0.000	1	0.000		15
Sulfate	26800	26800	1	0.133		15

Laboratory Control Sample (LCS)

(LCS) R3463970-2 10/22/19 09:58

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
	ug/l	ug/l	%	%	
Chloride	40000	37700	94.3	80.0-120	
Nitrate	8000	7790	97.4	80.0-120	
Sulfate	40000	37800	94.4	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1152324-03 Original Sample (OS) • Matrix Spike (MS)

(OS) L1152324-03 10/23/19 03:21 • (MS) R3463970-8 10/23/19 03:37

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Chloride	50000	1960	53800	104	1	80.0-120	
Nitrate	5000	110	5070	99.1	1	80.0-120	
Sulfate	50000	ND	55900	104	1	80.0-120	

L1152346-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152346-01 10/23/19 06:37 • (MS) R3463970-11 10/23/19 06:54 • (MSD) R3463970-12 10/23/19 07:10

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	2070	48300	48100	92.4	92.1	1	80.0-120			0.294	15
Nitrate	5000	ND	4600	4730	90.7	93.4	1	80.0-120			2.84	15
Sulfate	50000	29900	75600	75300	91.4	90.9	1	80.0-120			0.297	15

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3466124-1	10/26/19 10:58	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	304		↓	102	1000

L1152340-05 Original Sample (OS) • Duplicate (DUP)

(OS) L1152340-05	10/26/19 13:45 • (DUP) R3466124-3	10/26/19 14:00			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	4440	4380	1	1.36	20

L1152670-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1152670-03	10/26/19 16:56 • (DUP) R3466124-6	10/26/19 17:09			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	964	990	1	2.65	↓ 20

Laboratory Control Sample (LCS)

(LCS) R3466124-2	10/26/19 11:28				
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>	
Analyte	ug/l	ug/l	%	%	
TOC	75000	72500	96.7	85.0-115	

L1152412-05 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152412-05	10/26/19 15:27 • (MS) R3466124-4	10/26/19 15:47 • (MSD) R3466124-5	10/26/19 16:03		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	2760	52200	50600	98.9
					95.7
					1
					80.0-120
					3.15
					20

L1152670-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152670-06	10/26/19 18:52 • (MS) R3466124-7	10/26/19 19:09 • (MSD) R3466124-8	10/26/19 19:29		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	1110	48600	50000	94.9
					97.7
					1
					80.0-120
					2.86
					20

1 Cp
2 Tc
3 Ss
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3465394-1	10/26/19 15:18	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
Iron	U			15.0	100
Manganese	0.346	J		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3465394-2	10/26/19 15:21	(LCSD) R3465394-3	10/26/19 15:25	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Iron	5000	5100	4990	5000	5100	4990	102	99.9	80.0-120	2.20		20	20
Manganese	50.0	51.5	50.9	50.0	51.5	50.9	103	102	80.0-120	1.15		20	20

L1152302-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152302-01	10/26/19 15:28	(MS) R3465394-5	10/26/19 15:35	(MSD) R3465394-6	10/26/19 15:38	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits	
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%	%
Iron	5000	158	5230	4990	101	5000	158	5230	4990	101	96.6	1	75.0-125			4.76	20	
Manganese	50.0	5.28	56.9	54.1	103	50.0	5.28	56.9	54.1	103	97.6	1	75.0-125			5.01	20	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1152340-02.03.04.05.06](#)

Method Blank (MB)

(MB) R3467099-2 10/30/19 23:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	103		316	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	96.1			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3467099-1 10/30/19 22:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5290	96.2	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1152340-01.07](#)

Method Blank (MB)

(MB) R3467812-2 11/02/19 22:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	97.6	J	31.6	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	96.1			78.0-120

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	97.6	J	31.6	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	96.1			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3467812-1 11/02/19 20:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1152340-01.02.03.04.05.07](#)

Method Blank (MB)

(MB) R3464142-1 10/23/19 11:04

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1152333-03 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-03 10/23/19 13:15 • (DUP) R3464142-2 10/23/19 13:36

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	45.6	42.6	1	6.80		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1152347-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152347-01 10/23/19 14:09 • (DUP) R3464142-3 10/23/19 14:25

Analyte	Original Result ug/l	DUP Result ug/l	Dilution	DUP RPD %	DUP Qualifier	DUP RPD Limits %
Methane	1810	1930	1	6.42		20
Ethane	ND	0.000	1	0.000		20
Ethene	ND	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3464142-4 10/23/19 14:27 • (LCSD) R3464142-5 10/23/19 14:34

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Methane	67.8	69.4	71.2	102	105	85.0-115			2.56	20
Ethane	129	125	127	96.9	98.4	85.0-115			1.59	20
Ethene	127	131	133	103	105	85.0-115			1.52	20



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Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

Public Review Draft

1 Cp
2 Tc
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4 Cn
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6 Qc
7 Gl
8 Al
9 Sc

ACCOUNT:

PES Environmental, Inc.- WA

PROJECT:

1413.00102.501E

SDG:

L1152340

DATE/TIME:

11/04/19 09:57

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Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	97.6			80.0-120
(S) 4-Bromofluorobenzene	107			77.0-126
(S) 1,2-Dichloroethane-d4	103			70.0-130

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Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	91.7	73.4	19.0-160	<u>J4</u>
Acrylonitrile	125	90.2	72.2	55.0-149	<u>J4</u>
Benzene	25.0	27.6	110	70.0-123	
Bromobenzene	25.0	23.0	92.0	73.0-121	
Bromodichloromethane	25.0	30.2	121	75.0-120	<u>J4</u>
Bromochloromethane	25.0	29.1	116	76.0-122	
Bromoform	25.0	22.1	88.4	68.0-132	
Bromomethane	25.0	25.1	100	10.0-160	
n-Butylbenzene	25.0	26.1	104	73.0-125	
sec-Butylbenzene	25.0	24.5	98.0	75.0-125	
tert-Butylbenzene	25.0	25.3	101	76.0-124	
Carbon disulfide	25.0	24.5	98.0	61.0-128	
Carbon tetrachloride	25.0	30.0	120	68.0-126	
Chlorobenzene	25.0	24.6	98.4	80.0-121	
Chlorodibromomethane	25.0	26.6	106	77.0-125	
Chloroethane	25.0	23.2	92.8	47.0-150	
Chloroform	25.0	27.3	109	73.0-120	
Chloromethane	25.0	16.4	65.6	41.0-142	
2-Chlorotoluene	25.0	25.1	100	76.0-123	
4-Chlorotoluene	25.0	25.2	101	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.8	99.2	58.0-134	
1,2-Dibromoethane	25.0	23.3	93.2	80.0-122	
Dibromomethane	25.0	29.6	118	80.0-120	
1,2-Dichlorobenzene	25.0	23.2	92.8	79.0-121	
1,3-Dichlorobenzene	25.0	23.6	94.4	79.0-120	
1,4-Dichlorobenzene	25.0	22.6	90.4	79.0-120	
Dichlorodifluoromethane	25.0	27.2	109	51.0-149	
1,1-Dichloroethane	25.0	24.5	98.0	70.0-126	
1,2-Dichloroethane	25.0	26.6	106	70.0-128	
1,1-Dichloroethene	25.0	28.4	114	71.0-124	
cis-1,2-Dichloroethene	25.0	26.6	106	73.0-120	
trans-1,2-Dichloroethene	25.0	27.7	111	73.0-120	
1,2-Dichloropropane	25.0	24.0	96.0	77.0-125	
1,1-Dichloropropene	25.0	29.6	118	74.0-126	
1,3-Dichloropropene	25.0	24.7	98.8	80.0-120	
cis-1,3-Dichloropropene	25.0	29.6	118	80.0-123	
trans-1,3-Dichloropropene	25.0	26.7	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.0	68.0	33.0-144	
2,2-Dichloropropane	25.0	30.5	122	58.0-130	
Di-isopropyl ether	25.0	17.5	70.0	58.0-138	

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Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	24.6	98.4	79.0-123	
Hexachloro-1,3-butadiene	25.0	26.8	107	54.0-138	
2-Hexanone	125	97.6	78.1	67.0-149	
n-Hexane	25.0	22.1	88.4	57.0-133	
Iodomethane	125	152	122	33.0-147	
Isopropylbenzene	25.0	25.1	100	76.0-127	
p-Isopropyltoluene	25.0	25.3	101	76.0-125	
2-Butanone (MEK)	125	90.9	72.7	44.0-160	
Methylene Chloride	25.0	22.8	91.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	88.6	70.9	68.0-142	
Methyl tert-butyl ether	25.0	25.7	103	68.0-125	
Naphthalene	25.0	24.4	97.6	54.0-135	
n-Propylbenzene	25.0	25.9	104	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	24.8	99.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	21.8	87.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	26.2	105	69.0-132	
Tetrachloroethene	25.0	27.3	109	72.0-132	
Toluene	25.0	26.3	105	79.0-120	
1,2,3-Trichlorobenzene	25.0	26.2	105	50.0-138	
1,2,4-Trichlorobenzene	25.0	25.6	102	57.0-137	
1,1,1-Trichloroethane	25.0	31.7	127	73.0-124	J4
1,1,2-Trichloroethane	25.0	26.3	105	80.0-120	
Trichloroethene	25.0	29.1	116	78.0-124	
Trichlorofluoromethane	25.0	29.1	116	59.0-147	
1,2,3-Trichloropropane	25.0	24.5	98.0	73.0-130	
1,2,4-Trimethylbenzene	25.0	24.7	98.8	76.0-121	
1,2,3-Trimethylbenzene	25.0	23.8	95.2	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.7	98.8	76.0-122	
Vinyl acetate	125	88.5	70.8	11.0-160	
Vinyl chloride	25.0	21.0	84.0	67.0-131	
Xylenes, Total	75.0	72.0	96.0	79.0-123	
(S) Toluene-d8			99.9	80.0-120	
(S) 4-Bromofluorobenzene			105	77.0-126	
(S) 1,2-Dichloroethane-d4			98.5	70.0-130	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1152340-07](#)

Method Blank (MB)

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
(M) R3467086-3 10/29/19 18:32				
cis-1,2-Dichloroethene	0.167	J	0.0933	0.500
(S) Toluene-d8	104			80.0-120
(S) 4-Bromofluorobenzene	97.9			77.0-126
(S) 1,2-Dichloroethane-d4	97.1			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

Analyte	LCS		LCSD		LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
	Spike Amount	ug/l	LCS Result	ug/l							
(S) 1,2-Dichloroethene	5.00	4.96	5.27	99.2	105	73.0-120			6.06	20	
(S) Toluene-d8				104	104	80.0-120					
(S) 4-Bromofluorobenzene				99.8	98.6	77.0-126					
(S) 1,2-Dichloroethane-d4				98.8	96.4	70.0-130					

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
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Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J3	The associated batch QC was outside the established quality control range for precision.
J4	The associated batch QC was outside the established quality control range for accuracy.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

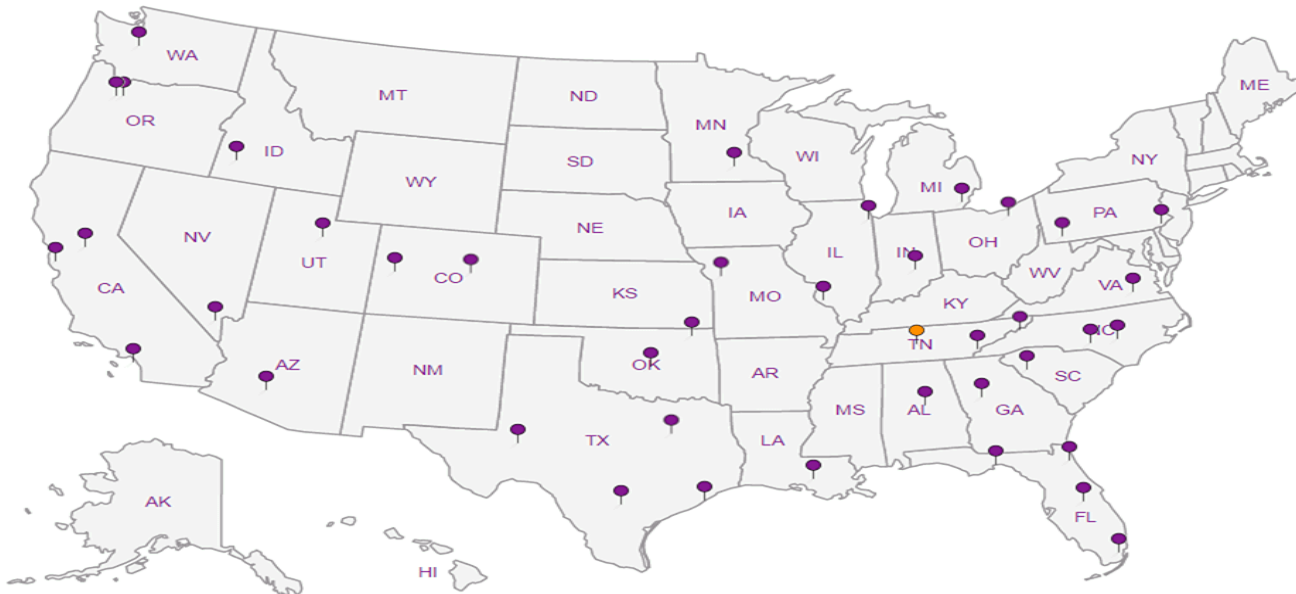
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Report to: Bill Haldeman/Brian O'neal
 Email To: on file

Project Description: American Liver
 City/State: Seattle, WA

Client Project #: 1413.001.02.501E
 Lab Project #: PESENVSWA-ALP

Phone: on file
 Fax: P.O. #

Collected by (print): Chris DeBen
 Site/Facility ID #

Collected by (signature): Chris DeBen
 Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Quote #
-----------	-----------	----------	-------	------	------	--------------	---------

MW-150-102119	Comb	GW	110'	10/21/19	1005	12	
MW-302-102119		GW	60'		1135	12	
MW-304-102119		GW	110'		1250	12	
MW-305-102119		GW	77'		1315	12	
R-MW5-102119		GW	21'		1025	12	
TSR Blank-102119		GW	-	10/21/19	-	1	
F-MW-129-102119		GW	80'	10/21/19	1225	12	

Remarks: ****NO3,SO4,Chloride**48 hour hold**

Matrix: SS - Soil AIR - Air F - Filter GW - Groundwater B - Blossay WW - Wastewater

DW - Drinking Water
 OT - Other

Tracking # 1275 8600 9716
 Trip Blank Received: Yes/No (HCL/Mech)

Temp: 47.2-4.50's
 Bottles Received: 62
 Hold: pH, 150 ml, 2

Sample Receipt Checklist:
 COC Seal Present/Intact: NP Y N
 COC Signed/Accurate: Y N
 Bottles arrive intact: Y N
 Correct bottles used: Y N
 Sufficient volume sent: Y N
 If Applicable: Y N
 VOA zero Headspace: Y N
 PPE/Label Correct/Checked: Y N
 RAD/SCHEM: <0.5 ml/hr

12005 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

Pace Analytical
 National Center for Testing & Innovation

L# 1152340
 E151

Acctnum: PESENVSWA
 Template:
 Prelogin:
 TSR: Brian Ford
 PB:

Shipped Via: _____
 Remarks: _____
 Sample # (lab only): _____

Kelsey Stephenson



Login #: L1152340	Client:PESENVSWA	Date:10/22	Evaluated by:Kelsey S
-------------------	------------------	------------	-----------------------

Non-Conformance (check applicable items)

Sample Integrity	Chain of Custody Clarification	
Parameter(s) past holding time	Login Clarification Needed	If Broken Container:
Temperature not in range	Chain of custody is incomplete	Insufficient packing material around container
Improper container type	Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range.	Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courier)
Insufficient sample volume.	Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.	Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.	Trip Blank not received.	If no Chain of Custody:
Broken container	Client did not "X" analysis.	Received by:
Broken container:	Chain of Custody is missing	Date/Time:
Sufficient sample remains		Temp./Cont. Rec./pH:
		Carrier:
		Tracking#

Login Comments: TOC for MW-303-10219 received with a pH of 7

Client informed by:	Call	Email x	Voice Mail	Date:10/22/19	Time:1115
TSR Initials:bjf	Client Contact: PMs				

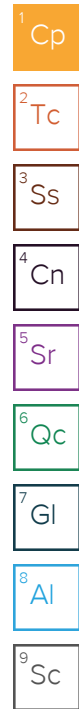
Login Instructions:

Proceed and qualify as needed.



ANALYTICAL REPORT

November 04, 2019



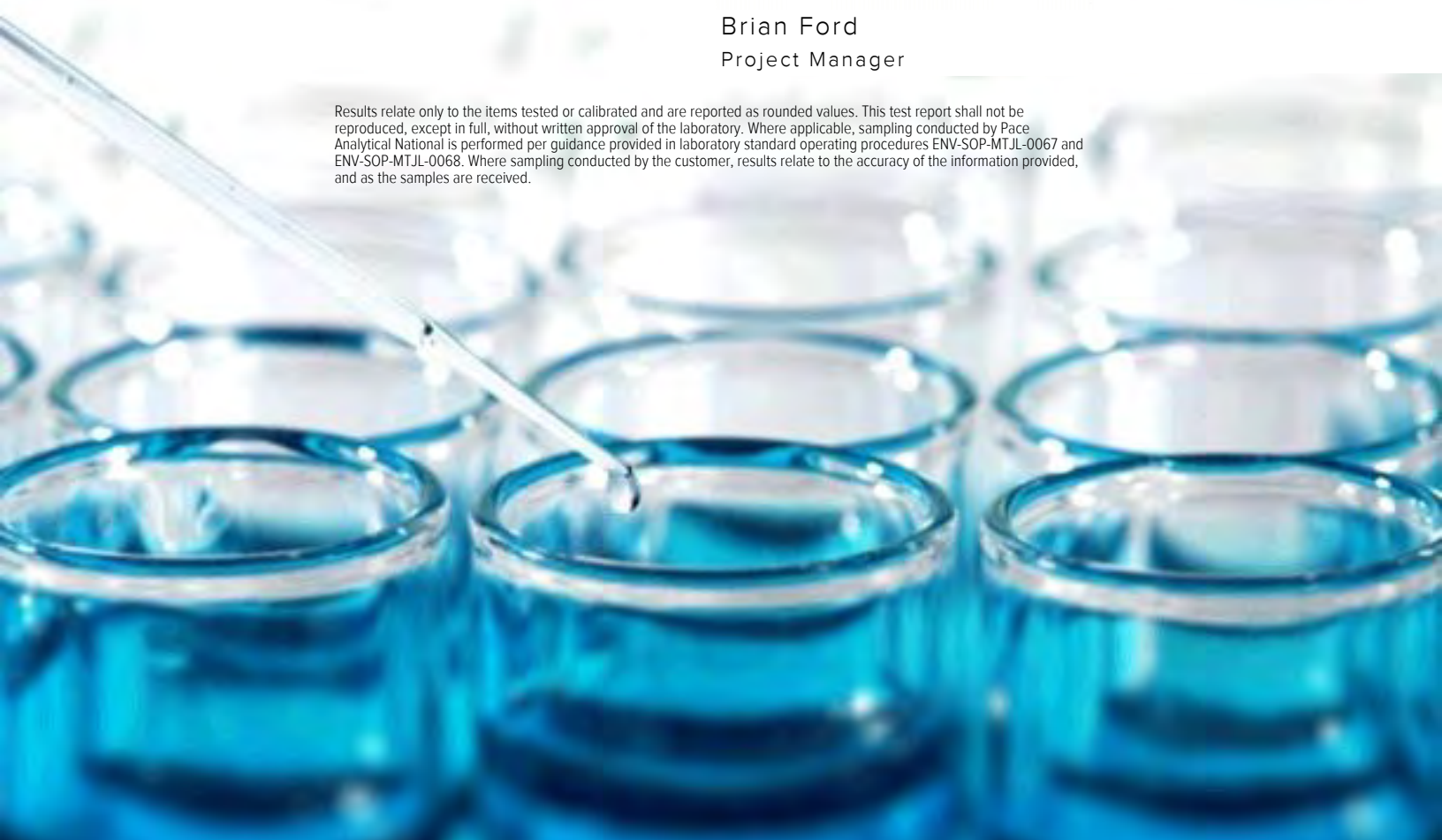
PES Environmental, Inc.- WA

Sample Delivery Group: L1152823
 Samples Received: 10/23/2019
 Project Number: 1413.001.02.501E
 Description: American Linen
 Site: AMERICAN LINEN
 Report To: Brian O'Neal/Bill Haldeman
 1215 Fourth Ave., Suite 1350
 Seattle, WA 98161

Entire Report Reviewed By:

Brian Ford
Project Manager

Results relate only to the items tested or calibrated and are reported as rounded values. This test report shall not be reproduced, except in full, without written approval of the laboratory. Where applicable, sampling conducted by Pace Analytical National is performed per guidance provided in laboratory standard operating procedures ENV-SOP-MTJL-0067 and ENV-SOP-MTJL-0068. Where sampling conducted by the customer, results relate to the accuracy of the information provided, and as the samples are received.





Cp: Cover Page	1	1 Cp
Tc: Table of Contents	2	
Ss: Sample Summary	3	2 Tc
Cn: Case Narrative	5	
Sr: Sample Results	6	3 Ss
MW-918-102219 L1152823-01	6	
MW-116-102219 L1152823-02	9	4 Cn
MW-113-102219 L1152823-03	10	5 Sr
MW-115-102219 L1152823-04	13	
BB-8-102219 L1152823-05	16	6 Qc
MW-105-102219 L1152823-06	19	
MW-919-102219 L1152823-07	22	7 Gl
EQ-102219 L1152823-08	25	8 Al
TRIP-102219 L1152823-09	28	
Qc: Quality Control Summary	29	9 Sc
Wet Chemistry by Method 2320 B-2011	29	
Wet Chemistry by Method 9056A	30	
Wet Chemistry by Method 9060A	32	
Metals (ICPMS) by Method 6020B	33	
Volatile Organic Compounds (GC) by Method NWTPHGX	34	
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Gl: Glossary of Terms	46	
Al: Accreditations & Locations	47	
Sc: Sample Chain of Custody	48	



				Collected by	Collected date/time	Received date/time
				BLH/HRC	10/22/19 09:30	10/23/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:27	10/24/19 23:27	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 18:44	10/23/19 18:44	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 19:05	10/26/19 19:05	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 16:34	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/03/19 00:40	11/03/19 00:40	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:45	10/24/19 11:45	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 09:06	10/29/19 09:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	5	10/29/19 19:29	10/29/19 19:29	ADM	Mt. Juliet, TN

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

				Collected by	Collected date/time	Received date/time
				BLH/HRC	10/22/19 10:05	10/23/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:34	10/24/19 23:34	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 19:17	10/23/19 19:17	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 19:30	10/26/19 19:30	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:09	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:45	LAT	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
				BLH/HRC	10/22/19 10:45	10/23/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:42	10/24/19 23:42	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 19:33	10/23/19 19:33	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 19:57	10/26/19 19:57	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:12	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:48	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:49	10/24/19 11:49	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 09:26	10/29/19 09:26	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	10	10/29/19 19:48	10/29/19 19:48	ADM	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
				BLH/HRC	10/22/19 11:05	10/23/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:49	10/24/19 23:49	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 20:39	10/23/19 20:39	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 20:20	10/26/19 20:20	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:15	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:51	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:51	10/24/19 11:51	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 09:46	10/29/19 09:46	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	1	10/29/19 20:07	10/29/19 20:07	ADM	Mt. Juliet, TN

				Collected by	Collected date/time	Received date/time
				BLH/HRC	10/22/19 12:50	10/23/19 08:45
Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/24/19 23:57	10/24/19 23:57	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 20:55	10/23/19 20:55	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 23:06	10/26/19 23:06	VRP	Mt. Juliet, TN



BB-8-102219 L1152823-05 GW

Collected by BLH/HRC
Collected date/time 10/22/19 12:50
Received date/time 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:19	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1373020	1	11/03/19 01:01	11/03/19 01:01	BMB	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:54	10/24/19 11:54	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 10:06	10/29/19 10:06	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	5	10/29/19 20:26	10/29/19 20:26	ADM	Mt. Juliet, TN

1 Cp

2 Tc

3 Ss

4 Cn

MW-105-102219 L1152823-06 GW

Collected by BLH/HRC
Collected date/time 10/22/19 13:00
Received date/time 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/25/19 00:13	10/25/19 00:13	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 21:12	10/23/19 21:12	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 23:27	10/26/19 23:27	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:22	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:55	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 08:01	10/31/19 08:01	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:56	10/24/19 11:56	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371177	1	10/29/19 10:27	10/29/19 10:27	ADM	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1371769	1	10/29/19 20:45	10/29/19 20:45	ADM	Mt. Juliet, TN

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

MW-919-102219 L1152823-07 GW

Collected by BLH/HRC
Collected date/time 10/22/19 14:00
Received date/time 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/25/19 00:20	10/25/19 00:20	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 21:28	10/23/19 21:28	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/26/19 23:44	10/26/19 23:44	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:25	LD	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	5	10/25/19 10:19	10/29/19 02:58	LAT	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 08:23	10/31/19 08:23	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 11:58	10/24/19 11:58	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1373274	1	10/31/19 21:50	10/31/19 21:50	JCP	Mt. Juliet, TN

EQ-102219 L1152823-08 GW

Collected by BLH/HRC
Collected date/time 10/22/19 15:00
Received date/time 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Wet Chemistry by Method 2320 B-2011	WG1369144	1	10/25/19 00:29	10/25/19 00:29	LEB	Mt. Juliet, TN
Wet Chemistry by Method 9056A	WG1367978	1	10/23/19 21:44	10/23/19 21:44	LDC	Mt. Juliet, TN
Wet Chemistry by Method 9060A	WG1370126	1	10/27/19 00:02	10/27/19 00:02	VRP	Mt. Juliet, TN
Metals (ICPMS) by Method 6020B	WG1368595	1	10/25/19 10:19	10/28/19 17:29	LD	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 08:44	10/31/19 08:44	JAH	Mt. Juliet, TN
Volatile Organic Compounds (GC) by Method RSK175	WG1368615	1	10/24/19 12:52	10/24/19 12:52	DAH	Mt. Juliet, TN
Volatile Organic Compounds (GC/MS) by Method 8260C	WG1373274	1	10/31/19 22:10	10/31/19 22:10	JCP	Mt. Juliet, TN

TRIP-102219 L1152823-09 GW

Collected by BLH/HRC
Collected date/time 10/22/19 15:30
Received date/time 10/23/19 08:45

Method	Batch	Dilution	Preparation date/time	Analysis date/time	Analyst	Location
Volatile Organic Compounds (GC) by Method NWTPHGX	WG1371615	1	10/31/19 00:07	10/31/19 00:07	JAH	Mt. Juliet, TN



All sample aliquots were received at the correct temperature, in the proper containers, with the appropriate preservatives, and within method specified holding times, unless qualified or notated within the report. Where applicable, all MDL (LOD) and RDL (LOQ) values reported for environmental samples have been corrected for the dilution factor used in the analysis. All Method and Batch Quality Control are within established criteria except where addressed in this case narrative, a non-conformance form or properly qualified within the sample results. By my digital signature below, I affirm to the best of my knowledge, all problems/anomalies observed by the laboratory as having the potential to affect the quality of the data have been identified by the laboratory, and no information or data have been knowingly withheld that would affect the quality of the data.

Brian Ford
Project Manager

Project Narrative

L1152823-09, TRIP-102219, VOCs by 8260: Vial accidentally broken prior to analysis. VOC analysis not possible.

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	246000		2710	20000	1	10/24/2019 23:27	WG1369144

Sample Narrative:

L1152823-01 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10500		51.9	1000	1	10/23/2019 18:44	WG1367978
Nitrate	2170		22.7	100	1	10/23/2019 18:44	WG1367978
Sulfate	70000		77.4	5000	1	10/23/2019 18:44	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	4270	<u>B</u>	102	1000	1	10/26/2019 19:05	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	339		15.0	100	1	10/28/2019 16:34	WG1368595
Manganese	313		0.250	5.00	1	10/28/2019 16:34	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	174	<u>B</u>	31.6	100	1	11/03/2019 00:40	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	96.6			78.0-120		11/03/2019 00:40	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	U		0.287	0.678	1	10/24/2019 11:45	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:45	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:45	WG1368615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.77	<u>J J4</u>	1.05	25.0	1	10/29/2019 09:06	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 09:06	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 09:06	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 09:06	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 09:06	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 09:06	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 09:06	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 09:06	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 09:06	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 09:06	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 09:06	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 09:06	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 09:06	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/22/19 09:30

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 09:06	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 09:06	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 09:06	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 09:06	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 09:06	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 09:06	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 09:06	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 09:06	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 09:06	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 09:06	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 09:06	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 09:06	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 09:06	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 09:06	WG1371177
cis-1,2-Dichloroethene	30.4		0.0933	0.500	1	10/29/2019 09:06	WG1371177
trans-1,2-Dichloroethene	0.426	J	0.152	0.500	1	10/29/2019 09:06	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 09:06	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 09:06	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 09:06	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 09:06	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 09:06	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 09:06	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 09:06	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 09:06	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 09:06	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 09:06	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 09:06	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 09:06	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 09:06	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 09:06	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 09:06	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 09:06	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 09:06	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 09:06	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 09:06	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 09:06	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 09:06	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 09:06	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 09:06	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 09:06	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 09:06	WG1371177
Tetrachloroethene	169		0.995	2.50	5	10/29/2019 19:29	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 09:06	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 09:06	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 09:06	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 09:06	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 09:06	WG1371177
Trichloroethene	48.3		0.153	0.500	1	10/29/2019 09:06	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 09:06	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 09:06	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 09:06	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 09:06	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 09:06	WG1371177

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 09:06	WG1371177
Vinyl chloride	0.152	<u>J</u>	0.118	0.500	1	10/29/2019 09:06	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 09:06	WG1371177
(S) Toluene-d8	96.8			80.0-120		10/29/2019 09:06	WG1371177
(S) Toluene-d8	106			80.0-120		10/29/2019 19:29	WG1371769
(S) 4-Bromofluorobenzene	105			77.0-126		10/29/2019 09:06	WG1371177
(S) 4-Bromofluorobenzene	100			77.0-126		10/29/2019 19:29	WG1371769
(S) 1,2-Dichloroethane-d4	101			70.0-130		10/29/2019 09:06	WG1371177
(S) 1,2-Dichloroethane-d4	100			70.0-130		10/29/2019 19:29	WG1371769

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	361000		2710	20000	1	10/24/2019 23:34	WG1369144

Sample Narrative:

L1152823-02 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	23600		51.9	1000	1	10/23/2019 19:17	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 19:17	WG1367978
Sulfate	U		77.4	5000	1	10/23/2019 19:17	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5950		102	1000	1	10/26/2019 19:30	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3720		75.0	500	5	10/29/2019 02:45	WG1368595
Manganese	723		0.250	5.00	1	10/28/2019 17:09	WG1368595

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	561000		2710	20000	1	10/24/2019 23:42	WG1369144

Sample Narrative:

L1152823-03 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	70400		51.9	1000	1	10/23/2019 19:33	WG1367978
Nitrate	146		22.7	100	1	10/23/2019 19:33	WG1367978
Sulfate	22100		77.4	5000	1	10/23/2019 19:33	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	15800		102	1000	1	10/26/2019 19:57	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	3380		75.0	500	5	10/29/2019 02:48	WG1368595
Manganese	426		0.250	5.00	1	10/28/2019 17:12	WG1368595

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	2330		0.287	0.678	1	10/24/2019 11:49	WG1368615
Ethane	16.3		0.296	1.29	1	10/24/2019 11:49	WG1368615
Ethene	115		0.422	1.27	1	10/24/2019 11:49	WG1368615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	1.45	J J4	1.05	25.0	1	10/29/2019 09:26	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 09:26	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 09:26	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 09:26	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 09:26	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 09:26	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 09:26	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 09:26	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 09:26	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 09:26	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 09:26	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 09:26	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 09:26	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 09:26	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 09:26	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 09:26	WG1371177
Chloroform	0.239	J	0.0860	0.500	1	10/29/2019 09:26	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 09:26	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 09:26	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 09:26	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/22/19 10:45

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 09:26	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 09:26	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 09:26	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 09:26	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 09:26	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 09:26	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 09:26	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 09:26	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 09:26	WG1371177
1,1-Dichloroethene	1.78		0.188	0.500	1	10/29/2019 09:26	WG1371177
cis-1,2-Dichloroethene	1420		0.933	5.00	10	10/29/2019 19:48	WG1371769
trans-1,2-Dichloroethene	4.45		0.152	0.500	1	10/29/2019 09:26	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 09:26	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 09:26	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 09:26	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 09:26	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 09:26	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 09:26	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 09:26	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 09:26	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 09:26	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 09:26	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 09:26	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 09:26	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 09:26	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 09:26	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 09:26	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 09:26	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 09:26	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 09:26	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 09:26	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 09:26	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 09:26	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 09:26	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 09:26	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 09:26	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 09:26	WG1371177
Tetrachloroethene	U		1.99	5.00	10	10/29/2019 19:48	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 09:26	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 09:26	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 09:26	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 09:26	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 09:26	WG1371177
Trichloroethene	6.77		0.153	0.500	1	10/29/2019 09:26	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 09:26	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 09:26	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 09:26	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 09:26	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 09:26	WG1371177
Vinyl acetate	U	JO	0.645	5.00	1	10/29/2019 09:26	WG1371177
Vinyl chloride	66.2		0.118	0.500	1	10/29/2019 09:26	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 09:26	WG1371177
(S) Toluene-d8	101			80.0-120		10/29/2019 09:26	WG1371177
(S) Toluene-d8	107			80.0-120		10/29/2019 19:48	WG1371769
(S) 4-Bromofluorobenzene	110			77.0-126		10/29/2019 09:26	WG1371177
(S) 4-Bromofluorobenzene	134	J1		77.0-126		10/29/2019 19:48	WG1371769

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/22/19 10:45

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	91.8			70.0-130		10/29/2019 09:26	WG1371177
(S) 1,2-Dichloroethane-d4	101			70.0-130		10/29/2019 19:48	WG1371769

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc

Sample Narrative:

L1152823-03 WG1371177, WG1371769: Not all compounds reportable at lower dilution.
 L1152823-03 WG1371177, WG1371769: Cannot be reanalyzed at lower dilution due to high levels of target analytes.



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Alkalinity	330000		2710	20000	1	10/24/2019 23:49	WG1369144

Sample Narrative:

L1152823-04 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Chloride	19300		51.9	1000	1	10/23/2019 20:39	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 20:39	WG1367978
Sulfate	23600		77.4	5000	1	10/23/2019 20:39	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
TOC (Total Organic Carbon)	5510		102	1000	1	10/26/2019 20:20	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Iron	4530		75.0	500	5	10/29/2019 02:51	WG1368595
Manganese	930		0.250	5.00	1	10/28/2019 17:15	WG1368595

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Methane	1500		0.287	0.678	1	10/24/2019 11:51	WG1368615
Ethane	4.04		0.296	1.29	1	10/24/2019 11:51	WG1368615
Ethene	4.17		0.422	1.27	1	10/24/2019 11:51	WG1368615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis	Batch
	ug/l		ug/l	ug/l		date / time	
Acetone	U	J4	1.05	25.0	1	10/29/2019 09:46	WG1371177
Acrylonitrile	U	J4	0.873	5.00	1	10/29/2019 09:46	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 09:46	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 09:46	WG1371177
Bromodichloromethane	U	J4	0.0800	0.500	1	10/29/2019 09:46	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 09:46	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 09:46	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 09:46	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 09:46	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 09:46	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 09:46	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 09:46	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 09:46	WG1371177
Chlorobenzene	U		0.140	0.500	1	10/29/2019 09:46	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 09:46	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 09:46	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 09:46	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 09:46	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 09:46	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 09:46	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/22/19 11:05

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 09:46	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 09:46	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 09:46	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 09:46	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 09:46	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 09:46	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 09:46	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 09:46	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 09:46	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 09:46	WG1371177
cis-1,2-Dichloroethene	0.819	B	0.0933	0.500	1	10/29/2019 20:07	WG1371769
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 09:46	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 09:46	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 09:46	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 09:46	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 09:46	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 09:46	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 09:46	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 09:46	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 09:46	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 09:46	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 09:46	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 09:46	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 09:46	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 09:46	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 09:46	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 09:46	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 09:46	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 09:46	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 09:46	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 09:46	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 09:46	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 09:46	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 09:46	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 09:46	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 09:46	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 09:46	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 09:46	WG1371177
Toluene	U		0.412	0.500	1	10/29/2019 09:46	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 09:46	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 09:46	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 09:46	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 09:46	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 09:46	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 09:46	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 09:46	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 09:46	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 09:46	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 09:46	WG1371177
Vinyl acetate	U	JO	0.645	5.00	1	10/29/2019 09:46	WG1371177
Vinyl chloride	23.2		0.118	0.500	1	10/29/2019 09:46	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 09:46	WG1371177
(S) Toluene-d8	96.1			80.0-120		10/29/2019 09:46	WG1371177
(S) Toluene-d8	107			80.0-120		10/29/2019 20:07	WG1371769
(S) 4-Bromofluorobenzene	105			77.0-126		10/29/2019 09:46	WG1371177
(S) 4-Bromofluorobenzene	97.9			77.0-126		10/29/2019 20:07	WG1371769

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
(S) 1,2-Dichloroethane-d4	101			70.0-130		10/29/2019 09:46	WG1371177
(S) 1,2-Dichloroethane-d4	94.1			70.0-130		10/29/2019 20:07	WG1371769

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	245000		2710	20000	1	10/24/2019 23:57	WG1369144

Sample Narrative:

L1152823-05 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	10300		51.9	1000	1	10/23/2019 20:55	WG1367978
Nitrate	1980		22.7	100	1	10/23/2019 20:55	WG1367978
Sulfate	67300		77.4	5000	1	10/23/2019 20:55	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	5090		102	1000	1	10/26/2019 23:06	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	678		15.0	100	1	10/28/2019 17:19	WG1368595
Manganese	376		0.250	5.00	1	10/28/2019 17:19	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

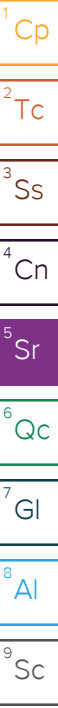
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	176	<u>B</u>	31.6	100	1	11/03/2019 01:01	WG1373020
(S) a,a,a-Trifluorotoluene(FID)	96.6			78.0-120		11/03/2019 01:01	WG1373020

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	74.8		0.287	0.678	1	10/24/2019 11:54	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:54	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:54	WG1368615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.24	<u>J J4</u>	1.05	25.0	1	10/29/2019 10:06	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 10:06	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 10:06	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 10:06	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 10:06	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 10:06	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 10:06	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 10:06	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 10:06	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 10:06	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 10:06	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 10:06	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 10:06	WG1371177





Collected date/time: 10/22/19 12:50

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 10:06	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 10:06	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 10:06	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 10:06	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 10:06	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 10:06	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 10:06	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 10:06	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 10:06	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 10:06	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 10:06	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 10:06	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 10:06	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 10:06	WG1371177
cis-1,2-Dichloroethene	31.8		0.0933	0.500	1	10/29/2019 10:06	WG1371177
trans-1,2-Dichloroethene	0.398	J	0.152	0.500	1	10/29/2019 10:06	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 10:06	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 10:06	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 10:06	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 10:06	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 10:06	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 10:06	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 10:06	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 10:06	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 10:06	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 10:06	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 10:06	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 10:06	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 10:06	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 10:06	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 10:06	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 10:06	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 10:06	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 10:06	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 10:06	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 10:06	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 10:06	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 10:06	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 10:06	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 10:06	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 10:06	WG1371177
Tetrachloroethene	135		0.995	2.50	5	10/29/2019 20:26	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 10:06	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 10:06	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 10:06	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 10:06	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 10:06	WG1371177
Trichloroethene	46.6		0.153	0.500	1	10/29/2019 10:06	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 10:06	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 10:06	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 10:06	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 10:06	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 10:06	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/22/19 12:50

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>J0</u>	0.645	5.00	1	10/29/2019 10:06	WG1371177
Vinyl chloride	0.162	<u>J</u>	0.118	0.500	1	10/29/2019 10:06	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 10:06	WG1371177
(S) Toluene-d8	96.8			80.0-120		10/29/2019 10:06	WG1371177
(S) Toluene-d8	107			80.0-120		10/29/2019 20:26	WG1371769
(S) 4-Bromofluorobenzene	105			77.0-126		10/29/2019 10:06	WG1371177
(S) 4-Bromofluorobenzene	60.4	<u>J2</u>		77.0-126		10/29/2019 20:26	WG1371769
(S) 1,2-Dichloroethane-d4	103			70.0-130		10/29/2019 10:06	WG1371177
(S) 1,2-Dichloroethane-d4	95.6			70.0-130		10/29/2019 20:26	WG1371769

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	330000		2710	20000	1	10/25/2019 00:13	WG1369144

Sample Narrative:

L1152823-06 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	35000		51.9	1000	1	10/23/2019 21:12	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 21:12	WG1367978
Sulfate	12800		77.4	5000	1	10/23/2019 21:12	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2860	<u>B</u>	102	1000	1	10/26/2019 23:27	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	3060		75.0	500	5	10/29/2019 02:55	WG1368595
Manganese	1050		0.250	5.00	1	10/28/2019 17:22	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	96.4	<u>B, J</u>	31.6	100	1	10/31/2019 08:01	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	95.1			78.0-120		10/31/2019 08:01	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	731		0.287	0.678	1	10/24/2019 11:56	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:56	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:56	WG1368615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.40	<u>J, J4</u>	1.05	25.0	1	10/29/2019 10:27	WG1371177
Acrylonitrile	U	<u>J4</u>	0.873	5.00	1	10/29/2019 10:27	WG1371177
Benzene	U		0.0896	0.500	1	10/29/2019 10:27	WG1371177
Bromobenzene	U		0.133	0.500	1	10/29/2019 10:27	WG1371177
Bromodichloromethane	U	<u>J4</u>	0.0800	0.500	1	10/29/2019 10:27	WG1371177
Bromochloromethane	U		0.145	0.500	1	10/29/2019 10:27	WG1371177
Bromoform	U		0.186	0.500	1	10/29/2019 10:27	WG1371177
Bromomethane	U		0.157	2.50	1	10/29/2019 10:27	WG1371177
n-Butylbenzene	U		0.143	0.500	1	10/29/2019 10:27	WG1371177
sec-Butylbenzene	U		0.134	0.500	1	10/29/2019 10:27	WG1371177
tert-Butylbenzene	U		0.183	0.500	1	10/29/2019 10:27	WG1371177
Carbon disulfide	U		0.101	0.500	1	10/29/2019 10:27	WG1371177
Carbon tetrachloride	U		0.159	0.500	1	10/29/2019 10:27	WG1371177

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/22/19 13:00

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/29/2019 10:27	WG1371177
Chlorodibromomethane	U		0.128	0.500	1	10/29/2019 10:27	WG1371177
Chloroethane	U		0.141	2.50	1	10/29/2019 10:27	WG1371177
Chloroform	U		0.0860	0.500	1	10/29/2019 10:27	WG1371177
Chloromethane	U	JO	0.153	1.25	1	10/29/2019 10:27	WG1371177
2-Chlorotoluene	U		0.111	0.500	1	10/29/2019 10:27	WG1371177
4-Chlorotoluene	U		0.0972	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/29/2019 10:27	WG1371177
1,2-Dibromoethane	U		0.193	0.500	1	10/29/2019 10:27	WG1371177
Dibromomethane	U		0.117	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dichlorobenzene	U		0.101	0.500	1	10/29/2019 10:27	WG1371177
1,3-Dichlorobenzene	U		0.130	0.500	1	10/29/2019 10:27	WG1371177
1,4-Dichlorobenzene	U		0.121	0.500	1	10/29/2019 10:27	WG1371177
Dichlorodifluoromethane	U		0.127	2.50	1	10/29/2019 10:27	WG1371177
1,1-Dichloroethane	U		0.114	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dichloroethane	U		0.108	0.500	1	10/29/2019 10:27	WG1371177
1,1-Dichloroethene	U		0.188	0.500	1	10/29/2019 10:27	WG1371177
cis-1,2-Dichloroethene	0.945		0.0933	0.500	1	10/29/2019 10:27	WG1371177
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/29/2019 10:27	WG1371177
1,2-Dichloropropane	U		0.190	0.500	1	10/29/2019 10:27	WG1371177
1,1-Dichloropropene	U		0.128	0.500	1	10/29/2019 10:27	WG1371177
1,3-Dichloropropane	U		0.147	1.00	1	10/29/2019 10:27	WG1371177
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/29/2019 10:27	WG1371177
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/29/2019 10:27	WG1371177
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/29/2019 10:27	WG1371177
2,2-Dichloropropane	U		0.0929	0.500	1	10/29/2019 10:27	WG1371177
Di-isopropyl ether	U	JO	0.0924	0.500	1	10/29/2019 10:27	WG1371177
Ethylbenzene	U		0.158	0.500	1	10/29/2019 10:27	WG1371177
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/29/2019 10:27	WG1371177
2-Hexanone	U		0.757	5.00	1	10/29/2019 10:27	WG1371177
n-Hexane	U		0.305	5.00	1	10/29/2019 10:27	WG1371177
Iodomethane	U		0.377	10.0	1	10/29/2019 10:27	WG1371177
Isopropylbenzene	U		0.126	0.500	1	10/29/2019 10:27	WG1371177
p-Isopropyltoluene	U		0.138	0.500	1	10/29/2019 10:27	WG1371177
2-Butanone (MEK)	U	JO	1.28	5.00	1	10/29/2019 10:27	WG1371177
Methylene Chloride	U		1.07	2.50	1	10/29/2019 10:27	WG1371177
4-Methyl-2-pentanone (MIBK)	U	JO	0.823	5.00	1	10/29/2019 10:27	WG1371177
Methyl tert-butyl ether	U		0.102	0.500	1	10/29/2019 10:27	WG1371177
Naphthalene	U		0.174	2.50	1	10/29/2019 10:27	WG1371177
n-Propylbenzene	U		0.162	0.500	1	10/29/2019 10:27	WG1371177
Styrene	U		0.117	0.500	1	10/29/2019 10:27	WG1371177
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/29/2019 10:27	WG1371177
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/29/2019 10:27	WG1371177
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/29/2019 10:27	WG1371177
Tetrachloroethene	U		0.199	0.500	1	10/29/2019 20:45	WG1371769
Toluene	U		0.412	0.500	1	10/29/2019 10:27	WG1371177
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/29/2019 10:27	WG1371177
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/29/2019 10:27	WG1371177
1,1,1-Trichloroethane	U	J4	0.0940	0.500	1	10/29/2019 10:27	WG1371177
1,1,2-Trichloroethane	U		0.186	0.500	1	10/29/2019 10:27	WG1371177
Trichloroethene	U		0.153	0.500	1	10/29/2019 10:27	WG1371177
Trichlorofluoromethane	U		0.130	2.50	1	10/29/2019 10:27	WG1371177
1,2,3-Trichloropropane	U		0.247	2.50	1	10/29/2019 10:27	WG1371177
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/29/2019 10:27	WG1371177
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/29/2019 10:27	WG1371177
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/29/2019 10:27	WG1371177

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/22/19 13:00

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U	<u>JO</u>	0.645	5.00	1	10/29/2019 10:27	WG1371177
Vinyl chloride	0.214	<u>J</u>	0.118	0.500	1	10/29/2019 10:27	WG1371177
Xylenes, Total	U		0.316	1.50	1	10/29/2019 10:27	WG1371177
(S) Toluene-d8	99.2			80.0-120		10/29/2019 10:27	WG1371177
(S) Toluene-d8	106			80.0-120		10/29/2019 20:45	WG1371769
(S) 4-Bromofluorobenzene	109			77.0-126		10/29/2019 10:27	WG1371177
(S) 4-Bromofluorobenzene	98.1			77.0-126		10/29/2019 20:45	WG1371769
(S) 1,2-Dichloroethane-d4	102			70.0-130		10/29/2019 10:27	WG1371177
(S) 1,2-Dichloroethane-d4	95.3			70.0-130		10/29/2019 20:45	WG1371769

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	330000		2710	20000	1	10/25/2019 00:20	WG1369144

Sample Narrative:

L1152823-07 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	35100		51.9	1000	1	10/23/2019 21:28	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 21:28	WG1367978
Sulfate	12800		77.4	5000	1	10/23/2019 21:28	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	2900	<u>B</u>	102	1000	1	10/26/2019 23:44	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	2590		75.0	500	5	10/29/2019 02:58	WG1368595
Manganese	1030		0.250	5.00	1	10/28/2019 17:25	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	90.8	<u>B, J</u>	31.6	100	1	10/31/2019 08:23	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	96.4			78.0-120		10/31/2019 08:23	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	655		0.287	0.678	1	10/24/2019 11:58	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 11:58	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 11:58	WG1368615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	1.47	<u>J</u>	1.05	25.0	1	10/31/2019 21:50	WG1373274
Acrylonitrile	U		0.873	5.00	1	10/31/2019 21:50	WG1373274
Benzene	U		0.0896	0.500	1	10/31/2019 21:50	WG1373274
Bromobenzene	U	<u>J4</u>	0.133	0.500	1	10/31/2019 21:50	WG1373274
Bromodichloromethane	U		0.0800	0.500	1	10/31/2019 21:50	WG1373274
Bromochloromethane	U		0.145	0.500	1	10/31/2019 21:50	WG1373274
Bromoform	U		0.186	0.500	1	10/31/2019 21:50	WG1373274
Bromomethane	U		0.157	2.50	1	10/31/2019 21:50	WG1373274
n-Butylbenzene	U		0.143	0.500	1	10/31/2019 21:50	WG1373274
sec-Butylbenzene	U		0.134	0.500	1	10/31/2019 21:50	WG1373274
tert-Butylbenzene	U		0.183	0.500	1	10/31/2019 21:50	WG1373274
Carbon disulfide	U		0.101	0.500	1	10/31/2019 21:50	WG1373274
Carbon tetrachloride	U		0.159	0.500	1	10/31/2019 21:50	WG1373274

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Collected date/time: 10/22/19 14:00

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/31/2019 21:50	WG1373274
Chlorodibromomethane	U		0.128	0.500	1	10/31/2019 21:50	WG1373274
Chloroethane	U		0.141	2.50	1	10/31/2019 21:50	WG1373274
Chloroform	U		0.0860	0.500	1	10/31/2019 21:50	WG1373274
Chloromethane	U		0.153	1.25	1	10/31/2019 21:50	WG1373274
2-Chlorotoluene	U	J4	0.111	0.500	1	10/31/2019 21:50	WG1373274
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2019 21:50	WG1373274
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2019 21:50	WG1373274
Dibromomethane	U		0.117	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2019 21:50	WG1373274
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2019 21:50	WG1373274
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2019 21:50	WG1373274
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2019 21:50	WG1373274
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2019 21:50	WG1373274
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2019 21:50	WG1373274
cis-1,2-Dichloroethene	0.720		0.0933	0.500	1	10/31/2019 21:50	WG1373274
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2019 21:50	WG1373274
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2019 21:50	WG1373274
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2019 21:50	WG1373274
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2019 21:50	WG1373274
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2019 21:50	WG1373274
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2019 21:50	WG1373274
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/31/2019 21:50	WG1373274
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2019 21:50	WG1373274
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2019 21:50	WG1373274
Ethylbenzene	U		0.158	0.500	1	10/31/2019 21:50	WG1373274
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2019 21:50	WG1373274
2-Hexanone	U		0.757	5.00	1	10/31/2019 21:50	WG1373274
n-Hexane	U		0.305	5.00	1	10/31/2019 21:50	WG1373274
Iodomethane	U		0.377	10.0	1	10/31/2019 21:50	WG1373274
Isopropylbenzene	U		0.126	0.500	1	10/31/2019 21:50	WG1373274
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2019 21:50	WG1373274
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2019 21:50	WG1373274
Methylene Chloride	U		1.07	2.50	1	10/31/2019 21:50	WG1373274
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2019 21:50	WG1373274
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2019 21:50	WG1373274
Naphthalene	U		0.174	2.50	1	10/31/2019 21:50	WG1373274
n-Propylbenzene	U		0.162	0.500	1	10/31/2019 21:50	WG1373274
Styrene	U		0.117	0.500	1	10/31/2019 21:50	WG1373274
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2019 21:50	WG1373274
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2019 21:50	WG1373274
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2019 21:50	WG1373274
Tetrachloroethene	U		0.199	0.500	1	10/31/2019 21:50	WG1373274
Toluene	U		0.412	0.500	1	10/31/2019 21:50	WG1373274
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2019 21:50	WG1373274
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2019 21:50	WG1373274
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2019 21:50	WG1373274
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2019 21:50	WG1373274
Trichloroethene	U		0.153	0.500	1	10/31/2019 21:50	WG1373274
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2019 21:50	WG1373274
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2019 21:50	WG1373274
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2019 21:50	WG1373274
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2019 21:50	WG1373274
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2019 21:50	WG1373274

- 1 Cp
- 2 Tc
- 3 Ss
- 4 Cn
- 5 Sr
- 6 Qc
- 7 Gl
- 8 Al
- 9 Sc



Collected date/time: 10/22/19 14:00

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/31/2019 21:50	WG1373274
Vinyl chloride	U		0.118	0.500	1	10/31/2019 21:50	WG1373274
Xylenes, Total	U		0.316	1.50	1	10/31/2019 21:50	WG1373274
<i>(S) Toluene-d8</i>	113			80.0-120		10/31/2019 21:50	WG1373274
<i>(S) 4-Bromofluorobenzene</i>	109			77.0-126		10/31/2019 21:50	WG1373274
<i>(S) 1,2-Dichloroethane-d4</i>	101			70.0-130		10/31/2019 21:50	WG1373274

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Wet Chemistry by Method 2320 B-2011

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Alkalinity	4850	J	2710	20000	1	10/25/2019 00:29	WG1369144

Sample Narrative:

L1152823-08 WG1369144: Endpoint pH 4.5

Wet Chemistry by Method 9056A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Chloride	397	J	51.9	1000	1	10/23/2019 21:44	WG1367978
Nitrate	U		22.7	100	1	10/23/2019 21:44	WG1367978
Sulfate	334	J	77.4	5000	1	10/23/2019 21:44	WG1367978

Wet Chemistry by Method 9060A

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
TOC (Total Organic Carbon)	168	B J	102	1000	1	10/27/2019 00:02	WG1370126

Metals (ICPMS) by Method 6020B

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Iron	25.5	J	15.0	100	1	10/28/2019 17:29	WG1368595
Manganese	4.16	B J	0.250	5.00	1	10/28/2019 17:29	WG1368595

Volatile Organic Compounds (GC) by Method NWTPHGX

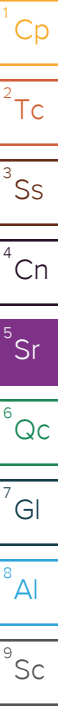
Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	88.4	B J	31.6	100	1	10/31/2019 08:44	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	96.4			78.0-120		10/31/2019 08:44	WG1371615

Volatile Organic Compounds (GC) by Method RSK175

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Methane	32.7		0.287	0.678	1	10/24/2019 12:52	WG1368615
Ethane	U		0.296	1.29	1	10/24/2019 12:52	WG1368615
Ethene	U		0.422	1.27	1	10/24/2019 12:52	WG1368615

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result	Qualifier	MDL	RDL	Dilution	Analysis date / time	Batch
Acetone	2.04	J	1.05	25.0	1	10/31/2019 22:10	WG1373274
Acrylonitrile	U		0.873	5.00	1	10/31/2019 22:10	WG1373274
Benzene	U		0.0896	0.500	1	10/31/2019 22:10	WG1373274
Bromobenzene	U	J4	0.133	0.500	1	10/31/2019 22:10	WG1373274
Bromodichloromethane	U		0.0800	0.500	1	10/31/2019 22:10	WG1373274
Bromochloromethane	U		0.145	0.500	1	10/31/2019 22:10	WG1373274
Bromoform	U		0.186	0.500	1	10/31/2019 22:10	WG1373274
Bromomethane	U		0.157	2.50	1	10/31/2019 22:10	WG1373274
n-Butylbenzene	U		0.143	0.500	1	10/31/2019 22:10	WG1373274
sec-Butylbenzene	U		0.134	0.500	1	10/31/2019 22:10	WG1373274
tert-Butylbenzene	U		0.183	0.500	1	10/31/2019 22:10	WG1373274
Carbon disulfide	U		0.101	0.500	1	10/31/2019 22:10	WG1373274
Carbon tetrachloride	U		0.159	0.500	1	10/31/2019 22:10	WG1373274





Collected date/time: 10/22/19 15:00

L1152823

Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Chlorobenzene	U		0.140	0.500	1	10/31/2019 22:10	WG1373274
Chlorodibromomethane	U		0.128	0.500	1	10/31/2019 22:10	WG1373274
Chloroethane	U		0.141	2.50	1	10/31/2019 22:10	WG1373274
Chloroform	0.398	J	0.0860	0.500	1	10/31/2019 22:10	WG1373274
Chloromethane	U		0.153	1.25	1	10/31/2019 22:10	WG1373274
2-Chlorotoluene	U	J4	0.111	0.500	1	10/31/2019 22:10	WG1373274
4-Chlorotoluene	U		0.0972	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dibromo-3-Chloropropane	U		0.325	2.50	1	10/31/2019 22:10	WG1373274
1,2-Dibromoethane	U		0.193	0.500	1	10/31/2019 22:10	WG1373274
Dibromomethane	U		0.117	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dichlorobenzene	U		0.101	0.500	1	10/31/2019 22:10	WG1373274
1,3-Dichlorobenzene	U		0.130	0.500	1	10/31/2019 22:10	WG1373274
1,4-Dichlorobenzene	U		0.121	0.500	1	10/31/2019 22:10	WG1373274
Dichlorodifluoromethane	U		0.127	2.50	1	10/31/2019 22:10	WG1373274
1,1-Dichloroethane	U		0.114	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dichloroethane	U		0.108	0.500	1	10/31/2019 22:10	WG1373274
1,1-Dichloroethene	U		0.188	0.500	1	10/31/2019 22:10	WG1373274
cis-1,2-Dichloroethene	U		0.0933	0.500	1	10/31/2019 22:10	WG1373274
trans-1,2-Dichloroethene	U		0.152	0.500	1	10/31/2019 22:10	WG1373274
1,2-Dichloropropane	U		0.190	0.500	1	10/31/2019 22:10	WG1373274
1,1-Dichloropropene	U		0.128	0.500	1	10/31/2019 22:10	WG1373274
1,3-Dichloropropane	U		0.147	1.00	1	10/31/2019 22:10	WG1373274
cis-1,3-Dichloropropene	U		0.0976	0.500	1	10/31/2019 22:10	WG1373274
trans-1,3-Dichloropropene	U		0.222	0.500	1	10/31/2019 22:10	WG1373274
trans-1,4-Dichloro-2-butene	U	JO	0.257	5.00	1	10/31/2019 22:10	WG1373274
2,2-Dichloropropane	U		0.0929	0.500	1	10/31/2019 22:10	WG1373274
Di-isopropyl ether	U		0.0924	0.500	1	10/31/2019 22:10	WG1373274
Ethylbenzene	U		0.158	0.500	1	10/31/2019 22:10	WG1373274
Hexachloro-1,3-butadiene	U		0.157	1.00	1	10/31/2019 22:10	WG1373274
2-Hexanone	U		0.757	5.00	1	10/31/2019 22:10	WG1373274
n-Hexane	U		0.305	5.00	1	10/31/2019 22:10	WG1373274
Iodomethane	U		0.377	10.0	1	10/31/2019 22:10	WG1373274
Isopropylbenzene	U		0.126	0.500	1	10/31/2019 22:10	WG1373274
p-Isopropyltoluene	U		0.138	0.500	1	10/31/2019 22:10	WG1373274
2-Butanone (MEK)	U		1.28	5.00	1	10/31/2019 22:10	WG1373274
Methylene Chloride	U		1.07	2.50	1	10/31/2019 22:10	WG1373274
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00	1	10/31/2019 22:10	WG1373274
Methyl tert-butyl ether	U		0.102	0.500	1	10/31/2019 22:10	WG1373274
Naphthalene	U		0.174	2.50	1	10/31/2019 22:10	WG1373274
n-Propylbenzene	U		0.162	0.500	1	10/31/2019 22:10	WG1373274
Styrene	U		0.117	0.500	1	10/31/2019 22:10	WG1373274
1,1,1,2-Tetrachloroethane	U		0.120	0.500	1	10/31/2019 22:10	WG1373274
1,1,2,2-Tetrachloroethane	U		0.130	0.500	1	10/31/2019 22:10	WG1373274
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500	1	10/31/2019 22:10	WG1373274
Tetrachloroethene	U		0.199	0.500	1	10/31/2019 22:10	WG1373274
Toluene	U		0.412	0.500	1	10/31/2019 22:10	WG1373274
1,2,3-Trichlorobenzene	U		0.164	0.500	1	10/31/2019 22:10	WG1373274
1,2,4-Trichlorobenzene	U		0.355	0.500	1	10/31/2019 22:10	WG1373274
1,1,1-Trichloroethane	U		0.0940	0.500	1	10/31/2019 22:10	WG1373274
1,1,2-Trichloroethane	U		0.186	0.500	1	10/31/2019 22:10	WG1373274
Trichloroethene	U		0.153	0.500	1	10/31/2019 22:10	WG1373274
Trichlorofluoromethane	U		0.130	2.50	1	10/31/2019 22:10	WG1373274
1,2,3-Trichloropropane	U		0.247	2.50	1	10/31/2019 22:10	WG1373274
1,2,4-Trimethylbenzene	U		0.123	0.500	1	10/31/2019 22:10	WG1373274
1,2,3-Trimethylbenzene	U		0.0739	0.500	1	10/31/2019 22:10	WG1373274
1,3,5-Trimethylbenzene	U		0.124	0.500	1	10/31/2019 22:10	WG1373274

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC/MS) by Method 8260C

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Vinyl acetate	U		0.645	5.00	1	10/31/2019 22:10	WG1373274
Vinyl chloride	U		0.118	0.500	1	10/31/2019 22:10	WG1373274
Xylenes, Total	U		0.316	1.50	1	10/31/2019 22:10	WG1373274
(S) Toluene-d8	111			80.0-120		10/31/2019 22:10	WG1373274
(S) 4-Bromofluorobenzene	108			77.0-126		10/31/2019 22:10	WG1373274
(S) 1,2-Dichloroethane-d4	100			70.0-130		10/31/2019 22:10	WG1373274

1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

Analyte	Result ug/l	Qualifier	MDL ug/l	RDL ug/l	Dilution	Analysis date / time	Batch
Gasoline Range Organics-NWTPH	91.3	<u>BJ</u>	31.6	100	1	10/31/2019 00:07	WG1371615
(S) a,a,a-Trifluorotoluene(FID)	96.1			78.0-120		10/31/2019 00:07	WG1371615

¹ Cp

² Tc

³ Ss

⁴ Cn

⁵ Sr

⁶ Qc

⁷ Gl

⁸ Al

⁹ Sc

Method Blank (MB)

(MB) R3464935-1 10/24/19 21:15

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
Alkalinity	U	ug/l	2710	20000

Sample Narrative:

BLANK: Endpoint pH 4.5

L1152333-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152333-01 10/24/19 21:24 • (DUP) R3464935-2 10/24/19 21:31

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	589000	589000	1	0.0563	%	20

Sample Narrative:

OS: Endpoint pH 4.5
DUP: Endpoint pH 4.5

L1152791-01 Original Sample (OS) • Duplicate (DUP)

(OS) L1152791-01 10/24/19 23:11 • (DUP) R3464935-4 10/24/19 23:20

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
Alkalinity	519000	520000	1	0.243	%	20

Sample Narrative:

OS: Endpoint pH 4.5 headspace
DUP: Endpoint pH 4.5

Laboratory Control Sample (LCS)

(LCS) R3464935-3 10/24/19 22:38

Analyte	Spike Amount	LCS Result	LCS Rec.	Rec. Limits	LCS Qualifier
Alkalinity	100000	98500	98.5	85.0-115	%

Sample Narrative:

LCS: Endpoint pH 4.5





Method Blank (MB)

(MB) R3464355-1 10/23/19 12:55

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Chloride	U		519	1000
Nitrate	U		22.7	100
Sulfate	U		77.4	5000

L1152818-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1152818-06 10/23/19 17:38 • (DUP) R3464355-3 10/23/19 17:55

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	DUP Result		%	DUP RPD		
Chloride	335	331	1	1.26		↓	15
Nitrate	U	0.000	1	0.000			15
Sulfate	U	0.000	1	0.000			15

L1152823-08 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-08 10/23/19 21:44 • (DUP) R3464355-8 10/24/19 08:01

Analyte	Original Result		Dilution	DUP RPD		DUP Qualifier	DUP RPD Limits
	ug/l	DUP Result		%	DUP RPD		
Chloride	397	406	1	2.07		↓	15
Nitrate	U	0.000	1	0.000			15
Sulfate	334	322	1	3.50		↓	15

Laboratory Control Sample (LCS)

(LCS) R3464355-2 10/23/19 13:11

Analyte	Spike Amount		LCS Rec.	Rec. Limits		LCS Qualifier
	ug/l	LCS Result		%	%	
Chloride	40000	38800	97.1	80.0-120		
Nitrate	8000	8040	101	80.0-120		
Sulfate	40000	39000	97.4	80.0-120		

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



L1152818-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152818-06 10/23/19 17:38 • (MS) R3464355-4 10/23/19 18:11 • (MSD) R3464355-5 10/23/19 18:28

Analyte	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	ug/l	%	%		%			%	%
Chloride	50000	335	50000	49500	99.3	98.3	1	80.0-120			1.03	15
Nitrate	5000	U	4880	4820	97.6	96.4	1	80.0-120			1.19	15
Sulfate	50000	U	49700	49200	99.4	98.4	1	80.0-120			0.969	15

L1152823-08 Original Sample (OS) • Matrix Spike (MS)

(OS) L1152823-08 10/23/19 21:44 • (MS) R3464355-7 10/23/19 22:17

Analyte	Spike Amount	Original Result	MS Result	MS Rec.	Dilution	Rec. Limits	MS Qualifier
	ug/l	ug/l	ug/l	%		%	
Chloride	50000	397	49500	98.3	1	80.0-120	
Nitrate	5000	U	4920	98.3	1	80.0-120	
Sulfate	50000	334	49300	97.9	1	80.0-120	

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3466121-1	10/26/19 11:45	MB Result	<u>MB Qualifier</u>	MB MDL	MB RDL
Analyte	ug/l		ug/l	ug/l	ug/l
TOC (Total Organic Carbon)	434	<u>1</u>	102	1000	

L1152741-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1152741-04	10/26/19 15:20 • (DUP) R3466121-3	10/26/19 15:34			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	ND	300	1	0.000	20

L1152823-04 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-04	10/26/19 20:20 • (DUP) R3466121-6	10/26/19 20:39			
Original Result	DUP Result	Dilution	DUP RPD	<u>DUP Qualifier</u>	DUP RPD Limits
Analyte	ug/l	ug/l	%	%	%
TOC	5510	5450	1	1.04	20

Laboratory Control Sample (LCS)

(LCS) R3466121-2	10/26/19 12:26				
Spike Amount	LCS Result	LCS Rec.	Rec. Limits	<u>LCS Qualifier</u>	
Analyte	ug/l	ug/l	%	%	
TOC	75000	73300	97.7	85.0-115	

L1152741-06 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152741-06	10/26/19 17:52 • (MS) R3466121-4	10/26/19 18:20 • (MSD) R3466121-5	10/26/19 18:43		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	ND	48400	48500	96.4
					96.7
					1
					80.0-120
					0.310
					20

L1152823-08 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152823-08	10/27/19 00:02 • (MS) R3466121-7	10/27/19 00:26 • (MSD) R3466121-8	10/27/19 00:53		
Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.
Analyte	ug/l	ug/l	ug/l	%	%
TOC	50000	168	50800	50800	101
					101
					1
					80.0-120
					0.0788
					20

1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Method Blank (MB)

(MB) R3466042-1	10/28/19 16:24	MB Result	MB Qualifier	MB MDL	MB RDL
Analyte	ug/l			ug/l	ug/l
Iron	U			15.0	100
Manganese	0.427	J		0.250	5.00

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3466042-2	10/28/19 16:28	(LCSD) R3466042-3	10/28/19 16:31	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%	%	%	%	%	%
Iron	5000	4950	5070	5070	99.0	101	101	101	80.0-120	2.36	20	20	
Manganese	50.0	49.3	51.5	51.5	98.6	103	103	103	80.0-120	4.31	20	20	

L1152823-01 Original Sample (OS) • Matrix Spike (MS) • Matrix Spike Duplicate (MSD)

(OS) L1152823-01	10/28/19 16:34	(MS) R3466042-5	10/28/19 16:41	(MSD) R3466042-6	10/28/19 16:45	Spike Amount	Original Result	MS Result	MSD Result	MS Rec.	MSD Rec.	Dilution	Rec. Limits	MS Qualifier	MSD Qualifier	RPD	RPD Limits
Analyte	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	ug/l	%	%		%	%	%	%	%
Iron	5000	339	5370	5230	101	101	97.9	1	75.0-125	2.51	20	20					
Manganese	50.0	313	360	361	93.9	96.6	1	75.0-125	0.373	20	20						

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc



Volatile Organic Compounds (GC) by Method NWTPHGX

[L1152823-06.07.08.09](#)

Method Blank (MB)

(MB) R3467099-2 10/30/19 23:24

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	103		316	100
^(S) <i>o,a,o</i> -Trifluorotoluene(FID)	96.1			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3467099-1 10/30/19 22:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	5290	96.2	70.0-124	
^(S) <i>o,a,o</i> -Trifluorotoluene(FID)			103	78.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method NWTPHGX

[L1152823-01.05](#)

Method Blank (MB)

(MB) R3467812-2 11/02/19 22:54

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	97.6	J	31.6	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	96.1			78.0-120

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Gasoline Range Organics-NWTPH	97.6	J	31.6	100
^(S) <i>a,a</i> -Trifluorotoluene(FID)	96.1			78.0-120

Laboratory Control Sample (LCS)

(LCS) R3467812-1 11/02/19 20:04

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Gasoline Range Organics-NWTPH	5500	4900	89.1	70.0-124	
^(S) <i>a,a</i> -Trifluorotoluene(FID)			103	78.0-120	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Volatile Organic Compounds (GC) by Method RSK175

[L1152823-01.03.04.05.06.07.08](#)

Method Blank (MB)

(MB) R3464593-1 10/24/19 11:26

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Methane	U		0.287	0.678
Ethane	U		0.296	1.29
Ethene	U		0.422	1.27

L1152823-06 Original Sample (OS) • Duplicate (DUP)

(OS) L1152823-06 10/24/19 11:56 • (DUP) R3464593-2 10/24/19 12:54

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	731	765	1	4.55		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

L1152959-09 Original Sample (OS) • Duplicate (DUP)

(OS) L1152959-09 10/24/19 13:31 • (DUP) R3464593-3 10/24/19 13:37

Analyte	Original Result	DUP Result	Dilution	DUP RPD	DUP Qualifier	DUP RPD Limits
	ug/l	ug/l		%		%
Methane	U	0.000	1	0.000		20
Ethane	U	0.000	1	0.000		20
Ethene	U	0.000	1	0.000		20

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3464593-4 10/24/19 13:42 • (LCSD) R3464593-5 10/24/19 13:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
Methane	67.8	64.6	68.2	95.3	101	85.0-115			5.42	20
Ethane	129	112	131	86.8	102	85.0-115			15.6	20
Ethene	127	117	136	92.1	107	85.0-115			15.0	20

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1152823-01.03.04.05.06](#)

Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropene	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Method Blank (MB)

(MB) R3466378-3 10/29/19 03:41

Analyte	MB Result ug/l	MB Qualifier	MB MDL ug/l	MB RDL ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,4-Trimethylbenzene	U		0.123	0.500
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	97.6			80.0-120
(S) 4-Bromofluorobenzene	107			77.0-126
(S) 1,2-Dichloroethane-d4	103			70.0-130

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
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Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Acetone	125	91.7	73.4	19.0-160	<u>J4</u>
Acrylonitrile	125	90.2	72.2	55.0-149	<u>J4</u>
Benzene	25.0	27.6	110	70.0-123	
Bromobenzene	25.0	23.0	92.0	73.0-121	
Bromodichloromethane	25.0	30.2	121	75.0-120	<u>J4</u>
Bromochloromethane	25.0	29.1	116	76.0-122	
Bromoform	25.0	22.1	88.4	68.0-132	
Bromomethane	25.0	25.1	100	10.0-160	
n-Butylbenzene	25.0	26.1	104	73.0-125	
sec-Butylbenzene	25.0	24.5	98.0	75.0-125	
tert-Butylbenzene	25.0	25.3	101	76.0-124	
Carbon disulfide	25.0	24.5	98.0	61.0-128	
Carbon tetrachloride	25.0	30.0	120	68.0-126	
Chlorobenzene	25.0	24.6	98.4	80.0-121	
Chlorodibromomethane	25.0	26.6	106	77.0-125	
Chloroethane	25.0	23.2	92.8	47.0-150	
Chloroform	25.0	27.3	109	73.0-120	
Chloromethane	25.0	16.4	65.6	41.0-142	
2-Chlorotoluene	25.0	25.1	100	76.0-123	
4-Chlorotoluene	25.0	25.2	101	75.0-122	
1,2-Dibromo-3-Chloropropane	25.0	24.8	99.2	58.0-134	
1,2-Dibromoethane	25.0	23.3	93.2	80.0-122	
Dibromomethane	25.0	29.6	118	80.0-120	
1,2-Dichlorobenzene	25.0	23.2	92.8	79.0-121	
1,3-Dichlorobenzene	25.0	23.6	94.4	79.0-120	
1,4-Dichlorobenzene	25.0	22.6	90.4	79.0-120	
Dichlorodifluoromethane	25.0	27.2	109	51.0-149	
1,1-Dichloroethane	25.0	24.5	98.0	70.0-126	
1,2-Dichloroethane	25.0	26.6	106	70.0-128	
1,1-Dichloroethene	25.0	28.4	114	71.0-124	
cis-1,2-Dichloroethene	25.0	26.6	106	73.0-120	
trans-1,2-Dichloroethene	25.0	27.7	111	73.0-120	
1,2-Dichloropropane	25.0	24.0	96.0	77.0-125	
1,1-Dichloropropene	25.0	29.6	118	74.0-126	
1,3-Dichloropropene	25.0	24.7	98.8	80.0-120	
cis-1,3-Dichloropropene	25.0	29.6	118	80.0-123	
trans-1,3-Dichloropropene	25.0	26.7	107	78.0-124	
trans-1,4-Dichloro-2-butene	25.0	17.0	68.0	33.0-144	
2,2-Dichloropropane	25.0	30.5	122	58.0-130	
Di-isopropyl ether	25.0	17.5	70.0	58.0-138	

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1 Cp
2 Tc
3 Ss
4 Cn
5 Sr
6 Qc
7 Gl
8 Al
9 Sc

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Laboratory Control Sample (LCS)

(LCS) R3466378-1 10/29/19 02:20

Analyte	Spike Amount ug/l	LCS Result ug/l	LCS Rec. %	Rec. Limits %	LCS Qualifier
Ethylbenzene	25.0	24.6	98.4	79.0-123	
Hexachloro-1,3-butadiene	25.0	26.8	107	54.0-138	
2-Hexanone	125	97.6	78.1	67.0-149	
n-Hexane	25.0	22.1	88.4	57.0-133	
Iodomethane	125	152	122	33.0-147	
Isopropylbenzene	25.0	25.1	100	76.0-127	
p-Isopropyltoluene	25.0	25.3	101	76.0-125	
2-Butanone (MEK)	125	90.9	72.7	44.0-160	
Methylene Chloride	25.0	22.8	91.2	67.0-120	
4-Methyl-2-pentanone (MIBK)	125	88.6	70.9	68.0-142	
Methyl tert-butyl ether	25.0	25.7	103	68.0-125	
Naphthalene	25.0	24.4	97.6	54.0-135	
n-Propylbenzene	25.0	25.9	104	77.0-124	
Styrene	25.0	23.9	95.6	73.0-130	
1,1,1,2-Tetrachloroethane	25.0	24.8	99.2	75.0-125	
1,1,2,2-Tetrachloroethane	25.0	21.8	87.2	65.0-130	
1,1,2-Trichlorotrifluoroethane	25.0	26.2	105	69.0-132	
Tetrachloroethene	25.0	27.3	109	72.0-132	
Toluene	25.0	26.3	105	79.0-120	
1,2,3-Trichlorobenzene	25.0	26.2	105	50.0-138	
1,2,4-Trichlorobenzene	25.0	25.6	102	57.0-137	
1,1,1-Trichloroethane	25.0	31.7	127	73.0-124	J4
1,1,2-Trichloroethane	25.0	26.3	105	80.0-120	
Trichloroethene	25.0	29.1	116	78.0-124	
Trichlorofluoromethane	25.0	29.1	116	59.0-147	
1,2,3-Trichloropropane	25.0	24.5	98.0	73.0-130	
1,2,4-Trimethylbenzene	25.0	24.7	98.8	76.0-121	
1,2,3-Trimethylbenzene	25.0	23.8	95.2	77.0-120	
1,3,5-Trimethylbenzene	25.0	24.7	98.8	76.0-122	
Vinyl acetate	125	88.5	70.8	11.0-160	
Vinyl chloride	25.0	21.0	84.0	67.0-131	
Xylenes, Total	75.0	72.0	96.0	79.0-123	
(S) Toluene-d8			99.9	80.0-120	
(S) 4-Bromofluorobenzene			105	77.0-126	
(S) 1,2-Dichloroethane-d4			98.5	70.0-130	

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1152823-01.03.04.05.06](#)

Method Blank (MB)

(MB) R3467086-3 10/29/19 18:32

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
cis-1,2-Dichloroethene	0.167	J	0.0933	0.500
Tetrachloroethene	U		0.199	0.500
(S) Toluene-d8	104			80.0-120
(S) 4-Bromofluorobenzene	97.9			77.0-126
(S) 1,2-Dichloroethane-d4	97.1			70.0-130

Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3467086-1 10/29/19 17:35 • (LCSD) R3467086-2 10/29/19 17:54

Analyte	Spike Amount	LCS Result	LCSD Result	LCS Rec.	LCSD Rec.	Rec. Limits	LCS Qualifier	LCSD Qualifier	RPD	RPD Limits
	ug/l	ug/l	ug/l	%	%	%			%	%
cis-1,2-Dichloroethene	5.00	4.96	5.27	99.2	105	73.0-120			6.06	20
Tetrachloroethene	5.00	5.06	5.67	101	113	72.0-132			11.4	20
(S) Toluene-d8				104	104	80.0-120				
(S) 4-Bromofluorobenzene				99.8	98.6	77.0-126				
(S) 1,2-Dichloroethane-d4				98.8	96.4	70.0-130				

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1152823-07.108](#)

Method Blank (MB)

(MB) R3467617-4 10/31/19 20:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Acetone	U		1.05	25.0
Acrylonitrile	U		0.873	5.00
Benzene	U		0.0896	0.500
Bromobenzene	U		0.133	0.500
Bromodichloromethane	U		0.0800	0.500
Bromochloromethane	U		0.145	0.500
Bromoform	U		0.186	0.500
Bromomethane	U		0.157	2.50
n-Butylbenzene	U		0.143	0.500
sec-Butylbenzene	U		0.134	0.500
tert-Butylbenzene	U		0.183	0.500
Carbon disulfide	U		0.101	0.500
Carbon tetrachloride	U		0.159	0.500
Chlorobenzene	U		0.140	0.500
Chlorodibromomethane	U		0.128	0.500
Chloroethane	U		0.141	2.50
Chloroform	U		0.0860	0.500
Chloromethane	U		0.153	1.25
2-Chlorotoluene	U		0.111	0.500
4-Chlorotoluene	U		0.0972	0.500
1,2-Dibromo-3-Chloropropane	U		0.325	2.50
1,2-Dibromoethane	U		0.193	0.500
Dibromomethane	U		0.117	0.500
1,2-Dichlorobenzene	U		0.101	0.500
1,3-Dichlorobenzene	U		0.130	0.500
1,4-Dichlorobenzene	U		0.121	0.500
trans-1,4-Dichloro-2-butene	U		0.257	5.00
Dichlorodifluoromethane	U		0.127	2.50
1,1-Dichloroethane	U		0.114	0.500
1,2-Dichloroethane	U		0.108	0.500
1,1-Dichloroethene	U		0.188	0.500
cis-1,2-Dichloroethene	U		0.0933	0.500
trans-1,2-Dichloroethene	U		0.152	0.500
1,2-Dichloropropane	U		0.190	0.500
1,1-Dichloropropene	U		0.128	0.500
1,3-Dichloropropane	U		0.147	1.00
cis-1,3-Dichloropropene	U		0.0976	0.500
trans-1,3-Dichloropropene	U		0.222	0.500
2,2-Dichloropropane	U		0.0929	0.500
Di-isopropyl ether	U		0.0924	0.500

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Volatile Organic Compounds (GC/MS) by Method 8260C

[L1152823-07.08](#)

Method Blank (MB)

(MB) R3467617-4 10/31/19 20:42

Analyte	MB Result	MB Qualifier	MB MDL	MB RDL
	ug/l		ug/l	ug/l
Ethylbenzene	U		0.158	0.500
Hexachloro-1,3-butadiene	U		0.157	1.00
2-Hexanone	U		0.757	5.00
n-Hexane	U		0.305	5.00
Iodomethane	U		0.377	10.0
Isopropylbenzene	U		0.126	0.500
p-Isopropyltoluene	U		0.138	0.500
2-Butanone (MEK)	U		1.28	5.00
Methylene Chloride	U		1.07	2.50
4-Methyl-2-pentanone (MIBK)	U		0.823	5.00
Methyl tert-butyl ether	U		0.102	0.500
Naphthalene	U		0.174	2.50
n-Propylbenzene	U		0.162	0.500
Styrene	U		0.117	0.500
1,1,1,2-Tetrachloroethane	U		0.120	0.500
1,1,2,2-Tetrachloroethane	U		0.130	0.500
Tetrachloroethene	U		0.199	0.500
Toluene	U		0.412	0.500
1,1,2-Trichlorotrifluoroethane	U		0.164	0.500
1,2,3-Trichlorobenzene	U		0.164	0.500
1,2,4-Trichlorobenzene	U		0.355	0.500
1,1,1-Trichloroethane	U		0.0940	0.500
1,1,2-Trichloroethane	U		0.186	0.500
Trichloroethene	U		0.153	0.500
Trichlorofluoromethane	U		0.130	2.50
1,2,3-Trichloropropane	U		0.247	2.50
1,2,3-Trimethylbenzene	U		0.0739	0.500
1,2,4-Trimethylbenzene	U		0.123	0.500
1,3,5-Trimethylbenzene	U		0.124	0.500
Vinyl acetate	U		0.645	5.00
Vinyl chloride	U		0.118	0.500
Xylenes, Total	U		0.316	1.50
(S) Toluene-d8	114			80.0-120
(S) 4-Bromofluorobenzene	109			77.0-126
(S) 1,2-Dichloroethane-d4	98.7			70.0-130

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3467617-1 10/31/19 19:21 • (LCSD) R3467617-2 10/31/19 19:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Acetone	25.0	23.4	19.7	93.6	78.8	19.0-160			17.2	27
Acrylonitrile	25.0	24.3	22.1	97.2	88.4	55.0-149			9.48	20
Benzene	5.00	4.59	4.37	91.8	87.4	70.0-123			4.91	20
Bromobenzene	5.00	4.05	3.63	81.0	72.6	73.0-121		J4	10.9	20
Bromodichloromethane	5.00	4.88	4.63	97.6	92.6	75.0-120			5.26	20
Bromochloromethane	5.00	5.53	5.30	111	106	76.0-122			4.25	20
Bromoform	5.00	6.04	5.96	121	119	68.0-132			1.33	20
Bromomethane	5.00	4.96	4.93	99.2	98.6	10.0-160			0.607	25
n-Butylbenzene	5.00	4.12	3.69	82.4	73.8	73.0-125			11.0	20
sec-Butylbenzene	5.00	4.32	3.99	86.4	79.8	75.0-125			7.94	20
tert-Butylbenzene	5.00	4.74	4.25	94.8	85.0	76.0-124			10.9	20
Carbon disulfide	5.00	4.23	4.11	84.6	82.2	61.0-128			2.88	20
Carbon tetrachloride	5.00	5.45	5.40	109	108	68.0-126			0.922	20
Chlorobenzene	5.00	5.17	4.90	103	98.0	80.0-121			5.36	20
Chlorodibromomethane	5.00	5.80	5.64	116	113	77.0-125			2.80	20
Chloroethane	5.00	4.85	4.77	97.0	95.4	47.0-150			1.66	20
Chloroform	5.00	4.46	4.43	89.2	88.6	73.0-120			0.675	20
Chloromethane	5.00	4.07	4.10	81.4	82.0	41.0-142			0.734	20
2-Chlorotoluene	5.00	4.27	3.77	85.4	75.4	76.0-123		J4	12.4	20
4-Chlorotoluene	5.00	4.29	3.77	85.8	75.4	75.0-122			12.9	20
1,2-Dibromo-3-Chloropropane	5.00	5.35	4.77	107	95.4	58.0-134			11.5	20
1,2-Dibromoethane	5.00	5.25	4.94	105	98.8	80.0-122			6.08	20
Dibromomethane	5.00	5.04	5.16	101	103	80.0-120			2.35	20
1,2-Dichlorobenzene	5.00	5.27	4.84	105	96.8	79.0-121			8.51	20
1,3-Dichlorobenzene	5.00	5.06	4.57	101	91.4	79.0-120			10.2	20
1,4-Dichlorobenzene	5.00	4.54	4.32	90.8	86.4	79.0-120			4.97	20
trans-1,4-Dichloro-2-butene	5.00	3.69	3.14	73.8	62.8	33.0-144			16.1	20
Dichlorodifluoromethane	5.00	4.40	4.24	88.0	84.8	51.0-149			3.70	20
1,1-Dichloroethane	5.00	4.67	4.53	93.4	90.6	70.0-126			3.04	20
1,2-Dichloroethane	5.00	4.42	4.43	88.4	88.6	70.0-128			0.226	20
1,1-Dichloroethene	5.00	4.59	4.60	91.8	92.0	71.0-124			0.218	20
cis-1,2-Dichloroethene	5.00	4.65	4.78	93.0	95.6	73.0-120			2.76	20
trans-1,2-Dichloroethene	5.00	4.74	4.76	94.8	95.2	73.0-120			0.421	20
1,2-Dichloropropane	5.00	4.59	4.69	91.8	93.8	77.0-125			2.16	20
1,1-Dichloropropene	5.00	4.72	4.52	94.4	90.4	74.0-126			4.33	20
1,3-Dichloropropene	5.00	5.03	4.73	101	94.6	80.0-120			6.15	20
cis-1,3-Dichloropropene	5.00	4.61	4.47	92.2	89.4	80.0-123			3.08	20
trans-1,3-Dichloropropene	5.00	4.82	4.85	96.4	97.0	78.0-124			0.620	20
2,2-Dichloropropane	5.00	5.14	4.76	103	95.2	58.0-130			7.68	20
Diisopropyl ether	5.00	4.68	4.56	93.6	91.2	58.0-138			2.60	20

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Laboratory Control Sample (LCS) • Laboratory Control Sample Duplicate (LCSD)

(LCS) R3467617-1 10/31/19 19:21 • (LCSD) R3467617-2 10/31/19 19:41

Analyte	Spike Amount ug/l	LCS Result ug/l	LCSD Result ug/l	LCS Rec. %	LCSD Rec. %	Rec. Limits %	LCS Qualifier	LCSD Qualifier	RPD %	RPD Limits %
Ethylbenzene	5.00	4.92	4.74	98.4	94.8	79.0-123			3.73	20
Hexachloro-1,3-butadiene	5.00	4.63	4.21	92.6	84.2	54.0-138			9.50	20
2-Hexanone	25.0	24.8	24.3	99.2	97.2	67.0-149			2.04	20
n-Hexane	5.00	4.51	4.10	90.2	82.0	57.0-133			9.52	20
Iodomethane	25.0	26.8	26.3	107	105	33.0-147			1.88	26
Isopropylbenzene	5.00	5.34	4.93	107	98.6	76.0-127			7.98	20
p-Isopropyltoluene	5.00	4.64	4.12	92.8	82.4	76.0-125			11.9	20
2-Butanone (MEK)	25.0	24.4	22.4	97.6	89.6	44.0-160			8.55	20
Methylene Chloride	5.00	4.46	4.40	89.2	88.0	67.0-120			1.35	20
4-Methyl-2-pentanone (MIBK)	25.0	24.5	23.5	98.0	94.0	68.0-142			4.17	20
Methyl tert-butyl ether	5.00	5.04	4.80	101	96.0	68.0-125			4.88	20
Naphthalene	5.00	4.31	4.18	86.2	83.6	54.0-135			3.06	20
n-Propylbenzene	5.00	4.18	3.86	83.6	77.2	77.0-124			7.96	20
Styrene	5.00	5.15	5.00	103	100	73.0-130			2.96	20
1,1,1,2-Tetrachloroethane	5.00	5.56	5.44	111	109	75.0-125			2.18	20
1,1,2,2-Tetrachloroethane	5.00	4.03	3.79	80.6	75.8	65.0-130			6.14	20
Tetrachloroethene	5.00	5.40	5.28	108	106	72.0-132			2.25	20
Toluene	5.00	4.93	4.78	98.6	95.6	79.0-120			3.09	20
1,1,2-Trichlorotrifluoroethane	5.00	4.94	4.80	98.8	96.0	69.0-132			2.87	20
1,2,3-Trichlorobenzene	5.00	4.49	4.35	89.8	87.0	50.0-138			3.17	20
1,2,4-Trichlorobenzene	5.00	4.52	4.20	90.4	84.0	57.0-137			7.34	20
1,1,1-Trichloroethane	5.00	5.16	4.98	103	99.6	73.0-124			3.55	20
1,1,2-Trichloroethane	5.00	5.17	5.19	103	104	80.0-120			0.386	20
Trichloroethene	5.00	5.40	5.18	108	104	78.0-124			4.16	20
Trichlorofluoromethane	5.00	5.19	5.06	104	101	59.0-147			2.54	20
1,2,3-Trichloropropane	5.00	4.20	4.39	84.0	87.8	73.0-130			4.42	20
1,2,3-Trimethylbenzene	5.00	4.51	4.07	90.2	81.4	77.0-120			10.3	20
1,2,4-Trimethylbenzene	5.00	4.39	3.95	87.8	79.0	76.0-121			10.6	20
1,3,5-Trimethylbenzene	5.00	4.43	3.87	88.6	77.4	76.0-122			13.5	20
Vinyl acetate	25.0	23.3	22.4	93.2	89.6	11.0-160			3.94	20
Vinyl chloride	5.00	4.80	4.79	96.0	95.8	67.0-131			0.209	20
Xylenes, Total	15.0	15.3	14.7	102	98.0	79.0-123			4.00	20
<i>(S) Toluene-d8</i>										
<i>(S) 4-Bromofluorobenzene</i>										
<i>(S) 1,2-Dichloroethane-d4</i>										
				97.4	100	70.0-130				

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Guide to Reading and Understanding Your Laboratory Report

The information below is designed to better explain the various terms used in your report of analytical results from the Laboratory. This is not intended as a comprehensive explanation, and if you have additional questions please contact your project representative.

Results Disclaimer - Information that may be provided by the customer, and contained within this report, include Permit Limits, Project Name, Sample ID, Sample Matrix, Sample Preservation, Field Blanks, Field Spikes, Field Duplicates, On-Site Data, Sampling Collection Dates/Times, and Sampling Location. Results relate to the accuracy of this information provided, and as the samples are received.

Abbreviations and Definitions

MDL	Method Detection Limit.
ND	Not detected at the Reporting Limit (or MDL where applicable).
RDL	Reported Detection Limit.
Rec.	Recovery.
RPD	Relative Percent Difference.
SDG	Sample Delivery Group.
(S)	Surrogate (Surrogate Standard) - Analytes added to every blank, sample, Laboratory Control Sample/Duplicate and Matrix Spike/Duplicate; used to evaluate analytical efficiency by measuring recovery. Surrogates are not expected to be detected in all environmental media.
U	Not detected at the Reporting Limit (or MDL where applicable).
Analyte	The name of the particular compound or analysis performed. Some Analyses and Methods will have multiple analytes reported.
Dilution	If the sample matrix contains an interfering material, the sample preparation volume or weight values differ from the standard, or if concentrations of analytes in the sample are higher than the highest limit of concentration that the laboratory can accurately report, the sample may be diluted for analysis. If a value different than 1 is used in this field, the result reported has already been corrected for this factor.
Limits	These are the target % recovery ranges or % difference value that the laboratory has historically determined as normal for the method and analyte being reported. Successful QC Sample analysis will target all analytes recovered or duplicated within these ranges.
Original Sample	The non-spiked sample in the prep batch used to determine the Relative Percent Difference (RPD) from a quality control sample. The Original Sample may not be included within the reported SDG.
Qualifier	This column provides a letter and/or number designation that corresponds to additional information concerning the result reported. If a Qualifier is present, a definition per Qualifier is provided within the Glossary and Definitions page and potentially a discussion of possible implications of the Qualifier in the Case Narrative if applicable.
Result	The actual analytical final result (corrected for any sample specific characteristics) reported for your sample. If there was no measurable result returned for a specific analyte, the result in this column may state "ND" (Not Detected) or "BDL" (Below Detectable Levels). The information in the results column should always be accompanied by either an MDL (Method Detection Limit) or RDL (Reporting Detection Limit) that defines the lowest value that the laboratory could detect or report for this analyte.
Uncertainty (Radiochemistry)	Confidence level of 2 sigma.
Case Narrative (Cn)	A brief discussion about the included sample results, including a discussion of any non-conformances to protocol observed either at sample receipt by the laboratory from the field or during the analytical process. If present, there will be a section in the Case Narrative to discuss the meaning of any data qualifiers used in the report.
Quality Control Summary (Qc)	This section of the report includes the results of the laboratory quality control analyses required by procedure or analytical methods to assist in evaluating the validity of the results reported for your samples. These analyses are not being performed on your samples typically, but on laboratory generated material.
Sample Chain of Custody (Sc)	This is the document created in the field when your samples were initially collected. This is used to verify the time and date of collection, the person collecting the samples, and the analyses that the laboratory is requested to perform. This chain of custody also documents all persons (excluding commercial shippers) that have had control or possession of the samples from the time of collection until delivery to the laboratory for analysis.
Sample Results (Sr)	This section of your report will provide the results of all testing performed on your samples. These results are provided by sample ID and are separated by the analyses performed on each sample. The header line of each analysis section for each sample will provide the name and method number for the analysis reported.
Sample Summary (Ss)	This section of the Analytical Report defines the specific analyses performed for each sample ID, including the dates and times of preparation and/or analysis.

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Qualifier Description

B	The same analyte is found in the associated blank.
J	The identification of the analyte is acceptable; the reported value is an estimate.
J0	J0: The identification of the analyte is acceptable, but the reported concentration is an estimate. The calibration method criteria.
J1	Surrogate recovery limits have been exceeded; values are outside upper control limits.
J2	Surrogate recovery limits have been exceeded; values are outside lower control limits.
J4	The associated batch QC was outside the established quality control range for accuracy.



Pace National is the only environmental laboratory accredited/certified to support your work nationwide from one location. One phone call, one point of contact, one laboratory. No other lab is as accessible or prepared to handle your needs throughout the country. Our capacity and capability from our single location laboratory is comparable to the collective totals of the network laboratories in our industry. The most significant benefit to our one location design is the design of our laboratory campus. The model is conducive to accelerated productivity, decreasing turn-around time, and preventing cross contamination, thus protecting sample integrity. Our focus on premium quality and prompt service allows us to be YOUR LAB OF CHOICE.

* Not all certifications held by the laboratory are applicable to the results reported in the attached report.
 * Accreditation is only applicable to the test methods specified on each scope of accreditation held by Pace National.

State Accreditations

Alabama	40660	Nebraska	NE-OS-15-05
Alaska	17-026	Nevada	TN-03-2002-34
Arizona	AZ0612	New Hampshire	2975
Arkansas	88-0469	New Jersey-NELAP	TN002
California	2932	New Mexico ¹	n/a
Colorado	TN00003	New York	11742
Connecticut	PH-0197	North Carolina	Env375
Florida	E87487	North Carolina ¹	DW21704
Georgia	NELAP	North Carolina ³	41
Georgia ¹	923	North Dakota	R-140
Idaho	TN00003	Ohio-VAP	CL0069
Illinois	200008	Oklahoma	9915
Indiana	C-TN-01	Oregon	TN200002
Iowa	364	Pennsylvania	68-02979
Kansas	E-10277	Rhode Island	LA000356
Kentucky ^{1,6}	90010	South Carolina	84004
Kentucky ²	16	South Dakota	n/a
Louisiana	AI30792	Tennessee ^{1,4}	2006
Louisiana ¹	LA180010	Texas	T104704245-18-15
Maine	TN0002	Texas ⁵	LAB0152
Maryland	324	Utah	TN00003
Massachusetts	M-TN003	Vermont	VT2006
Michigan	9958	Virginia	460132
Minnesota	047-999-395	Washington	C847
Mississippi	TN00003	West Virginia	233
Missouri	340	Wisconsin	9980939910
Montana	CERT0086	Wyoming	A2LA

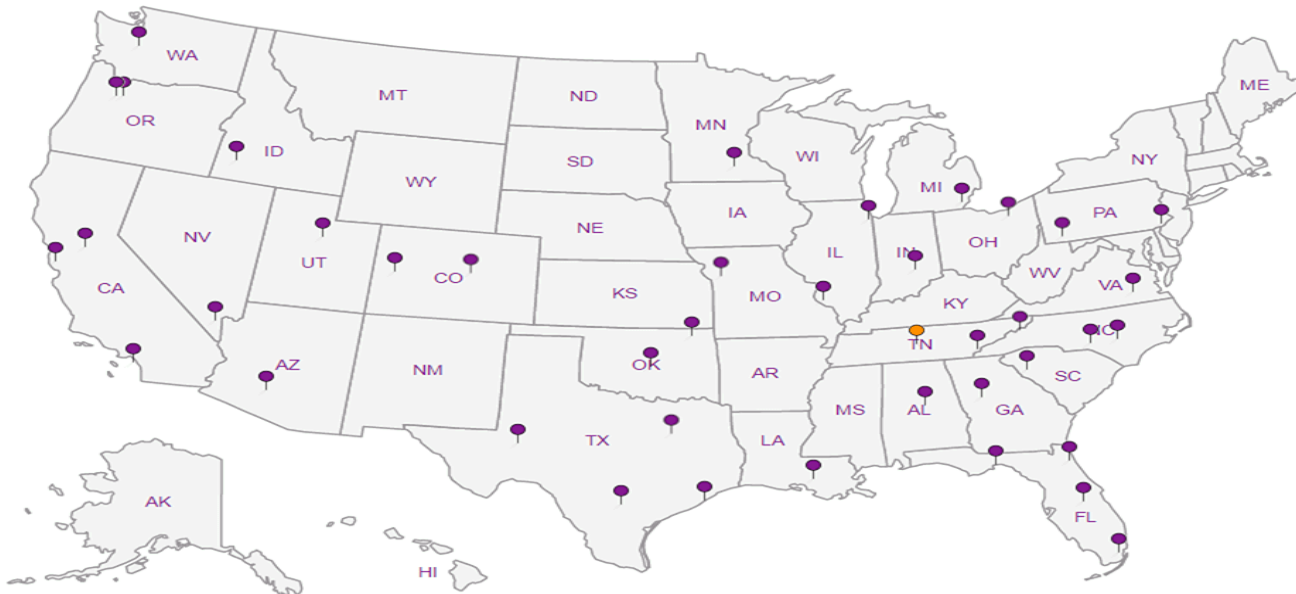
Third Party Federal Accreditations

A2LA – ISO 17025	1461.01	AIHA-LAP,LLC EMLAP	100789
A2LA – ISO 17025 ⁵	1461.02	DOD	1461.01
Canada	1461.01	USDA	P330-15-00234
EPA-Crypto	TN00003		

¹ Drinking Water ² Underground Storage Tanks ³ Aquatic Toxicity ⁴ Chemical/Microbiological ⁵ Mold ⁶ Wastewater n/a Accreditation not applicable

Our Locations

Pace National has sixty-four client support centers that provide sample pickup and/or the delivery of sampling supplies. If you would like assistance from one of our support offices, please contact our main office. Pace National performs all testing at our central laboratory.



1 Cp

2 Tc

3 Ss

4 Cn

5 Sr

6 Qc

7 Gl

8 Al

9 Sc

Report to: **Bill Haldeman/Brian O'neal**
 Email To: on file
 Project: **American Linn**
 Description: **American Linn**
 City/State: **Seattle, WA**
 Client Project #: **1413.001.02.501 E**
 Lab Project #: **PESENVSWA-ALP**
 P.O. #
 Site/Facility ID #: **American Linn**
 Collected by (signature): **BLH/HRC**
 Rush? (Lab MUST Be Notified)
 Same Day Five Day
 Next Day 5 Day (Rad Only)
 Two Day 10 Day (Rad Only)
 Three Day
 Date Results Needed
 Immediately N Y
 Packed on Ice N Y

Sample ID	Comp/Grab	Matrix *	Depth	Date	Time	No. of Cntrs	Quote #
MW-918-102219	Grab	GW	35	10-22-19	0930	12	
MW116-102219		GW	40		1005	9	
MW113-102219		GW	75		1045	9	
MW115-102219		GW	40		1105	12	
BB8-102219		GW	35		1250	12	
MW105-102219		GW	135		1300	12	
MW-99-102219		GW	135		1400	12	
EQ-102219		GW	-		1500	12	
TRIP-102219		GW	-		1530	1	

NO3,SO4,Chloride48 hour hold	
NWTPHGX	
VOCs (V8260LLC)	
Total Fe Mn 6020	u u
TOC	u u
Alkalinity	
EEM (RSK175LL)	

* Matrix: **SS - Soil AIR - Air F - Filter**
GW - Groundwater B - Blossay
DW - Drinking Water
OT - Other
 Relinquished by: (Signature) **[Signature]** Date: **10-22-19** Time: **1600**
 Relinquished by: (Signature) **[Signature]** Date: **10-22-19** Time: **1600**

Remarks: **Tracking # 1203 5724 6529**
 Received by: (Signature) **[Signature]**
 Received by: (Signature) **[Signature]**
 Trip Blank Received: Yes No
 HCL Mech TBR
 pH _____ Temp _____
 Flow _____ Other _____
 Temp: **2.81-2.98** °C Bottles Received: **82**
 Date: **10/23/19** Time: **8:46**
 Received for lab by: (Signature) **[Signature]**
 Received by: (Signature) **[Signature]**
 Date: **10/23/19** Time: **8:46**

12065 Lebanon Rd
 Mount Juliet, TN 37122
 Phone: 615-758-5858
 Phone: 800-767-5859
 Fax: 615-758-5859

Pace Analytical
 National Center for Testing & Innovation
 Accum: **PESENVSWA**
 Template:
 Prelogin:
 TSP: **Brian Ford**
 PB:
 Shipped Via:
 Remarks: **L # 1152823 F190**
 Sample # (lab only): **-01**

Relinquished by: (Signature) **[Signature]** Date: _____ Time: _____
 Relinquished by: (Signature) **[Signature]** Date: _____ Time: _____
 Condition: **OK**

Sample Receipt Checklist
 COC Seal Present/Intact: NP Y N
 COC Signed/Accurate: X Y N
 Bottles arrive Intact: X Y N
 Correct bottles used: X Y N
 Sufficient volume sent: X Y N
 If Applicable
 YOA zero Headspace: Y N
 Preservation Correct/Checked: Y N
NO CORRECT <0.5 mPa
 If preservation required by Login: Date/Time
 Hold: _____ Condition: **OK**

Matt Shacklock



Login #: L1152823	Client: PESEBVSWA	Date: 10/23	Evaluated by: Kelsey S
-------------------	-------------------	-------------	------------------------

Non-Conformance (check applicable items)

Sample Integrity		Chain of Custody Clarification	
Parameter(s) past holding time	x	Login Clarification Needed	If Broken Container:
Temperature not in range		Chain of custody is incomplete	Insufficient packing material around container
Improper container type		Please specify Metals requested.	Insufficient packing material inside cooler
pH not in range.		Please specify TCLP requested.	Improper handling by carrier (FedEx / UPS / Courie
Insufficient sample volume.		Received additional samples not listed on coc.	Sample was frozen
Sample is biphasic.		Sample ids on containers do not match ids on coc	Container lid not intact
Vials received with headspace.		Trip Blank not received.	If no Chain of Custody:
Broken container		Client did not "X" analysis.	Received by:
Broken container:		Chain of Custody is missing	Date/Time:
Sufficient sample remains			Temp./Cont. Rec./pH:
			Carrier:
			Tracking#

Login Comments: All 5 vials for MW-116-102219 received empty.

Client informed by:	Call	Email x	Voice Mail	Date: 10/23/19	Time: 1200
TSR Initials: bjf	Client Contact: PMs				

Login Instructions:

For **MW-116-102219** , proceed with all analyses marked on the COC except VOCs by 8260.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

SEATTLE, WA 11720 NORTH CREEK PKWY N, SUITE 400
BOTHELL, WA 98011-8244
PH: (425) 420.9200 FAX: (425) 420.9210

February 11, 2009

Matthew Dalton
Dalton, Olmsted and Fuglevand
6034 N Star Rd.
Ferndale, WA 98248

RE: American Linen

Enclosed are the results of analyses for samples received by the laboratory on 01/30/09 15:15.
The following list is a summary of the Work Orders contained in this report, generated on 02/11/09
14:04.

If you have any questions concerning this report, please feel free to contact me.

<u>Work Order</u>	<u>Project</u>	<u>ProjectNumber</u>
BSA0257	American Linen	SUM-005

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand
 6034 N Star Rd.
 Ferndale, WA 98248
Project Name: **American Linen**

Project Number: SUM-005

Project Manager: Matthew Dalton

Report Created:

02/11/09 14:04

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
R-MW1	BSA0257-01	Water	01/29/09 14:00	01/30/09 15:15
R-MW2	BSA0257-02	Water	01/29/09 16:00	01/30/09 15:15
R-MW-3	BSA0257-03	Water	01/29/09 15:00	01/30/09 15:15
R-MW5	BSA0257-04	Water	01/30/09 11:00	01/30/09 15:15
R-MW6	BSA0257-05	Water	01/30/09 09:00	01/30/09 15:15
G-MW1	BSA0257-06	Water	01/29/09 13:00	01/30/09 15:15
G-MW2	BSA0257-07	Water	01/29/09 12:00	01/30/09 15:15
G-MW3	BSA0257-08	Water	01/30/09 08:00	01/30/09 15:15
BB-B	BSA0257-09	Water	01/30/09 12:00	01/30/09 15:15
BB-BA	BSA0257-10	Water	01/30/09 13:00	01/30/09 15:15

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand

6034 N Star Rd.
 Ferndale, WA 98248

Project Name: **American Linen**

Project Number: SUM-005

Project Manager: Matthew Dalton

Report Created:

02/11/09 14:04

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
---------	--------	--------	------	-----	-------	-----	-------	----------	----------	-------

BSA0257-01 (R-MW1)		Water				Sampled: 01/29/09 14:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	9B02031	02/02/09 13:45	02/04/09 02:42	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			89.3%		70 - 145 %	"				"
4-BFB (PID)			104%		80 - 130 %	"				"

BSA0257-02 (R-MW2)		Water				Sampled: 01/29/09 16:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	657	----	50.0	ug/l	1x	9B02031	02/02/09 13:45	02/04/09 10:48	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	0.557	----	0.500	"	"	"	"	"	
Ethylbenzene	"	0.513	----	0.500	"	"	"	"	"	
Xylenes (total)	"	2.08	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			117%		70 - 145 %	"				"
4-BFB (PID)			108%		80 - 130 %	"				"

BSA0257-03 (R-MW-3)		Water				Sampled: 01/29/09 15:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	9B02031	02/02/09 13:45	02/03/09 20:12	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			91.2%		70 - 145 %	"				"
4-BFB (PID)			101%		80 - 130 %	"				"

BSA0257-04 (R-MW5)		Water				Sampled: 01/30/09 11:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	9B02031	02/02/09 13:45	02/03/09 20:45	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
Surrogate(s): 4-BFB (FID)			89.9%		70 - 145 %	"				"
4-BFB (PID)			99.0%		80 - 130 %	"				"

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-05 (R-MW6)		Water				Sampled: 01/30/09 09:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	ND	----	50.0	ug/l	1x	9B02031	02/02/09 13:45	02/03/09 21:17	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	C
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
<i>Surrogate(s): 4-BFB (FID)</i>				88.3%		70 - 145 %	"			
<i>4-BFB (PID)</i>				98.9%		80 - 130 %	"			

BSA0257-06 (G-MW1)		Water				Sampled: 01/29/09 13:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	41300	----	2000	ug/l	40x	9B02031	02/02/09 13:45	02/04/09 07:01	QP
Benzene	"	ND	----	20.0	"	"	"	"	"	
Toluene	"	ND	----	20.0	"	"	"	"	"	
Ethylbenzene	"	28.6	----	20.0	"	"	"	"	"	
Xylenes (total)	"	55.1	----	40.0	"	"	"	"	"	
<i>Surrogate(s): 4-BFB (FID)</i>				91.9%		70 - 145 %	1x			
<i>4-BFB (PID)</i>				100%		80 - 130 %	"			

BSA0257-07 (G-MW2)		Water				Sampled: 01/29/09 12:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	39600	----	2000	ug/l	40x	9B02031	02/02/09 13:45	02/04/09 07:34	QP
Benzene	"	ND	----	20.0	"	"	"	"	"	
Toluene	"	ND	----	20.0	"	"	"	"	"	
Ethylbenzene	"	ND	----	20.0	"	"	"	"	"	
Xylenes (total)	"	48.9	----	40.0	"	"	"	"	"	
<i>Surrogate(s): 4-BFB (FID)</i>				87.9%		70 - 145 %	1x			
<i>4-BFB (PID)</i>				104%		80 - 130 %	"			

BSA0257-08 (G-MW3)		Water				Sampled: 01/30/09 08:00				
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	26600	----	1250	ug/l	25x	9B02031	02/02/09 13:45	02/04/09 11:21	QP
Benzene	"	ND	----	12.5	"	"	"	"	"	
Toluene	"	ND	----	12.5	"	"	"	"	"	
Ethylbenzene	"	ND	----	12.5	"	"	"	"	"	
Xylenes (total)	"	ND	----	25.0	"	"	"	"	"	
<i>Surrogate(s): 4-BFB (FID)</i>				89.0%		70 - 145 %	1x			
<i>4-BFB (PID)</i>				104%		80 - 130 %	"			

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-09 (BB-B)		Water			Sampled: 01/30/09 12:00					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	499	----	50.0	ug/l	1x	9B02031	02/02/09 13:45	02/03/09 22:22	
Benzene	"	0.694	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
<i>Surrogate(s):</i>	<i>4-BFB (FID)</i>			<i>91.0%</i>		<i>70 - 145 %</i>	"			
	<i>4-BFB (PID)</i>			<i>104%</i>		<i>80 - 130 %</i>	"			

BSA0257-10 (BB-BA)		Water			Sampled: 01/30/09 13:00					
Gasoline Range Hydrocarbons	NWTPH-Gx/802 1B	669	----	50.0	ug/l	1x	9B02031	02/02/09 13:45	02/04/09 03:14	
Benzene	"	ND	----	0.500	"	"	"	"	"	
Toluene	"	ND	----	0.500	"	"	"	"	"	
Ethylbenzene	"	ND	----	0.500	"	"	"	"	"	
Xylenes (total)	"	ND	----	1.00	"	"	"	"	"	
<i>Surrogate(s):</i>	<i>4-BFB (FID)</i>			<i>90.2%</i>		<i>70 - 145 %</i>	"			
	<i>4-BFB (PID)</i>			<i>102%</i>		<i>80 - 130 %</i>	"			

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-01 (R-MWI)		Water			Sampled: 01/29/09 14:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 18:08	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	1.60	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
Tetrachloroethene	"	17.1	----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichloroethene	"	4.26	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	0.630	----	0.200	"	"	"	"	"	
<i>Surrogate(s):</i>										
	<i>1,2-DCA-d4</i>		<i>96.0%</i>			<i>76 - 138%</i>				
	<i>Toluene-d8</i>		<i>99.9%</i>			<i>80 - 120%</i>				
	<i>4-BFB</i>		<i>103%</i>			<i>80 - 120%</i>				

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-02 (R-MW2)		Water			Sampled: 01/29/09 16:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 18:37	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
Tetrachloroethene	"	5.05	----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.200	"	"	"	"	"	
<i>Surrogate(s):</i>	<i>1,2-DCA-d4</i>		<i>97.8%</i>		<i>76 - 138%</i>	"				"
	<i>Toluene-d8</i>		<i>99.2%</i>		<i>80 - 120%</i>	"				"
	<i>4-BFB</i>		<i>102%</i>		<i>80 - 120%</i>	"				"

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-03 (R-MW-3)		Water			Sampled: 01/29/09 15:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 19:06	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
Tetrachloroethene	"	4.26	----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.200	"	"	"	"	"	
<hr/>										
Surrogate(s):	1,2-DCA-d4		94.2%		76 - 138%	"				"
	Toluene-d8		99.6%		80 - 120%	"				"
	4-BFB		104%		80 - 120%	"				"

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-04 (R-MW5)		Water			Sampled: 01/30/09 11:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 19:35	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
Tetrachloroethene	"	0.800	----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.200	"	"	"	"	"	
<hr/>										
Surrogate(s):	1,2-DCA-d4		98.8%		76 - 138%	"				"
	Toluene-d8		100%		80 - 120%	"				"
	4-BFB		104%		80 - 120%	"				"

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-05 (R-MW6)		Water			Sampled: 01/30/09 09:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 20:04	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	2.64	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
Tetrachloroethene	"	1.78	----	0.200	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichloroethene	"	ND	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	2.75	----	0.200	"	"	"	"	"	
<i>Surrogate(s):</i>	<i>1,2-DCA-d4</i>			<i>102%</i>						<i>96 - 138%</i>
	<i>Toluene-d8</i>			<i>101%</i>						<i>80 - 120%</i>
	<i>4-BFB</i>			<i>102%</i>						<i>80 - 120%</i>

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-06 (G-MWT)		Water			Sampled: 01/29/09 13:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 20:33	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	0.500	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	0.320	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	0.460	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	60.1	----	0.200	"	"	"	"	"	
cis-1,2-Dichloroethene	"	34.4	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	1.49	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	----	0.200	"	"	"	"	"	
<i>Surrogate(s):</i>	<i>1,2-DCA-d4</i>		<i>104%</i>		<i>76 - 138%</i>	"				
	<i>Toluene-d8</i>		<i>127%</i>		<i>80 - 120%</i>	"				<i>ZX</i>
	<i>4-BFB</i>		<i>95.0%</i>		<i>80 - 120%</i>	"				

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name: American Linen Project Number: SUM-005 Project Manager: Matthew Dalton	Report Created: 02/11/09 14:04
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Volatile Organic Compounds by EPA Method 8260B
TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
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BSA0257-06RE1 (G-MW1)		Water			Sampled: 01/29/09 13:00					
Trichloroethene	EPA 8260B	1160	---	40.0	ug/l	200x	9B05010	02/05/09 14:33	02/05/09 15:46	
Surrogate(s):										
	1,2-DCA-d4		101%		76 - 138%	1x				"
	Toluene-d8		102%		80 - 120%	"				"
	4-BFB		104%		80 - 120%	"				"

BSA0257-06RE2 (G-MW1)		Water			Sampled: 01/29/09 13:00					
Tetrachloroethene	EPA 8260B	78400	---	400	ug/l	2000x	9B05010	02/05/09 14:33	02/05/09 21:42	BI
Surrogate(s):										
	1,2-DCA-d4		103%		76 - 138%	1x				"
	Toluene-d8		104%		80 - 120%	"				"
	4-BFB		103%		80 - 120%	"				"

BSA0257-07 (G-MW2)		Water			Sampled: 01/29/09 12:00					
Bromochloromethane	EPA 8260B	ND	---	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 21:02	
Bromodichloromethane	"	ND	---	0.200	"	"	"	"	"	
Bromoform	"	ND	---	0.250	"	"	"	"	"	
Bromomethane	"	ND	---	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	---	0.200	"	"	"	"	"	
Chlorobenzene	"	0.720	---	0.200	"	"	"	"	"	
Chloroethane	"	ND	---	1.00	"	"	"	"	"	
Chloroform	"	2.79	---	0.200	"	"	"	"	"	
Chloromethane	"	ND	---	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	---	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	---	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	---	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	---	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	---	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	---	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	1.31	---	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	1.33	---	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	---	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	---	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	---	0.200	"	"	"	"	"	
Methylene chloride	"	ND	---	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0.500	"	"	"	"	"	
1,1,1-Trichloroethane	"	5.54	---	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	---	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	---	0.500	"	"	"	"	"	
Vinyl chloride	"	ND	---	0.200	"	"	"	"	"	
Surrogate(s):										
	1,2-DCA-d4		98.0%		76 - 138%	"				"
	Toluene-d8		134%		80 - 120%	"				ZX

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name: American Linen Project Number: SUM-005 Project Manager: Matthew Dalton	Report Created: 02/11/09 14:04
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Volatile Organic Compounds by EPA Method 8260B
TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-07 (G-MW2)		Water		Sampled: 01/29/09 12:00						
<i>4-BFB</i>		94.8%		80 - 120%		1x			02/02/09 21:02	
BSA0257-07RE1 (G-MW2)		Water		Sampled: 01/29/09 12:00						
Tetrachloroethene	EPA 8260B	59000	----	400	ug/l	2000x	9B05010	02/05/09 14:33	02/05/09 22:12	BI
<i>Surrogate(s): 1,2-DCA-d4</i>		100%		76 - 138%		1x			"	
<i>Toluene-d8</i>		106%		80 - 120%		"			"	
<i>4-BFB</i>		111%		80 - 120%		"			"	
BSA0257-07RE2 (G-MW2)		Water		Sampled: 01/29/09 12:00						
cis-1,2-Dichloroethene	EPA 8260B	373	----	2.00	ug/l	10x	9B05010	02/05/09 14:33	02/05/09 23:10	
Trichloroethene	"	210	----	2.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		84.7%		76 - 138%		1x			"	
<i>Toluene-d8</i>		109%		80 - 120%		"			"	
<i>4-BFB</i>		105%		80 - 120%		"			"	
BSA0257-08 (G-MW3)		Water		Sampled: 01/30/09 08:00						
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 21:31	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	0.220	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	0.410	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	18.9	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	13.9	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	

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Curtis D. Armstrong, Project Manager



Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B
 TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
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BSA0257-08 (G-MW3)		Water			Sampled: 01/30/09 08:00					
Trichlorofluoromethane	EPA 8260B	ND	----	0.500	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 21:31	
Vinyl chloride	"	ND	----	0.200	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				93.2%		76 - 138%	"		"	
<i>Toluene-d8</i>				135%		80 - 120%	"		"	ZX
<i>4-BFB</i>				94.0%		80 - 120%	"		"	

BSA0257-08RE1 (G-MW3)		Water			Sampled: 01/30/09 08:00					
cis-1,2-Dichloroethene	EPA 8260B	4050	----	40.0	ug/l	200x	9B05010	02/05/09 14:33	02/05/09 19:46	
Trichloroethene	"	1580	----	40.0	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				103%		76 - 138%	1x		"	
<i>Toluene-d8</i>				105%		80 - 120%	"		"	
<i>4-BFB</i>				103%		80 - 120%	"		"	

BSA0257-08RE2 (G-MW3)		Water			Sampled: 01/30/09 08:00					
Tetrachloroethene	EPA 8260B	64000	----	400	ug/l	2000x	9B06009	02/06/09 13:00	02/06/09 19:33	BI
<i>Surrogate(s): 1,2-DCA-d4</i>				105%		76 - 138%	1x		"	
<i>Toluene-d8</i>				103%		80 - 120%	"		"	
<i>4-BFB</i>				105%		80 - 120%	"		"	

BSA0257-09 (BB-B)		Water			Sampled: 01/30/09 12:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 22:00	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	1.36	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	2.45	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	

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Curtis D. Armstrong, Project Manager



Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name: American Linen Project Number: SUM-005 Project Manager: Matthew Dalton	Report Created: 02/11/09 14:04
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Volatile Organic Compounds by EPA Method 8260B
TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
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BSA0257-09 (BB-B)		Water			Sampled: 01/30/09 12:00					
Methylene chloride	EPA 8260B	ND	----	5.00	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 22:00	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	1.48	----	0.200	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				<i>91.7%</i>						<i>76 - 138%</i>
<i>Toluene-d8</i>				<i>102%</i>						<i>80 - 120%</i>
<i>4-BFB</i>				<i>103%</i>						<i>80 - 120%</i>

BSA0257-09RE1 (BB-B)		Water			Sampled: 01/30/09 12:00					
cis-1,2-Dichloroethene	EPA 8260B	441	----	8.00	ug/l	50x	9B05010	02/05/09 14:33	02/05/09 20:44	
Tetrachloroethene	"	896	----	8.00	"	"	"	"	"	B1
Trichloroethene	"	258	----	8.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				<i>104%</i>						<i>76 - 138%</i>
<i>Toluene-d8</i>				<i>103%</i>						<i>80 - 120%</i>
<i>4-BFB</i>				<i>104%</i>						<i>80 - 120%</i>

BSA0257-10 (BB-BA)		Water			Sampled: 01/30/09 13:00					
Bromochloromethane	EPA 8260B	ND	----	0.250	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 22:28	
Bromodichloromethane	"	ND	----	0.200	"	"	"	"	"	
Bromoform	"	ND	----	0.250	"	"	"	"	"	
Bromomethane	"	ND	----	2.00	"	"	"	"	"	
Carbon tetrachloride	"	ND	----	0.200	"	"	"	"	"	
Chlorobenzene	"	ND	----	0.200	"	"	"	"	"	
Chloroethane	"	ND	----	1.00	"	"	"	"	"	
Chloroform	"	ND	----	0.200	"	"	"	"	"	
Chloromethane	"	ND	----	1.00	"	"	"	"	"	
Dibromochloromethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,2-Dichloroethane	"	ND	----	0.200	"	"	"	"	"	
1,1-Dichloroethene	"	1.59	----	0.200	"	"	"	"	"	
trans-1,2-Dichloroethene	"	2.96	----	0.200	"	"	"	"	"	
1,2-Dichloropropane	"	ND	----	0.200	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	----	0.200	"	"	"	"	"	
Methylene chloride	"	ND	----	5.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	----	0.500	"	"	"	"	"	

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and FuglevandProject Name: **American Linen**

6034 N Star Rd.

Project Number: SUM-005

Report Created:

Ferndale, WA 98248

Project Manager: Matthew Dalton

02/11/09 14:04

Volatile Organic Compounds by EPA Method 8260B

TestAmerica Seattle

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
BSA0257-10 (BB-BA)		Water		Sampled: 01/30/09 13:00						
1,1,1-Trichloroethane	EPA 8260B	ND	----	0.200	ug/l	1x	9B02024	02/02/09 12:57	02/02/09 22:28	
1,1,2-Trichloroethane	"	ND	----	0.200	"	"	"	"	"	
Trichlorofluoromethane	"	ND	----	0.500	"	"	"	"	"	
Vinyl chloride	"	3.86	----	0.200	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				<i>91.4%</i>		<i>76 - 138%</i>	"			"
<i>Toluene-d8</i>				<i>102%</i>		<i>80 - 120%</i>	"			"
<i>4-BFB</i>				<i>104%</i>		<i>80 - 120%</i>	"			"
BSA0257-10RE1 (BB-BA)		Water		Sampled: 01/30/09 13:00						
cis-1,2-Dichloroethene	EPA 8260B	549	----	8.00	ug/l	40x	9B05010	02/05/09 14:33	02/05/09 21:13	
Tetrachloroethene	"	1290	----	8.00	"	"	"	"	"	BI
Trichloroethene	"	285	----	8.00	"	"	"	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>				<i>103%</i>		<i>76 - 138%</i>	<i>1x</i>			"
<i>Toluene-d8</i>				<i>104%</i>		<i>80 - 120%</i>	"			"
<i>4-BFB</i>				<i>104%</i>		<i>80 - 120%</i>	"			"

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name: American Linen Project Number: SUM-005 Project Manager: Matthew Dalton	Report Created: 02/11/09 14:04
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Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results
 TestAmerica Seattle

QC Batch: 9B02031 Water Preparation Method: EPA 5030B (P/T)

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes		
Blank (9B02031-BLK1)													Extracted: 02/02/09 13:45			
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	--	--	--	--	--	--	02/03/09 14:14			
Benzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"			
Toluene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"			
Ethylbenzene	"	ND	---	0.500	"	"	--	--	--	--	--	--	"			
Xylenes (total)	"	ND	---	1.00	"	"	--	--	--	--	--	--	"			
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 88.7%</i>		<i>Limits: 70-145%</i>										02/03/09 14:14		
<i>4-BFB (PID)</i>		<i>101%</i>		<i>80-130%</i>										"		
LCS (9B02031-BS1)													Extracted: 02/02/09 13:45			
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	1080	---	50.0	ug/l	1x	--	1000	108%	(80-120)	--	--	02/03/09 14:47			
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 98.3%</i>		<i>Limits: 70-145%</i>										02/03/09 14:47		
LCS (9B02031-BS2)													Extracted: 02/02/09 13:45			
Benzene	NWTPH-Gx/ 8021B	30.4	---	0.500	ug/l	1x	--	30.0	101%	(80-125)	--	--	02/03/09 15:20			
Toluene	"	32.4	---	0.500	"	"	--	"	108%	(80-120)	--	--	"			
Ethylbenzene	"	32.7	---	0.500	"	"	--	"	109%	(80-125)	--	--	"			
Xylenes (total)	"	97.8	---	1.00	"	"	--	99.0	109%	(75-120)	--	--	"			
<i>Surrogate(s): 4-BFB (PID)</i>		<i>Recovery: 101%</i>		<i>Limits: 80-130%</i>										02/03/09 15:20		
Duplicate (9B02031-DUP1)													QC Source: BSA0245-02		Extracted: 02/02/09 13:45	
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	761	---	250	ug/l	5x	2070	--	--	--	92.4%	(25)	02/04/09 12:59	R3		
Benzene	"	ND	---	2.50	"	"	ND	--	--	--	NR	"	"			
Toluene	"	ND	---	2.50	"	"	ND	--	--	--	56.1%	"	"	R4		
Ethylbenzene	"	23.3	---	2.50	"	"	66.6	--	--	--	96.4%	"	"	R3		
Xylenes (total)	"	66.8	---	5.00	"	"	182	--	--	--	92.7%	"	"	R3		
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 93.4%</i>		<i>Limits: 70-145%</i>		<i>1x</i>								02/04/09 12:59		
<i>4-BFB (PID)</i>		<i>104%</i>		<i>80-130%</i>		<i>"</i>								"		
Duplicate (9B02031-DUP2)													QC Source: BSA0245-03		Extracted: 02/02/09 13:45	
Gasoline Range Hydrocarbons	NWTPH-Gx/ 8021B	ND	---	50.0	ug/l	1x	ND	--	--	--	NR	(25)	02/03/09 17:30			
Benzene	"	ND	---	0.500	"	"	ND	--	--	--	"	"	"			
Toluene	"	ND	---	0.500	"	"	ND	--	--	--	NR	"	"			
Ethylbenzene	"	ND	---	0.500	"	"	ND	--	--	--	"	"	"	C		
Xylenes (total)	"	ND	---	1.00	"	"	ND	--	--	--	"	"	"			
<i>Surrogate(s): 4-BFB (FID)</i>		<i>Recovery: 88.9%</i>		<i>Limits: 70-145%</i>		<i>"</i>								02/03/09 17:30		
<i>4-BFB (PID)</i>		<i>101%</i>		<i>80-130%</i>		<i>"</i>								"		

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Gasoline Hydrocarbons (Benzene to Naphthalene) and BTEX by NWTPH-G and EPA 8021B - Laboratory Quality Control Results
 TestAmerica Seattle

QC Batch: 9B02031 Water Preparation Method: EPA 5030B (P/T)

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
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Matrix Spike (9B02031-MS1) QC Source: BSA0245-02 Extracted: 02/02/09 13:45

Gasoline Range Hydrocarbons	NWTPH-Gx/8021B	3450	---	50.0	ug/l	1x	2070	1000	138%	(70-135)	---	---	02/03/09 22:55	MI
<i>Surrogate(s): 4-BFB (PID)</i>		<i>Recovery: 180%</i>		<i>Limits: 70-145%</i>									02/03/09 22:55	ZX

Matrix Spike (9B02031-MS2) QC Source: BSA0245-03 Extracted: 02/02/09 13:45

Benzene	NWTPH-Gx/8021B	34.9	---	0.500	ug/l	1x	ND	30.0	116%	(60-135)	---	---	02/04/09 00:00	
Toluene	"	36.3	---	0.500	"	"	ND	"	121%	(65-135)	---	---	"	
Ethylbenzene	"	37.9	---	0.500	"	"	ND	"	126%	"	---	---	"	
Xylenes (total)	"	108	---	1.00	"	"	ND	90.0	121%	(65-130)	---	---	"	
<i>Surrogate(s): 4-BFB (PID)</i>		<i>Recovery: 99.4%</i>		<i>Limits: 80-130%</i>									02/04/09 00:00	

Matrix Spike Dup (9B02031-MSD1) QC Source: BSA0245-02 Extracted: 02/02/09 13:45

Gasoline Range Hydrocarbons	NWTPH-Gx/8021B	3380	---	50.0	ug/l	1x	2070	1000	132%	(70-135)	1.84%	(25)	02/03/09 23:27	
<i>Surrogate(s): 4-BFB (PID)</i>		<i>Recovery: 177%</i>		<i>Limits: 70-145%</i>									02/03/09 23:27	ZX

Matrix Spike Dup (9B02031-MSD2) QC Source: BSA0245-03 Extracted: 02/02/09 13:45

Benzene	NWTPH-Gx/8021B	33.9	---	0.500	ug/l	1x	ND	30.0	113%	(60-135)	3.11%	(25)	02/04/09 00:32	
Toluene	"	34.8	---	0.500	"	"	ND	"	116%	(65-135)	4.09%	"	"	
Ethylbenzene	"	36.1	---	0.500	"	"	ND	"	120%	"	5.08%	"	"	
Xylenes (total)	"	103	---	1.00	"	"	ND	90.0	115%	(65-130)	5.04%	"	"	
<i>Surrogate(s): 4-BFB (PID)</i>		<i>Recovery: 102%</i>		<i>Limits: 80-130%</i>									02/04/09 00:32	

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results
 TestAmerica Seattle

QC Batch: 9B02024 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9B02024-BL.K1)													Extracted: 02/02/09 12:57	
Bromochloromethane	EPA 8260B	ND	---	0.250	ug/l	1x	---	---	---	---	---	---	02/02/09 16:43	
Bromodichloromethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Bromoform	"	ND	---	0.250	"	"	---	---	---	---	---	---	"	
Bromomethane	"	ND	---	2.00	"	"	---	---	---	---	---	---	"	
Carbon tetrachloride	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chloroethane	"	ND	---	1.00	"	"	---	---	---	---	---	---	"	
Chloroform	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chloromethane	"	ND	---	1.00	"	"	---	---	---	---	---	---	"	
Dibromochloromethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,3-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,4-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1-Dichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
cis-1,2-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
trans-1,2-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichloropropane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
cis-1,3-Dichloropropene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
trans-1,3-Dichloropropene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Methylene chloride	"	ND	---	5.00	"	"	---	---	---	---	---	---	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0.500	"	"	---	---	---	---	---	---	"	
Tetrachloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1,1-Trichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1,2-Trichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Trichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Trichlorofluoromethane	"	ND	---	0.500	"	"	---	---	---	---	---	---	"	
Vinyl chloride	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Surrogate(s):	1,2-DCA-d4	Recovery:	95.2%	Limits:	76-138%	"							02/02/09 16:41	
	Toluene-d8		100%		80-120%	"							"	
	4-BFB		104%		80-120%	"							"	

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Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name: American Linen Project Number: SUM-005 Project Manager: Matthew Dalton	Report Created: 02/11/09 14:04
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Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results
 TestAmerica Seattle

QC Batch: 9B02024 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9B02024-BS1) Extracted: 02/02/09 12:57														
Chlorobenzene	EPA 8260B	38.3	---	0.200	ug/l	1x	---	40.0	95.8%	(80-120)	---	---	02/02/09 14:12	
1,1-Dichloroethene	"	35.2	---	0.200	"	"	---	"	87.9%	"	---	---	"	
Trichloroethene	"	36.6	---	0.200	"	"	---	"	91.5%	"	---	---	"	
<i>Surrogate(s): 1,2-DCA-d4 Recovery: 89.6% Limits: 76-138% "</i> 02/02/09 14:12														
<i>Toluene-d8 Recovery: 95.2% Limits: 80-120% "</i> "														
<i>4-BFB Recovery: 103% Limits: 80-120% "</i> "														

LCS Dup (9B02024-BSD1) Extracted: 02/02/09 12:57														
Chlorobenzene	EPA 8260B	39.0	---	0.200	ug/l	1x	---	40.0	97.6%	(80-120)	1.89%	(20)	02/02/09 14:41	
1,1-Dichloroethene	"	34.3	---	0.200	"	"	---	"	85.7%	"	2.53%	"	"	
Trichloroethene	"	36.2	---	0.200	"	"	---	"	90.6%	"	1.04%	"	"	
<i>Surrogate(s): 1,2-DCA-d4 Recovery: 87.0% Limits: 76-138% "</i> 02/02/09 14:41														
<i>Toluene-d8 Recovery: 97.1% Limits: 80-120% "</i> "														
<i>4-BFB Recovery: 101% Limits: 80-120% "</i> "														

QC Batch: 9B05010 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9B05010-BLK1) Extracted: 02/05/09 12:33														
Bromochloromethane	EPA 8260B	ND	---	0.250	ug/l	1x	---	---	---	---	---	---	02/05/09 14:48	
Bromodichloromethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Bromoform	"	ND	---	0.250	"	"	---	---	---	---	---	---	"	
Bromomethane	"	ND	---	2.00	"	"	---	---	---	---	---	---	"	
Carbon tetrachloride	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chloroethane	"	ND	---	1.00	"	"	---	---	---	---	---	---	"	
Chloroform	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chloromethane	"	ND	---	1.00	"	"	---	---	---	---	---	---	"	
Dibromochloromethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,3-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,4-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1-Dichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
cis-1,2-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
trans-1,2-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichloropropane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results
 TestAmerica Seattle

QC Batch: 9B05010 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9B05010-BLK1)														
Extracted: 02/05/09 12:33														
cis-1,3-Dichloropropene	EPA 8260B	ND	---	0.200	ug/l	1x	---	---	---	---	---	---	02/05/09 14:48	
trans-1,3-Dichloropropene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Methylene chloride	"	ND	---	5.00	"	"	---	---	---	---	---	---	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0.500	"	"	---	---	---	---	---	---	"	
Tetrachloroethene	"	0.430	---	0.200	"	"	---	---	---	---	---	---	"	B
1,1,1-Trichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1,2-Trichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Trichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Trichlorofluoromethane	"	ND	---	0.500	"	"	---	---	---	---	---	---	"	
Vinyl chloride	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	

<i>Surrogate(s):</i>	<i>1,2-DCA-d4</i>	<i>Recovery:</i>	<i>97.2%</i>	<i>Limits:</i>	<i>76-138%</i>	"							02/05/09 14:48	
	<i>Toluene-d8</i>		<i>102%</i>		<i>80-120%</i>	"							"	
	<i>4-BFB</i>		<i>104%</i>		<i>80-120%</i>	"							"	

LCS (9B05010-BS1)

Extracted: 02/05/09 12:33

Chlorobenzene	EPA 8260B	37.6	---	0.200	ug/l	1x	---	40.0	94.0%	(80-120)	---	---	02/05/09 12:46	
1,1-Dichloroethene	"	41.3	---	0.200	"	"	---	"	103%	"	---	---	"	
Trichloroethene	"	38.3	---	0.200	"	"	---	"	95.8%	"	---	---	"	
<i>Surrogate(s):</i>	<i>1,2-DCA-d4</i>	<i>Recovery:</i>	<i>95.4%</i>	<i>Limits:</i>	<i>76-138%</i>	"							02/05/09 12:46	
	<i>Toluene-d8</i>		<i>97.9%</i>		<i>80-120%</i>	"							"	
	<i>4-BFB</i>		<i>99.3%</i>		<i>80-120%</i>	"							"	

LCS Dup (9B05010-BSD1)

Extracted: 02/05/09 12:33

Chlorobenzene	EPA 8260B	39.1	---	0.200	ug/l	1x	---	40.0	97.8%	(80-120)	4.02%	(20)	02/05/09 13:15	
1,1-Dichloroethene	"	42.1	---	0.200	"	"	---	"	105%	"	1.82%	"	"	
Trichloroethene	"	39.3	---	0.200	"	"	---	"	98.2%	"	2.45%	"	"	
<i>Surrogate(s):</i>	<i>1,2-DCA-d4</i>	<i>Recovery:</i>	<i>92.5%</i>	<i>Limits:</i>	<i>76-138%</i>	"							02/05/09 13:15	
	<i>Toluene-d8</i>		<i>99.9%</i>		<i>80-120%</i>	"							"	
	<i>4-BFB</i>		<i>101%</i>		<i>80-120%</i>	"							"	

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatle Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results
 TestAmerica Seattle

QC Batch: 9B06009 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (9B06009-BL.K1)													Extracted: 02/06/09 13:00	
Bromochloromethane	EPA 8260B	ND	---	0.250	ug/l	1x	---	---	---	---	---	---	02/06/09 15:40	
Bromodichloromethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Bromoform	"	ND	---	0.250	"	"	---	---	---	---	---	---	"	
Bromomethane	"	ND	---	2.00	"	"	---	---	---	---	---	---	"	
Carbon tetrachloride	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chloroethane	"	ND	---	1.00	"	"	---	---	---	---	---	---	"	
Chloroform	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Chloromethane	"	ND	---	1.00	"	"	---	---	---	---	---	---	"	
Dibromochloromethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,3-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,4-Dichlorobenzene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1-Dichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
cis-1,2-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
trans-1,2-Dichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,2-Dichloropropane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
cis-1,3-Dichloropropene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
trans-1,3-Dichloropropene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Methylene chloride	"	ND	---	5.00	"	"	---	---	---	---	---	---	"	
1,1,2,2-Tetrachloroethane	"	ND	---	0.500	"	"	---	---	---	---	---	---	"	
Tetrachloroethene	"	0.490	---	0.200	"	"	---	---	---	---	---	---	"	B
1,1,1-Trichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
1,1,2-Trichloroethane	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Trichloroethene	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Trichlorofluoromethane	"	ND	---	0.500	"	"	---	---	---	---	---	---	"	
Vinyl chloride	"	ND	---	0.200	"	"	---	---	---	---	---	---	"	
Surrogate(s):	1,2-DCA-d4	Recovery:	99.4%	Limits:	76-138%	"							02/06/09 15:40	
	Toluene-d8		103%		80-120%	"							"	
	4-BFB		104%		80-120%	"							"	

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

Volatile Organic Compounds by EPA Method 8260B - Laboratory Quality Control Results
 TestAmerica Seattle

QC Batch: 9B06009 Water Preparation Method: EPA 5030B

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (9B06009-BS1)														
												Extracted: 02/06/09 13:00		
Chlorobenzene	EPA 8260B	38.4	---	0.200	ug/l	1x	--	40.0	96.0%	(80-120)	--	--	02/06/09 13:40	
1,1-Dichloroethene	"	41.1	---	0.200	"	"	--	"	103%	"	--	--	"	
Trichloroethene	"	39.1	---	0.200	"	"	--	"	97.8%	"	--	--	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery: 97.4%</i>			<i>Limits: 76-138%</i>									<i>02/06/09 13:40</i>
<i>Toluene-d8</i>		<i>100%</i>			<i>80-120%</i>									<i>"</i>
<i>4-BFB</i>		<i>98.1%</i>			<i>80-120%</i>									<i>"</i>
LCS Dup (9B06009-BSD1)														
												Extracted: 02/06/09 13:00		
Chlorobenzene	EPA 8260B	37.9	---	0.200	ug/l	1x	--	40.0	94.8%	(80-120)	1.26%	(20)	02/06/09 14:09	
1,1-Dichloroethene	"	41.7	---	0.200	"	"	--	"	104%	"	1.47%	"	"	
Trichloroethene	"	39.0	---	0.200	"	"	--	"	97.5%	"	0.282%	"	"	
<i>Surrogate(s): 1,2-DCA-d4</i>		<i>Recovery: 95.1%</i>			<i>Limits: 76-138%</i>									<i>02/06/09 14:09</i>
<i>Toluene-d8</i>		<i>97.8%</i>			<i>80-120%</i>									<i>"</i>
<i>4-BFB</i>		<i>99.0%</i>			<i>80-120%</i>									<i>"</i>

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand 6034 N Star Rd. Ferndale, WA 98248	Project Name:	American Linen	Report Created:
	Project Number:	SUM-005	02/11/09 14:04
	Project Manager:	Matthew Dalton	

CERTIFICATION SUMMARY

TestAmerica Seattle

Method	Matrix	Nelac	Washington
EPA 8260B	Water	X	X
NWTPH-Gx/8021B	Water		X

Any abnormalities or departures from sample acceptance policy shall be documented on the 'Sample Receipt and Temperature Log Form' and 'Sample Non-conformance Form' (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility, please visit our website at www.TestAmericaInc.com

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC).

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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Dalton, Olmsted and Fuglevand
 6034 N Star Rd.
 Ferndale, WA 98248

 Project Name: **American Linen**
 Project Number: SUM-005
 Project Manager: Matthew Dalton

 Report Created:
 02/11/09 14:04

Notes and Definitions

Report Specific Notes:

- B - Analyte was detected in the associated Method Blank.
- B1 - Analyte was detected in the associated method blank. Analyte concentration in the sample is greater than 10x the concentration found in the method blank.
- C - Calibration Verification recovery was above the method control limit for this analyte. Analyte not detected, data not impacted.
- M1 - The MS and/or MSD were above the acceptance limits due to sample matrix interference. See Blank Spike (LCS).
- QP - Hydrocarbon result partly due to individual peak(s) in quantitation range.
- R3 - The RPD exceeded the acceptance limit due to sample matrix effects.
- R4 - Due to the low levels of analyte in the sample, the duplicate RPD calculation does not provide useful information.
- ZX - Due to sample matrix effects, the surrogate recovery was outside the acceptance limits.

Laboratory Reporting Conventions:

- DET - Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
- ND - Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
- NR/NA - Not Reported / Not Available
- dry - Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
- wet - Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
- RPD - RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
- MRL - METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
- MDL* - METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
- Dil - Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
- Reporting Limits - Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
- Electronic Signature - Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy*. Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

TestAmerica Seattle



Curtis D. Armstrong, Project Manager

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TAT: 10

Paperwork to PM - Date: _____ Time: _____

Non-Conformances?

Page Time & Initials: _____

Circle Y or N

(If Y, see other side)

TEST AMERICA SAMPLE RECEIPT CHECKLIST

Received By: _____
(applies to temp at receipt)

Logged-in By: _____

Unpacked/Labeled By: _____

Cooler ID: 354

Date: 1/30

Date: 1/30/09

Date: 1/30/09

Work Order No. BSA0257

Time: 15:15

Time: 1652

Time: 1850

Client: _____

Initials: ML

Initials: FL

Initials: PTJ

Project: _____

Container Type:

COC Seals:

Packing Material _____

- Cooler
- Box
- None/Other _____

- Ship Container
- On Bottles
- None
- Sign By _____
- Date _____

- Bubble Bags
- Styrofoam
- Foam Packs
- None/Other Voac box

Refrigerant:

- Gel Ice Pack _____
- Loose Ice _____
- None/Other _____

Received Via: Bill# _____

- Fed Ex
- Client
- UPS
- TA Courier
- DHL
- Mid Valley
- Senvoy
- TDP
- GS
- Other _____

Cooler Temperature (IR): 4.2 °C Plastic Glass (circle one) (Frozen filters, Tedlars and aqueous Metals exempt)

Temperature Blank? _____ °C or NA

Trip Blank? Y or N or NA

BP, OPLC, ARCO-Temperature monitoring every 15 minutes:

(initial/date/time): _____

Comments: _____

Sample Containers:

	ID		ID
Intact?	<u>Y</u> or N _____	Metals Preserved?	Y or N or <u>NA</u> _____
Provided by TA?	<u>Y</u> or N _____	Client QAPP Preserved?	Y or N or <u>NA</u> _____
Correct Type?	<u>Y</u> or N _____	Adequate Volume? (for tests requested)	<u>Y</u> or N _____
#Containers match COC?	<u>Y</u> or N _____	Water VOAs: Headspace?	Y or <u>N</u> or NA _____
IDs/time/date match COC?	<u>Y</u> or N _____	Comments:	_____
Hold Times in hold?	<u>Y</u> or N _____		_____

PROJECT MANAGEMENT

Is the Chain of Custody complete? _____ Y or N If N, circle the items that were incomplete

Comments, Problems _____

Total access set up? _____ Y or N

Has client been contacted regarding non-conformances? _____ Y or N If Y, _____ / _____ Date Time

PM Initials: _____ Date: _____ Time: _____

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

11720 North Creek Pkwy N Suite 400, Bothell, WA 98011-8244
11922 E. First Ave, Spokane, WA 99206-5302
9405 SW Nimbus Ave, Beaverton, OR 97008-7145
2000 W International Airport Rd Ste A10, Anchorage, AK 99502-1119

425-420-9200 FAX 420-9210
509-924-9200 FAX 924-9290
503-906-9200 FAX 906-9210
907-563-9200 FAX 563-9210

CHAIN OF CUSTODY REPORT

Work Order #: **BSA 0257**

INVOICE TO:

DOF WILKINS

PO. NUMBER:

PRESERVATIVE

TURNAROUND REQUEST

In Business Days*

<input checked="" type="checkbox"/> 0	<input type="checkbox"/> 7	<input type="checkbox"/> 5	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> <1
Organic & Inorganic Analyses				Petroleum Hydrocarbon Analyses			
<input checked="" type="checkbox"/> STD	<input checked="" type="checkbox"/> STD	<input type="checkbox"/> 4	<input type="checkbox"/> 3	<input type="checkbox"/> 2	<input type="checkbox"/> 1	<input type="checkbox"/> <1	

OTHER Specify:

* Turnaround Requests less than standard may incur Rush Charges.

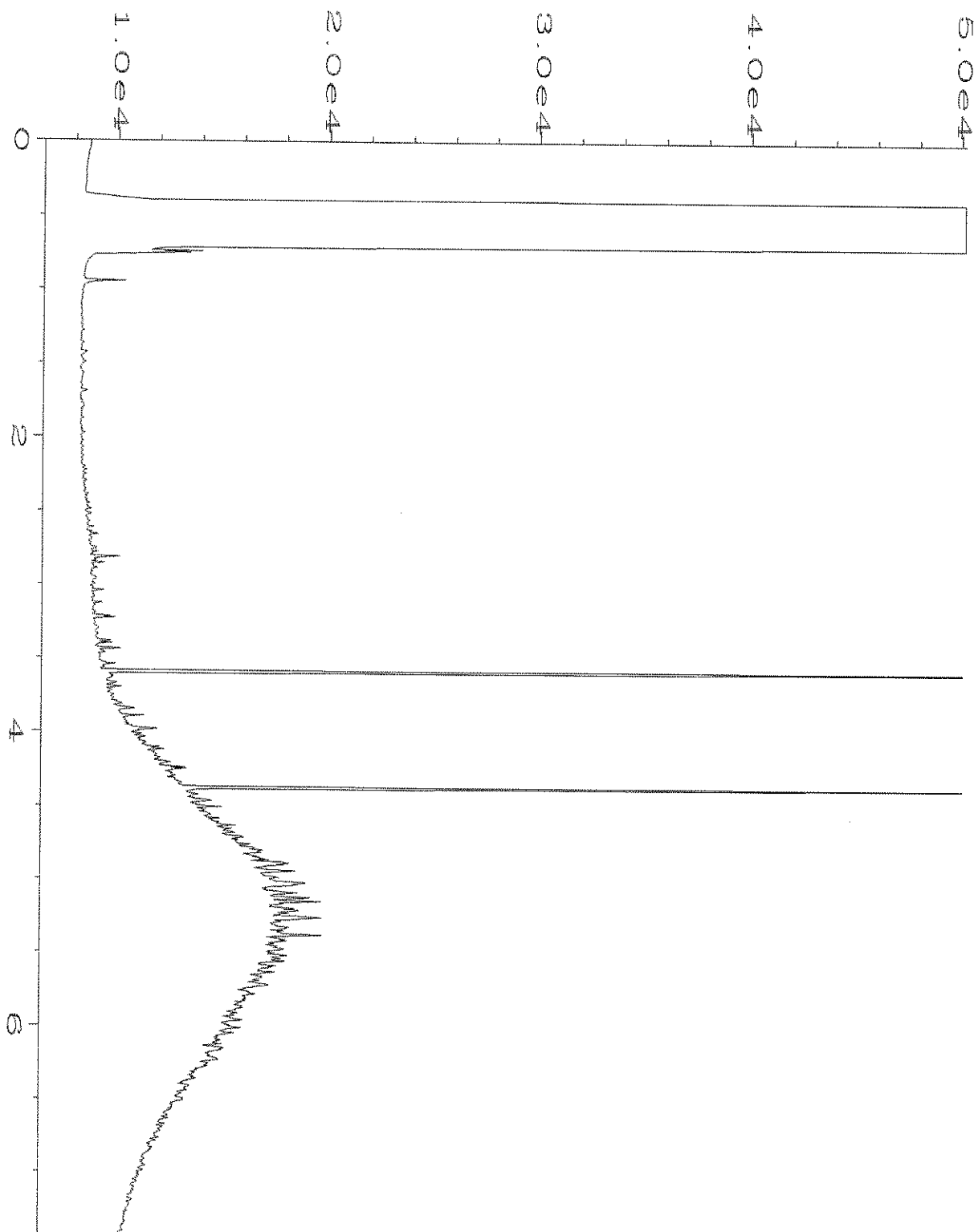
CLIENT: WEDD BUNGER & FRIELAND			REPORT TO: HART BUNGER/DAVE COOPER			ADDRESS: DOF HEADQUARTER			PHONE: AMERICAN LINK			FAX:			PROJECT NUMBER: SUM-005			SAMPLED BY: DG COOPER		
CLIENT SAMPLE IDENTIFICATION	SAMPLING DATE/TIME	FIRM:	FIRM:	DATE:	TIME:	RECEIVED BY:	PRINT NAME:	DATE:	TIME:	MATRIX (W, S, O)	# OF CONT.	LOCATION/ COMMENTS	TA WO ID	MUTUAL-G		MUTUAL-G				
														HTX	HTX	HTX	HTX			
1 R-MU1	1/14/09	1400								W	6		-01	X	X					
2 R-MU2		1400											-02	X	X					
3 R-MU-3		1500											-03	X	X					
4 R-MU5	1/30/09	1100											-04	X	X					
5 R-MU6		0900											-05	X	X					
6 G-MU1	1/24/09	1300											-06	X	X					
7 G-MU2		1200											-07	X	X					
8 G-MU3	1/30/09	0800											-08	X	X					
9 G-B		1200											-09	X	X					
10 G-B		1300											-10	X	X					

RELEASED BY: **DR. COOPER** FIRM: **DOF** DATE: **1/30/09** TIME: **1515**

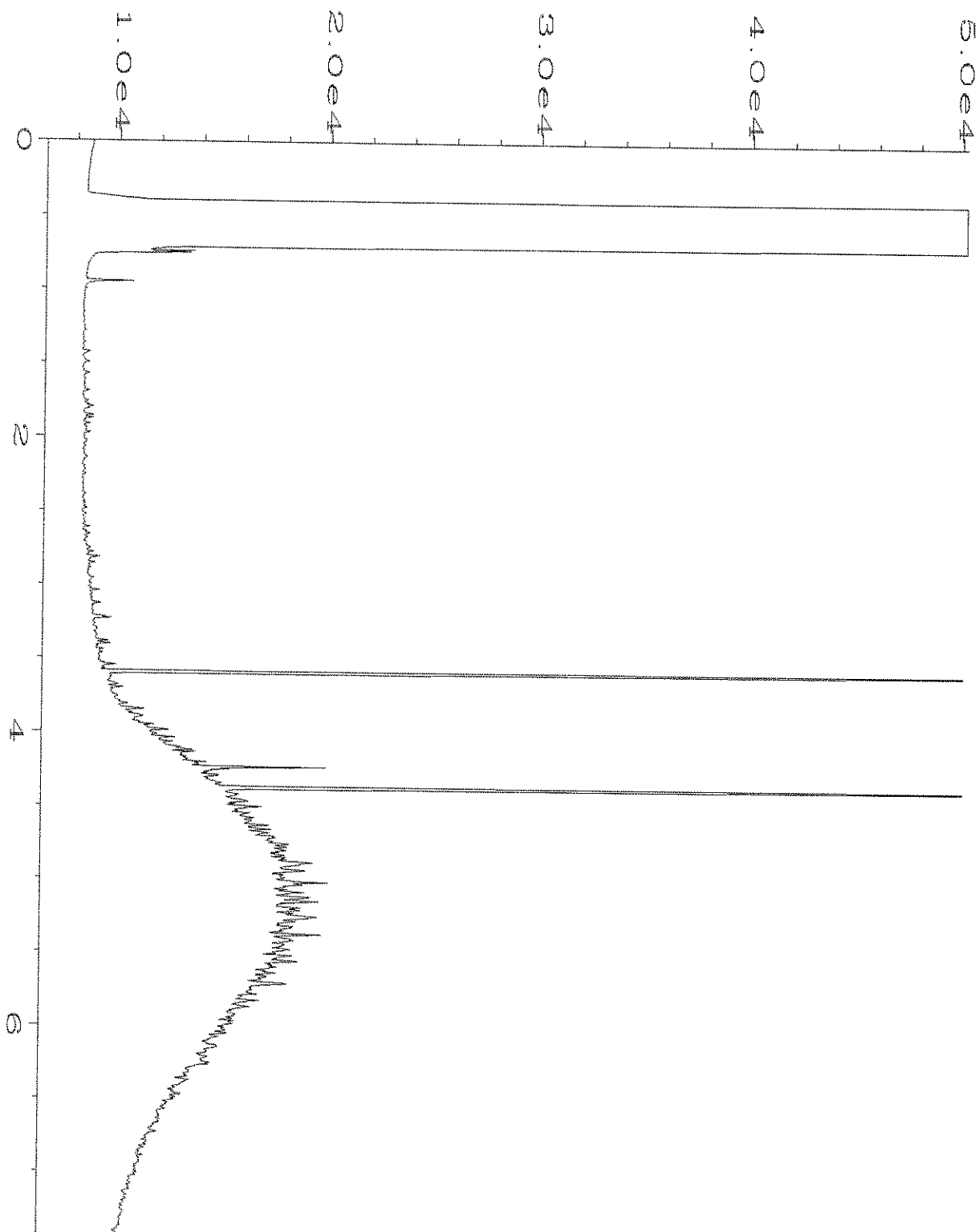
RECEIVED BY: **REY FANBEE** FIRM: **TASDA** DATE: **1/30/09** TIME: **1515**

TEMP: **47** PAGE: **1** OF **1**

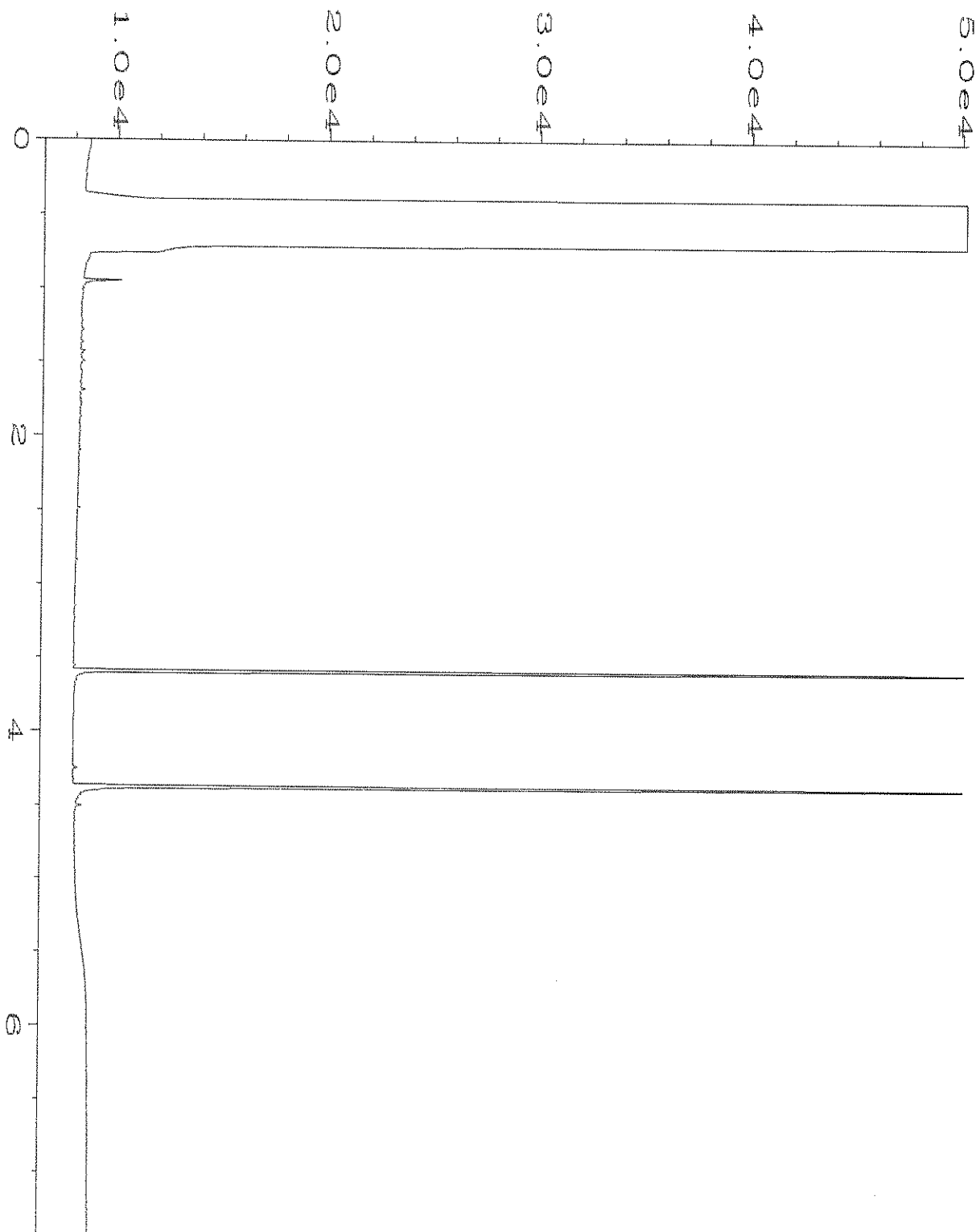
APPENDIX C3
Chromatograms for TPH in Select Samples



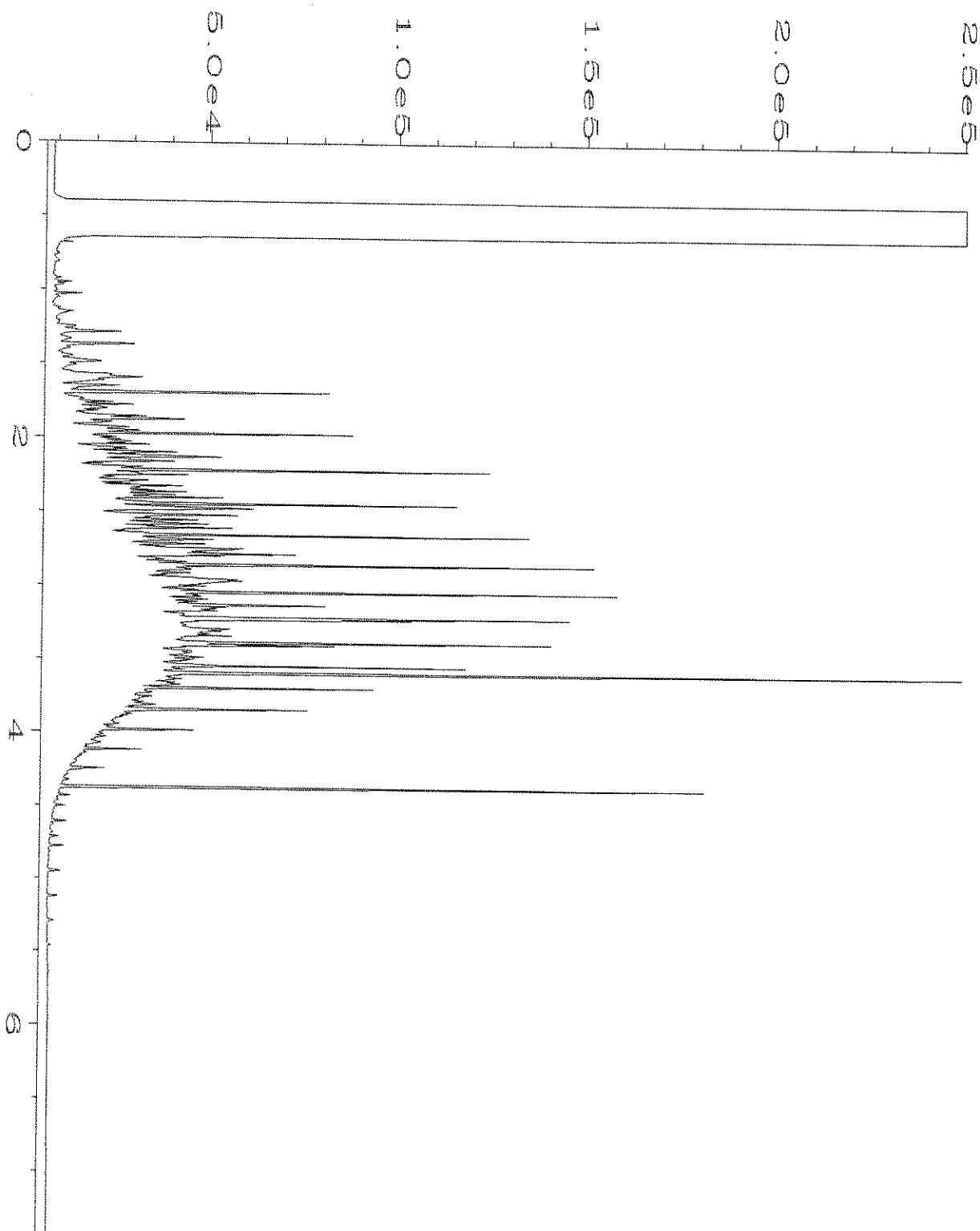
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Operator	: TL	Vial Number	: 52
Instrument	: GC1	Injection Number	: 1
Sample Name	: 002468-08	Sequence Line	: 7
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 02 Mar 20 08:47 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:10 AM		



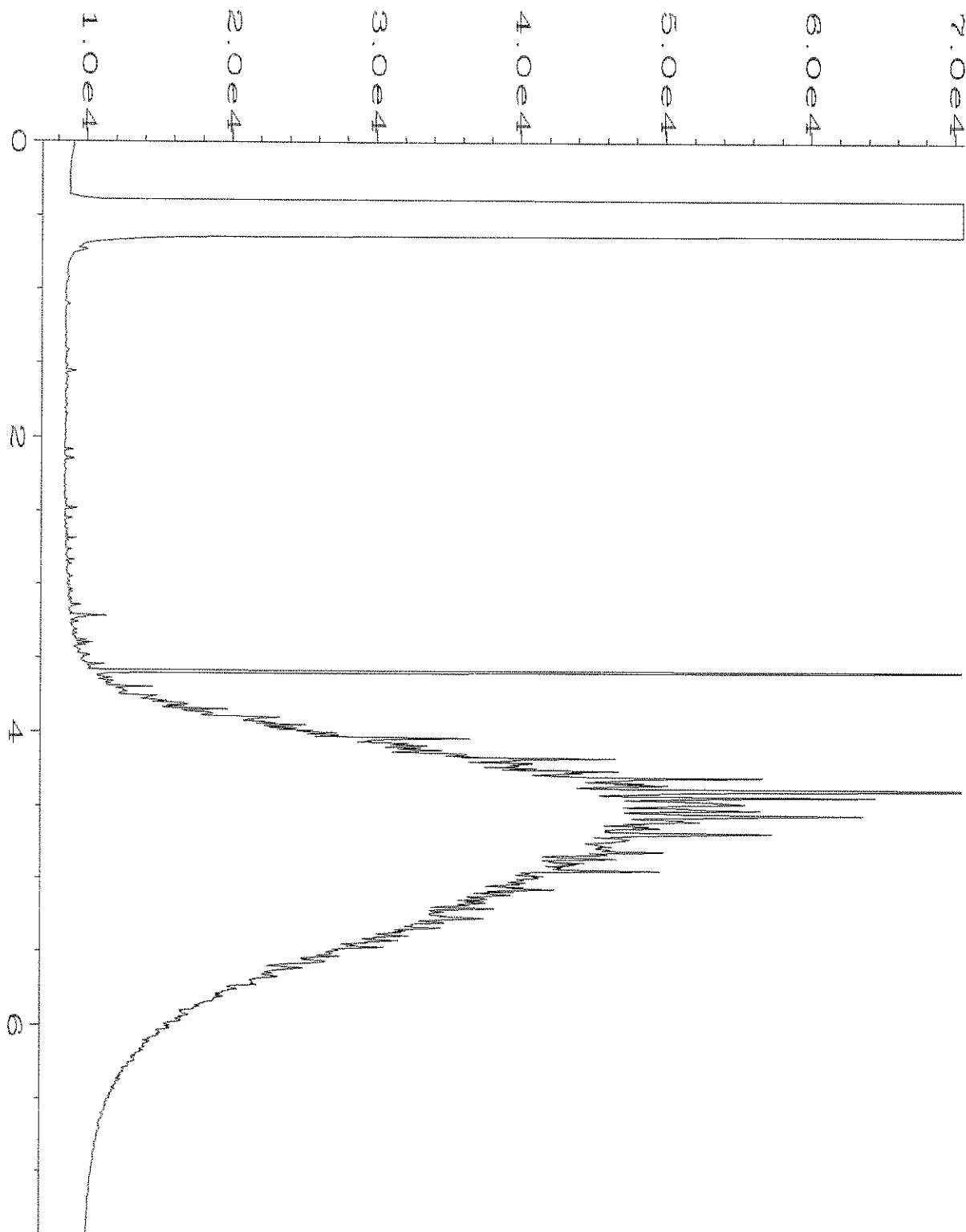
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Operator	: TL	Vial Number	: 53
Instrument	: GC1	Injection Number	: 1
Sample Name	: 002468-09	Sequence Line	: 7
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 02 Mar 20 08:59 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 07 Jan 21 11:10 AM		



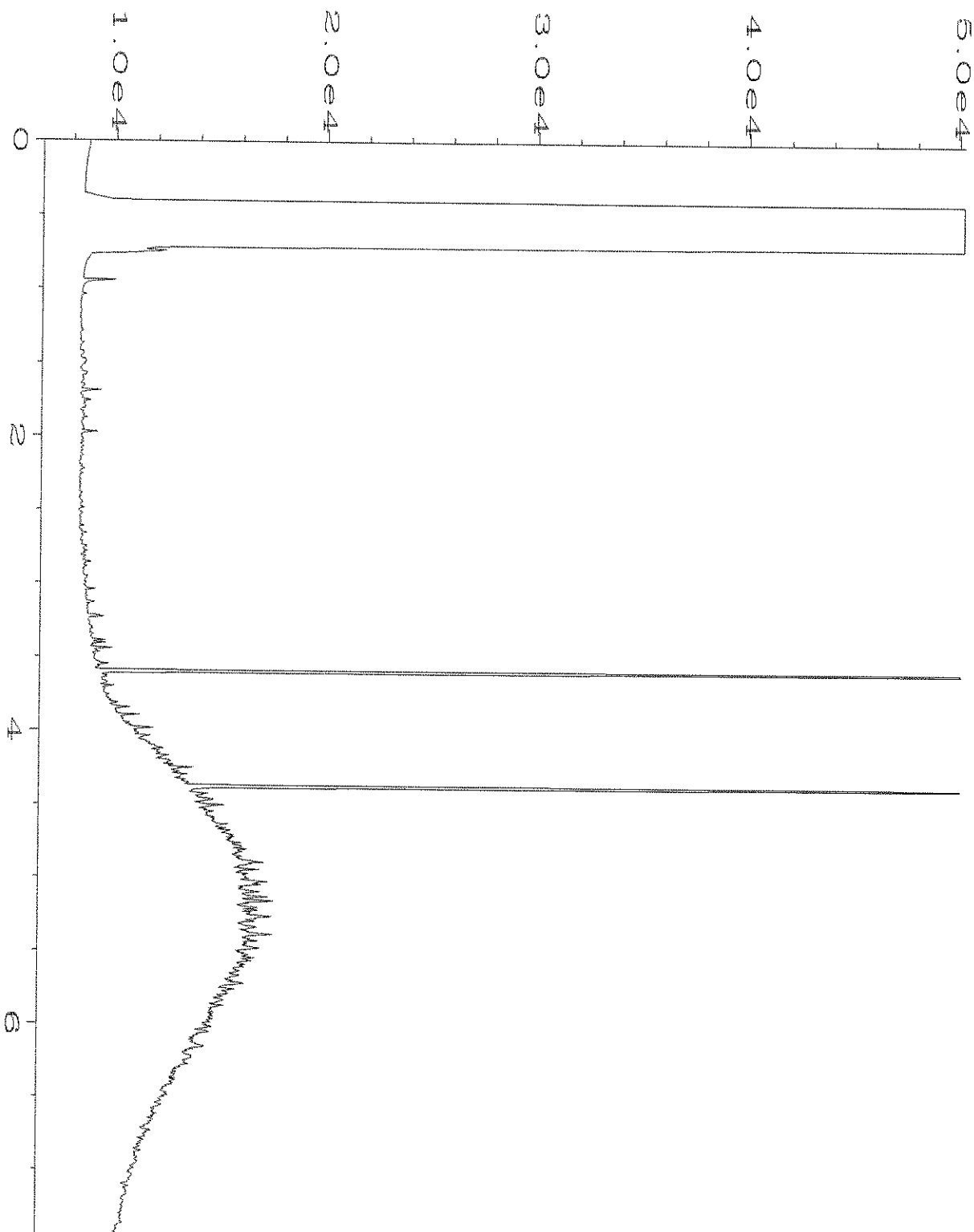
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Operator	: TL	Vial Number	: 31
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-516 mb	Sequence Line	: 7
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 02 Mar 20 04:50 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 12:06 PM		



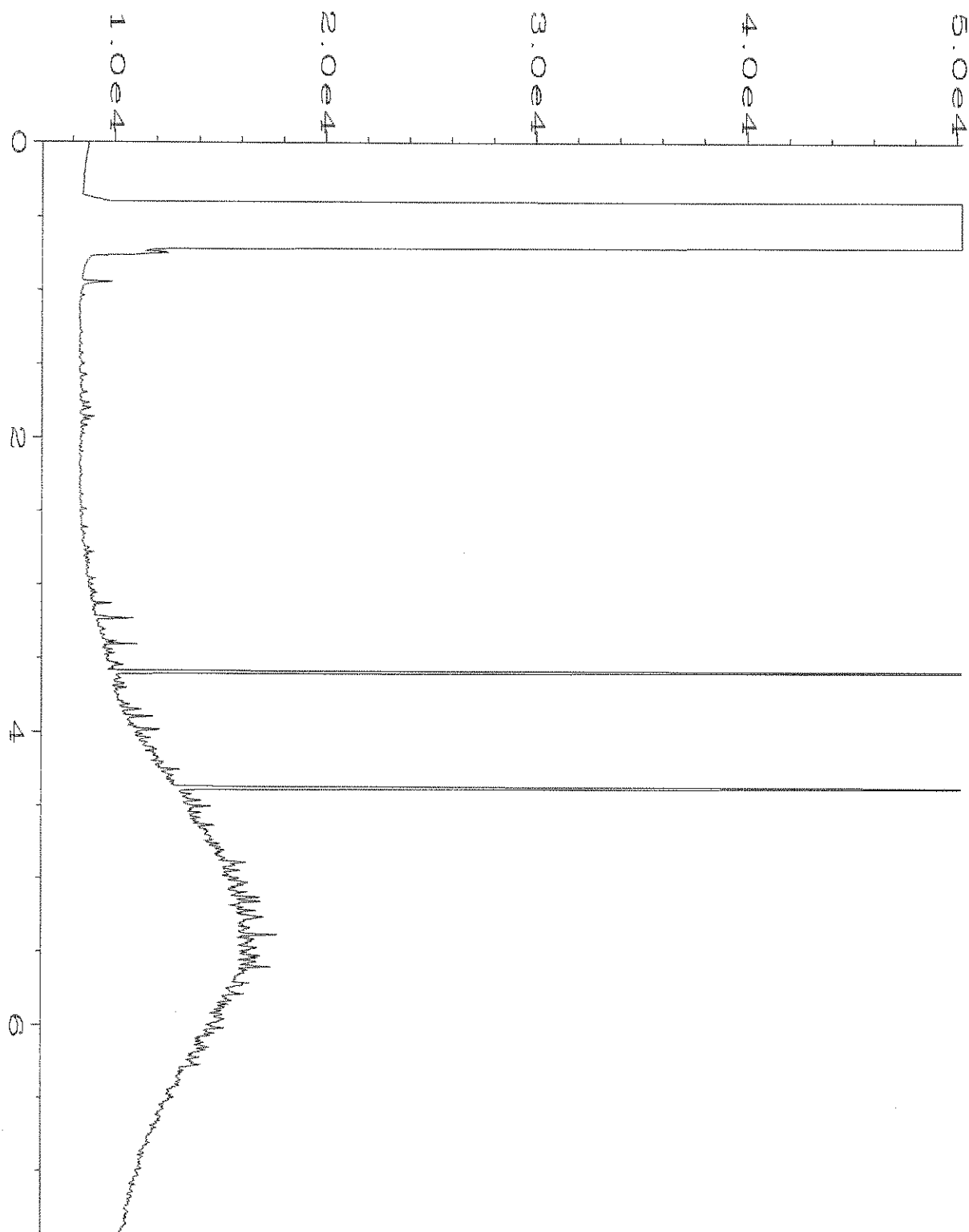
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Operator	: TL	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 58-146H	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 02 Mar 20 06:41 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:12 AM		



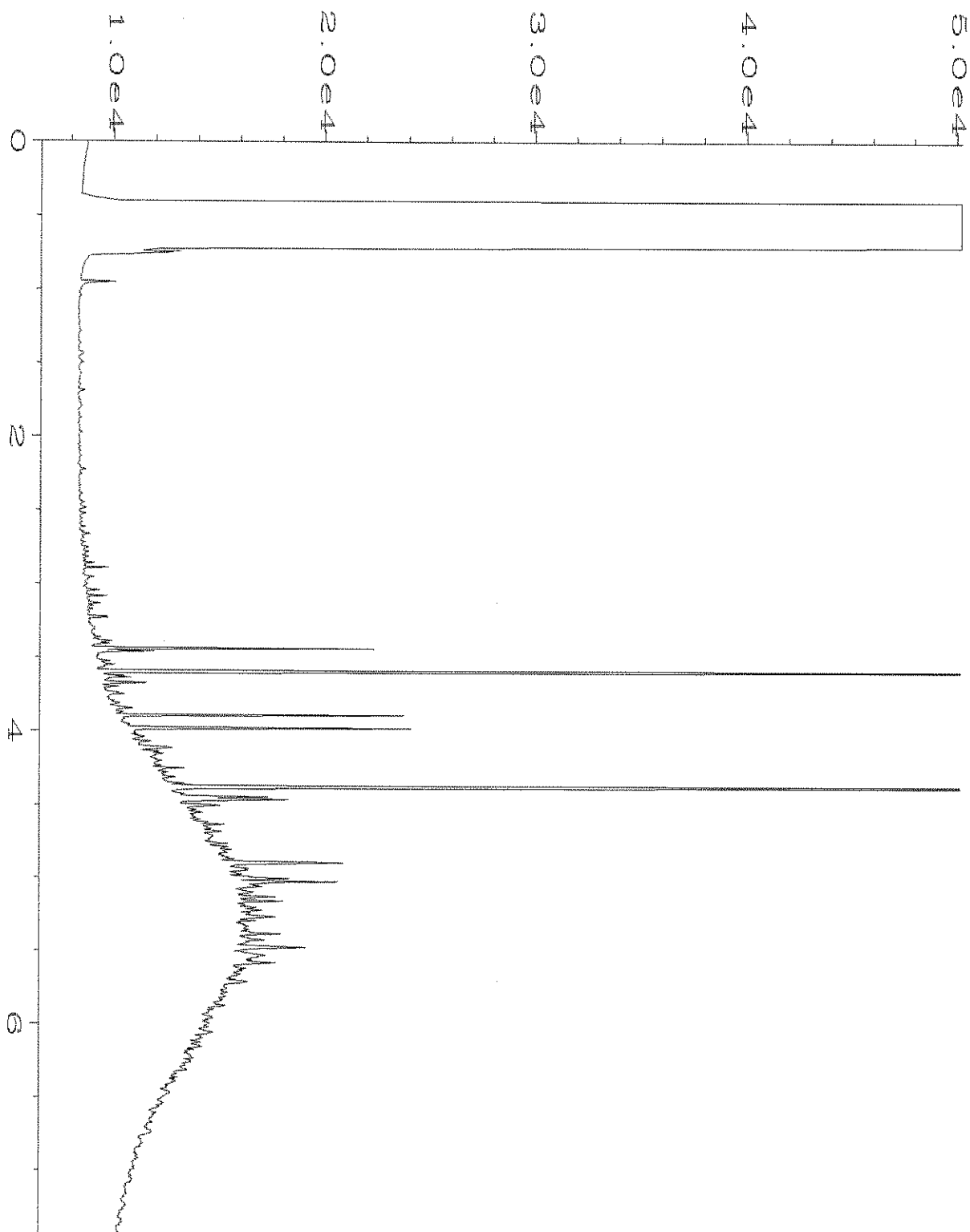
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Operator	: TL	Vial Number	: 2
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 MO 59-156B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 02 Mar 20 05:53 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:11 AM		



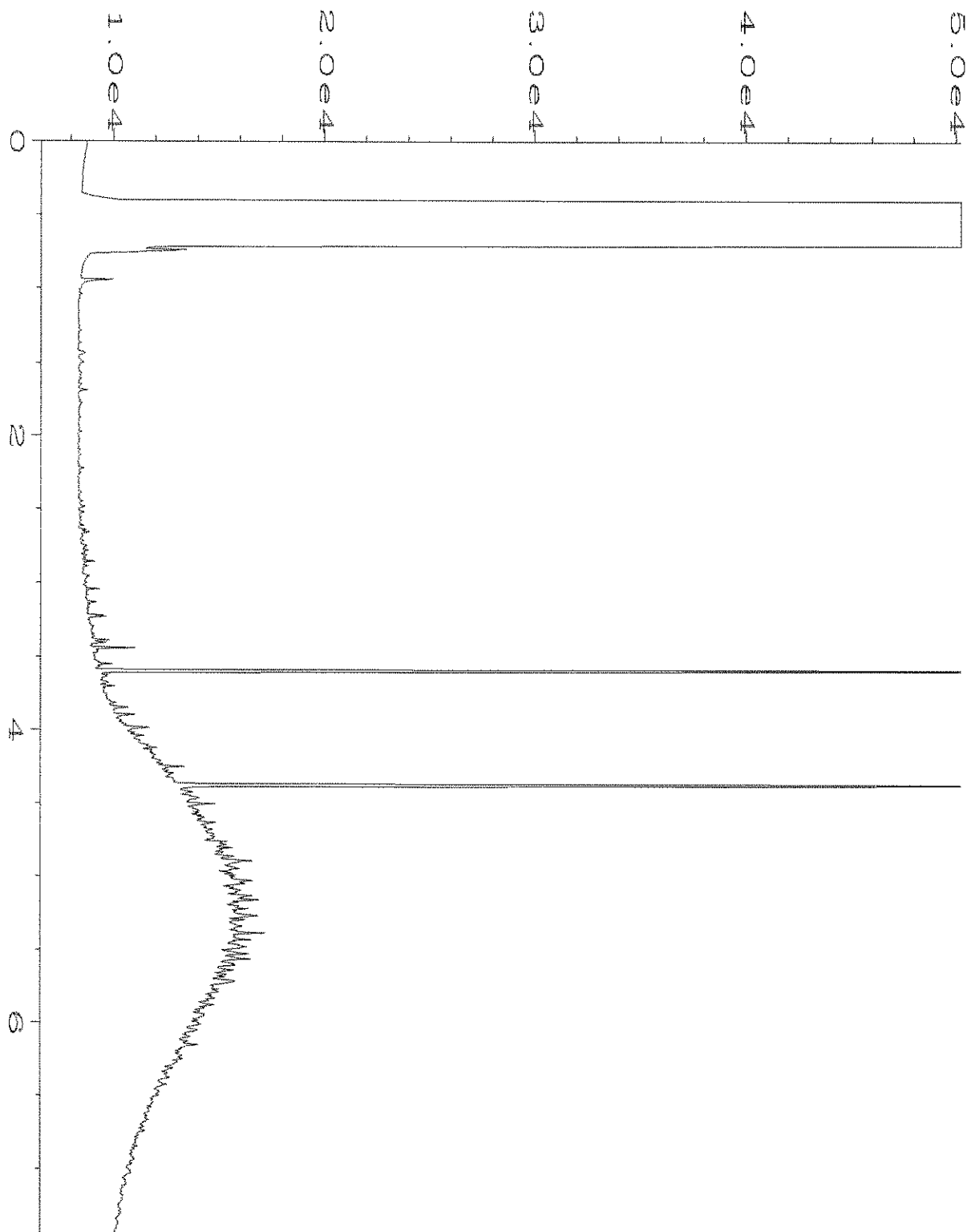
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Sample Name	: 003022-13	Sequence Line	: 10
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Acquired on	: 03 Mar 20 06:24 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 07 Jan 21 11:12 AM		



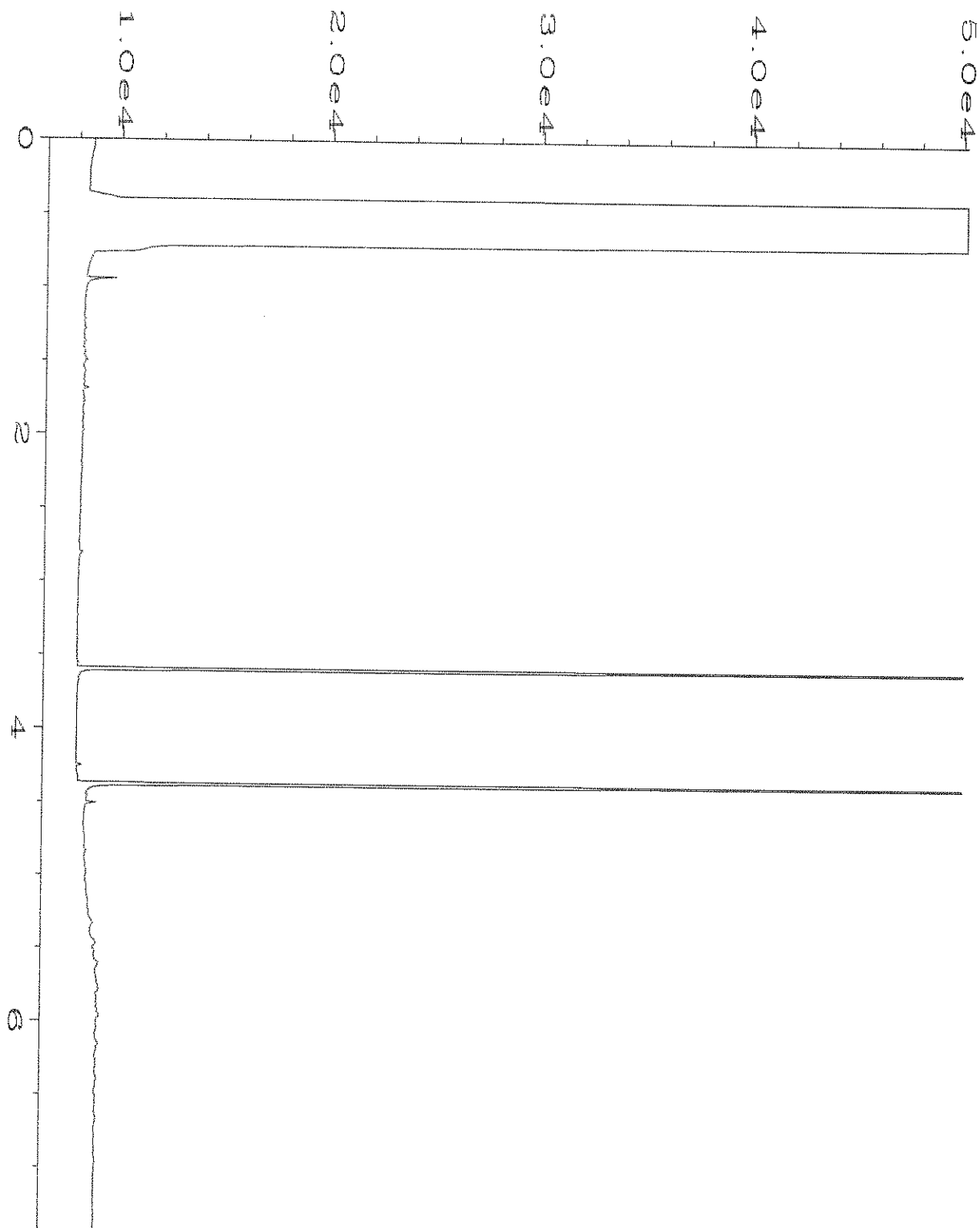
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Instrument	: GC1	Injection Number	: 1
Sample Name	: 003022-14	Sequence Line	: 10
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 03 Mar 20 06:36 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:12 AM		



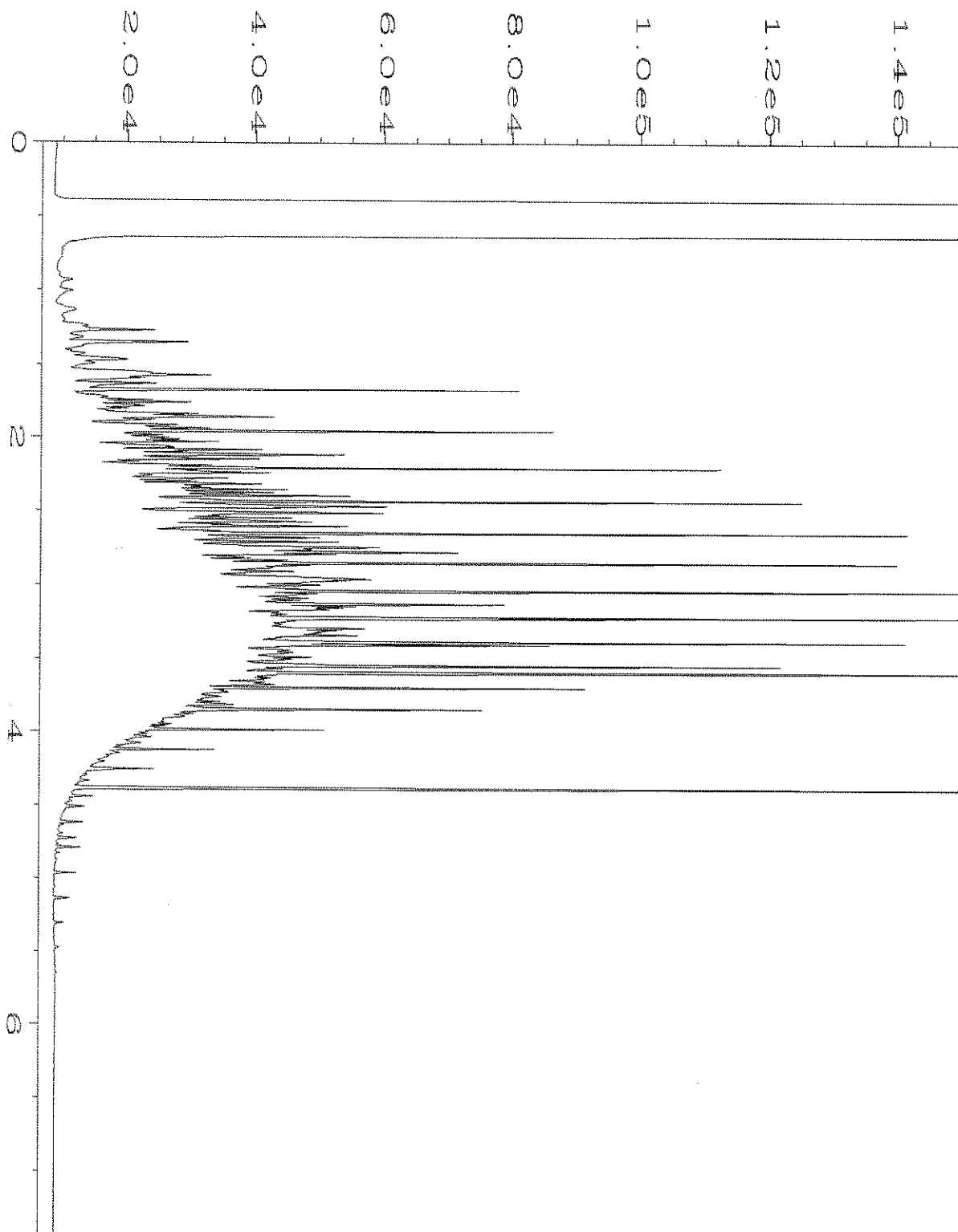
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Operator	: TL	Vial Number	: 47
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003022-17	Sequence Line	: 10
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 03 Mar 20 07:10 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:12 AM		



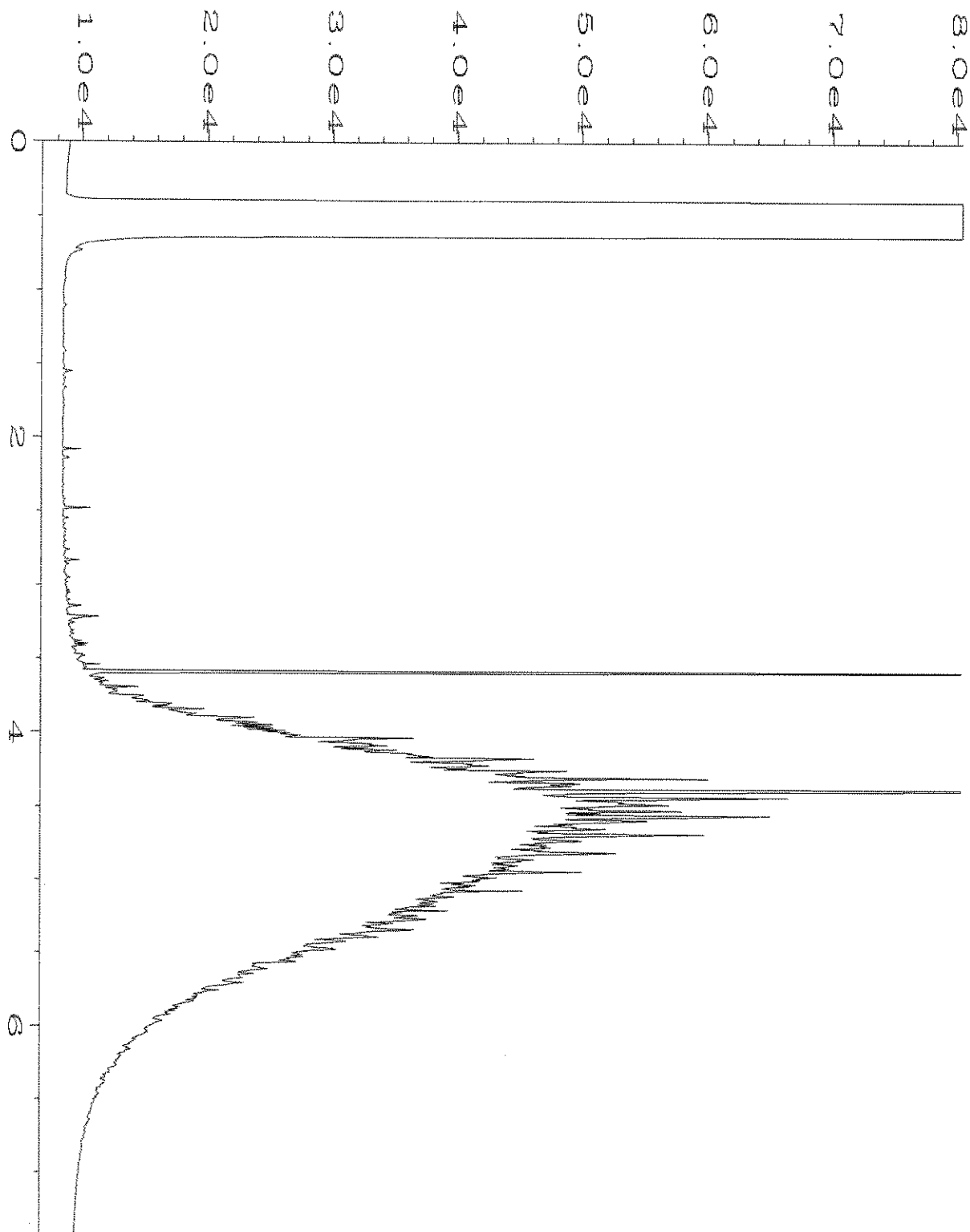
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Instrument	: GC1	Injection Number	: 1
Sample Name	: 003022-19	Sequence Line	: 10
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Acquired on	: 03 Mar 20 07:32 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 07 Jan 21 11:12 AM		



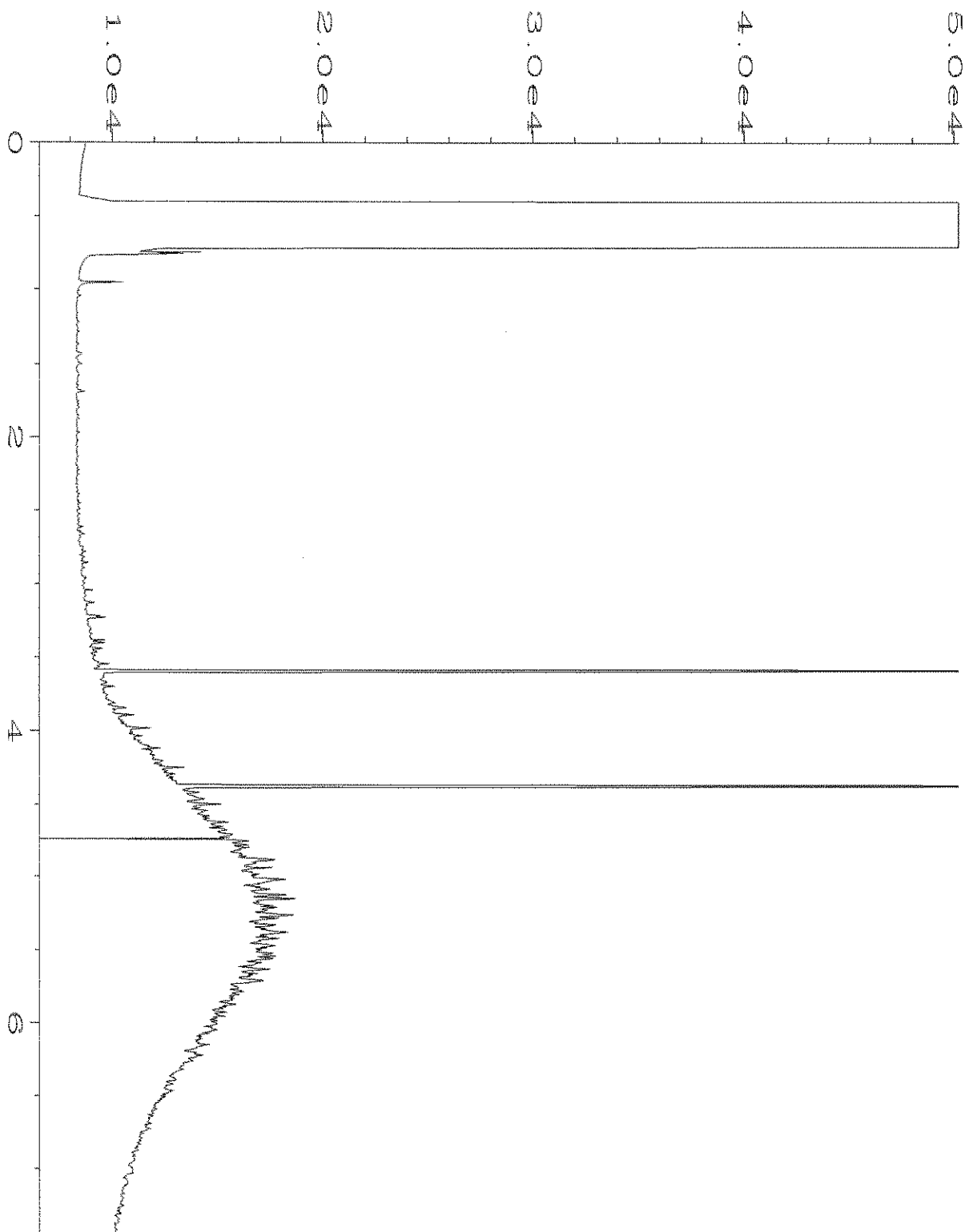
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Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-527 mb	Sequence Line	: 8
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 03 Mar 20 03:01 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:13 AM		



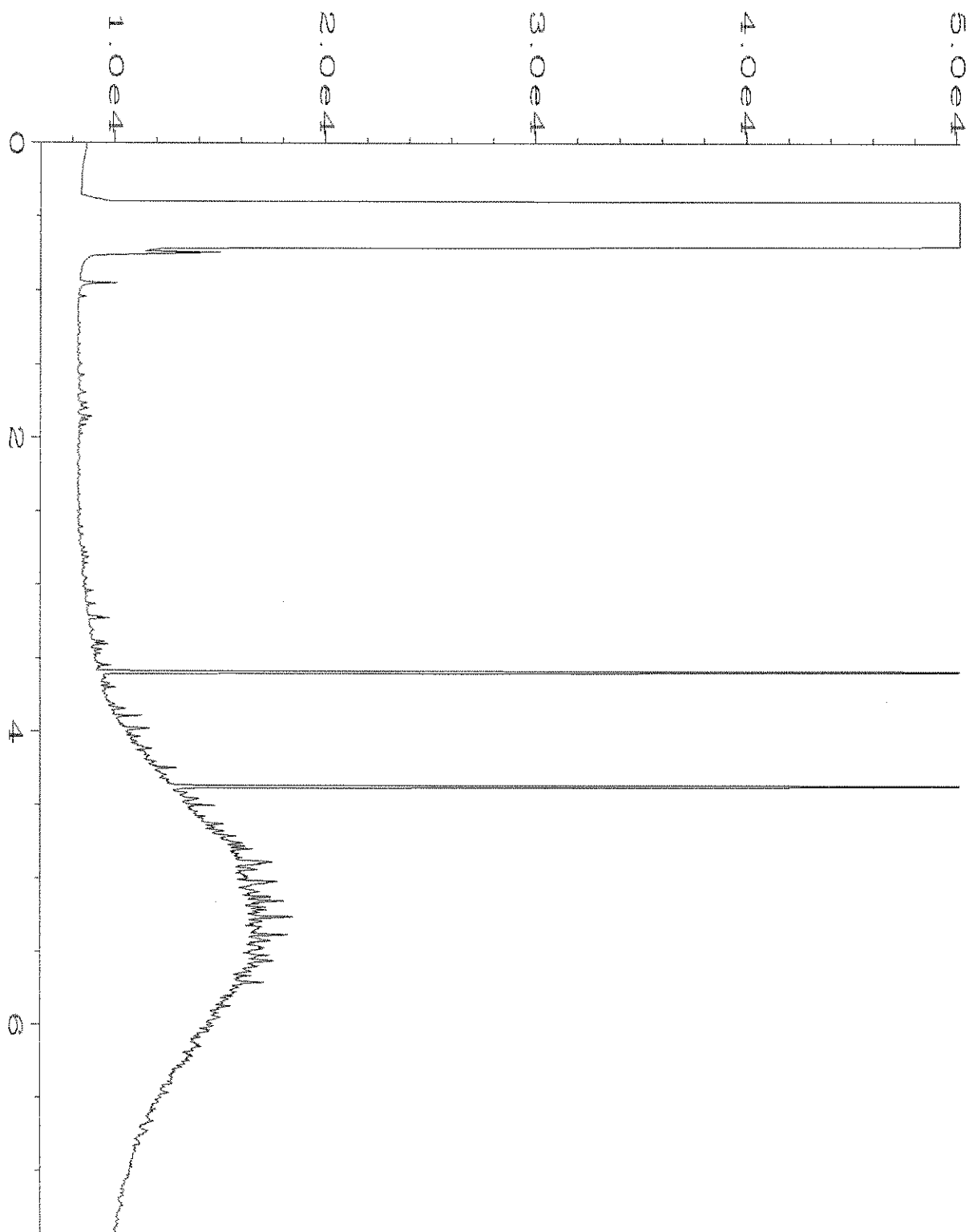
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Operator	: TL	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 58-146H	Sequence Line	: 2
Run Time Bar Code:		Instrument Method	: DX.MTH
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Report Created on:	: 07 Jan 21 11:13 AM		



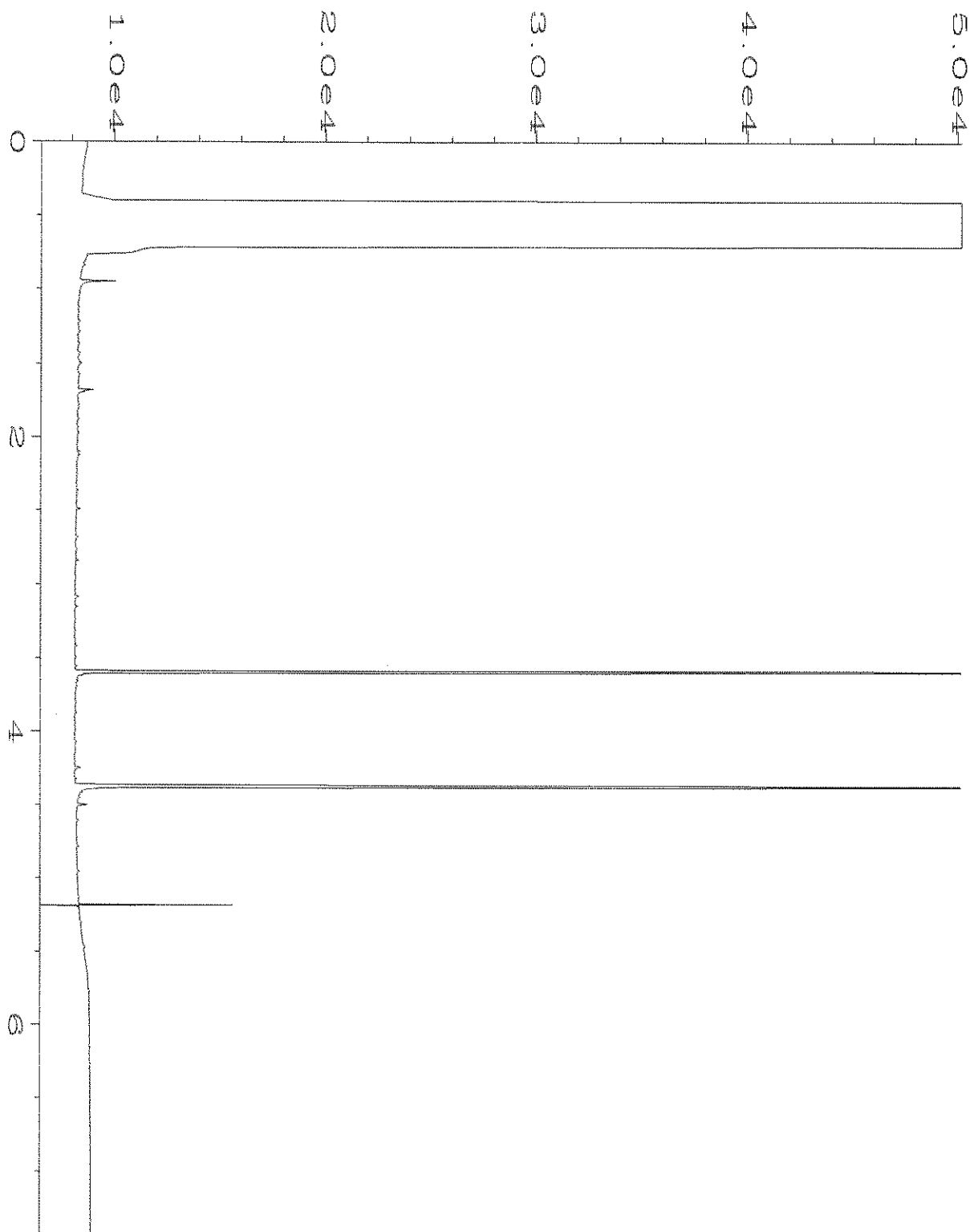
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Operator	: TL	Vial Number	: 2
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 MO 59-156B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
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Report Created on:	07 Jan 21 11:13 AM		



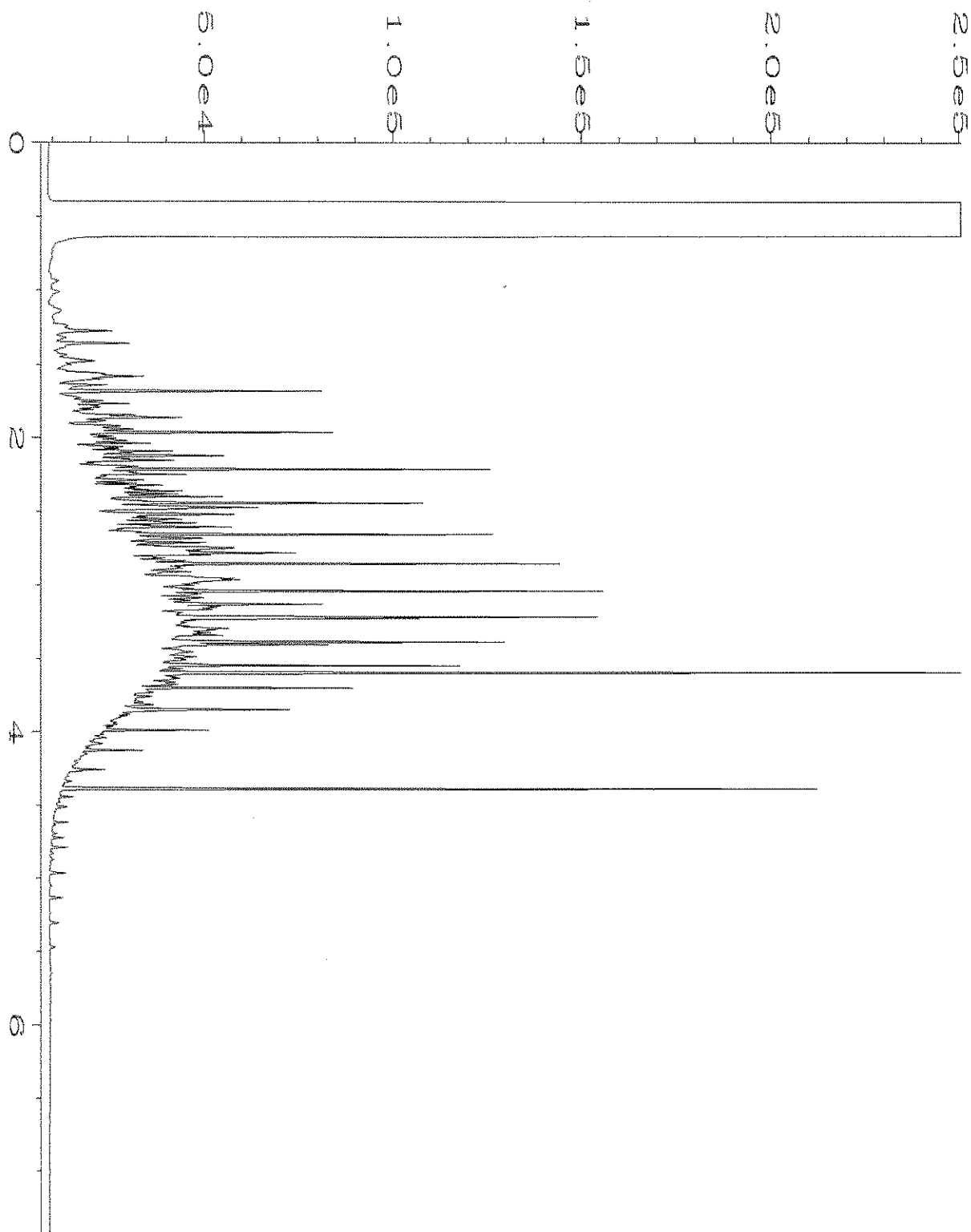
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Operator	: TL	Vial Number	: 26
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003038-01	Sequence Line	: 8
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Acquired on	: 04 Mar 20 04:55 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:14 AM		



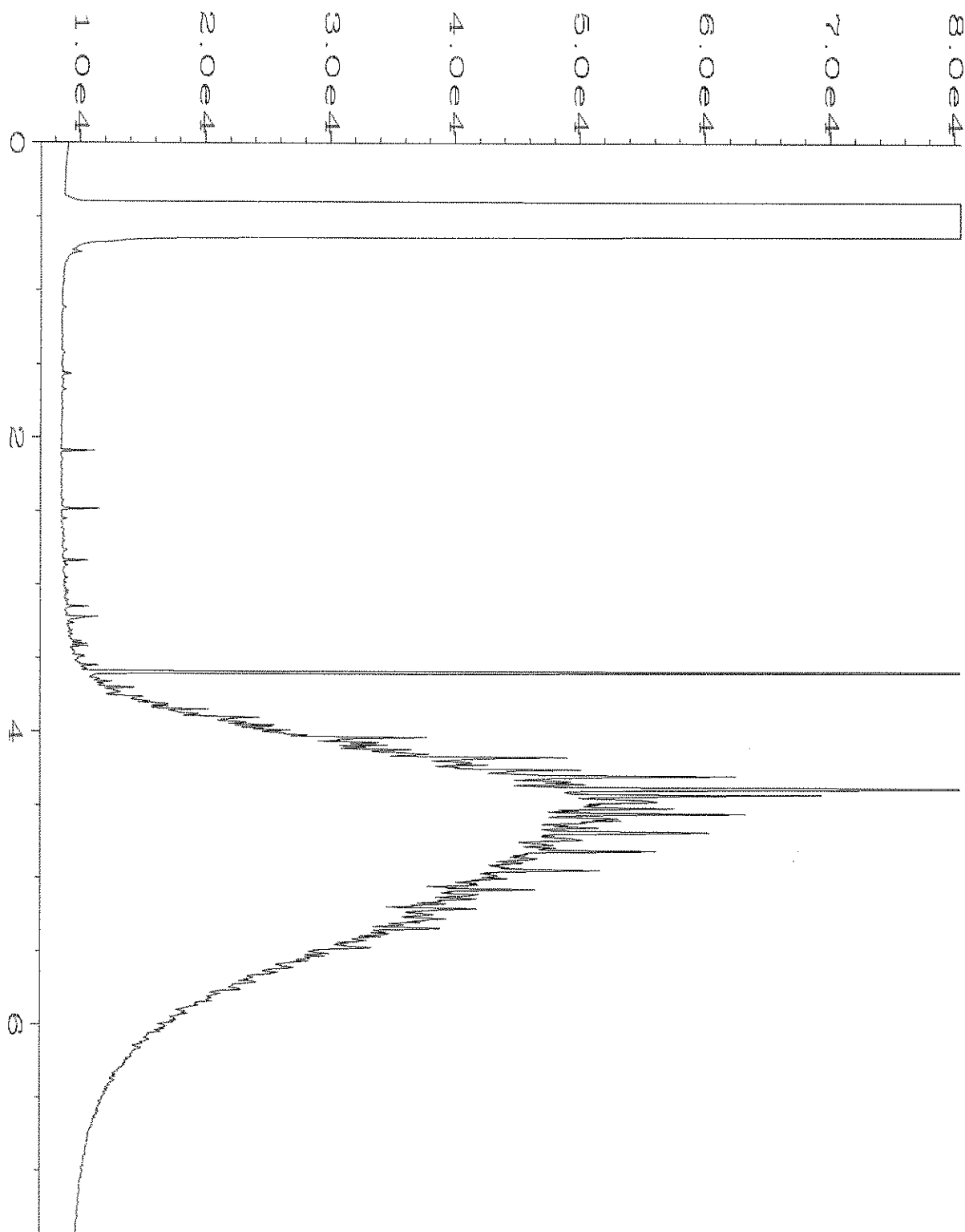
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Instrument	: GC1	Injection Number	: 1
Sample Name	: 003038-04	Sequence Line	: 8
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Acquired on	: 04 Mar 20 05:29 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:14 AM		



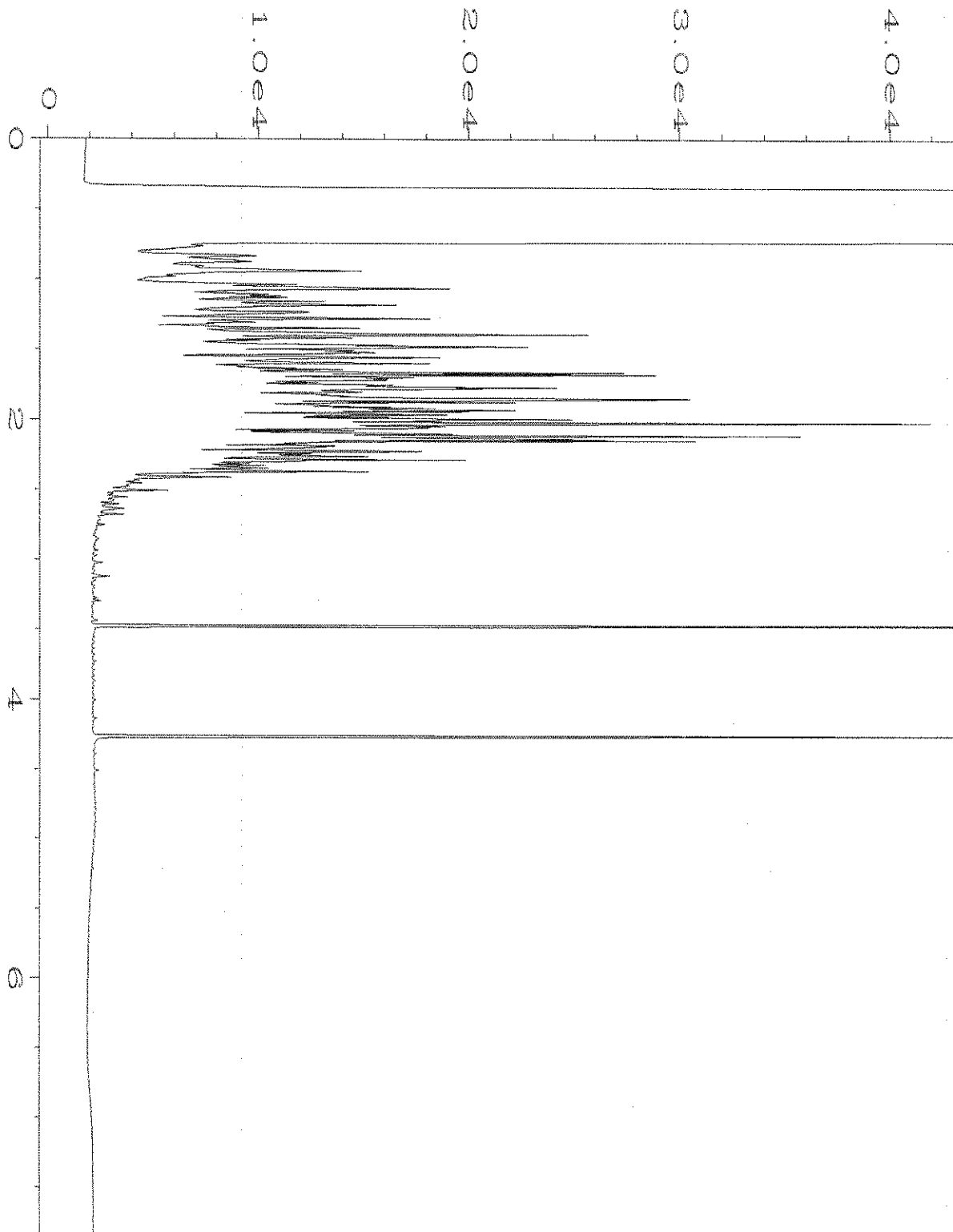
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Operator	: TL	Vial Number	: 22
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-535 mb	Sequence Line	: 5
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Report Created on:	07 Jan 21 11:14 AM		



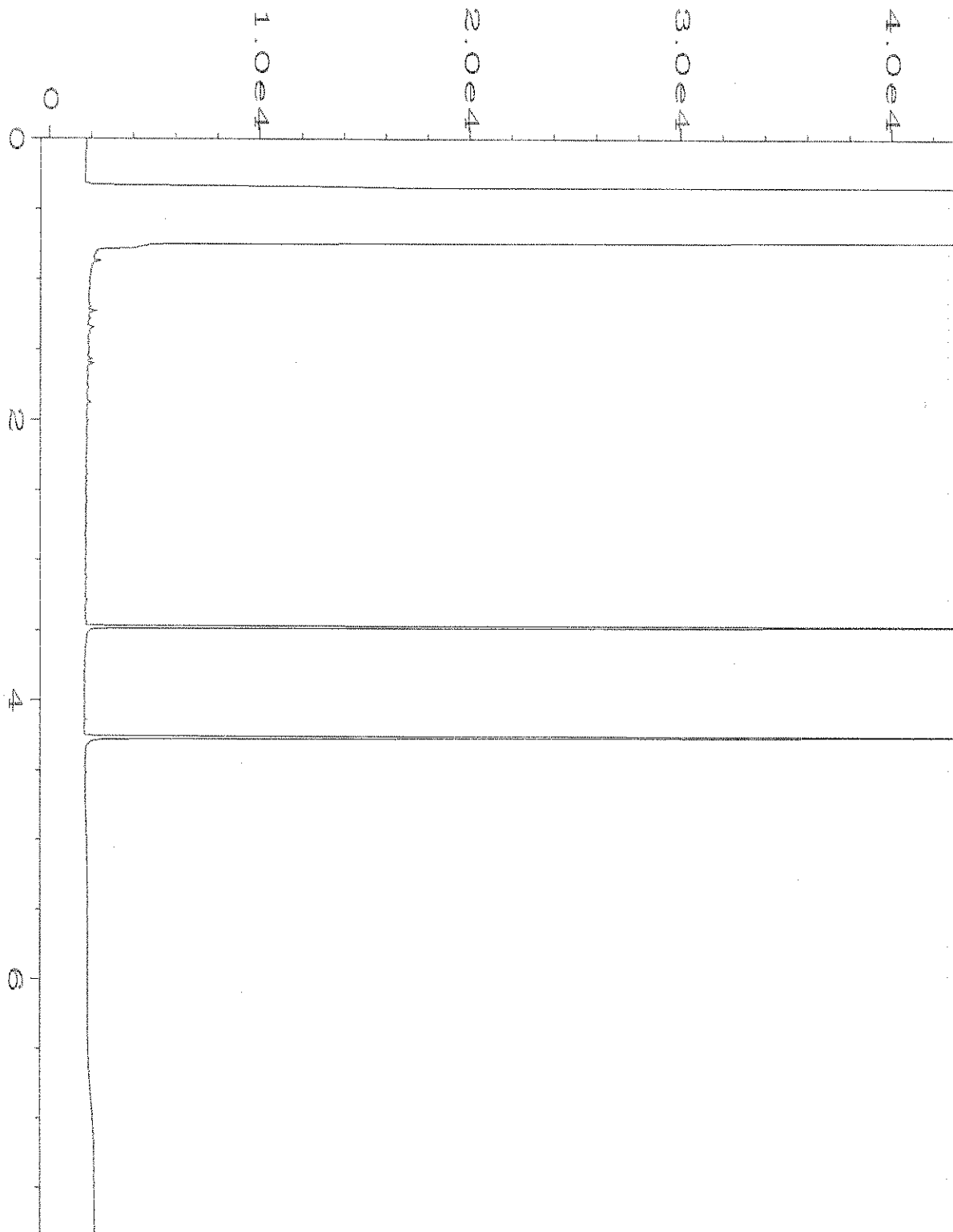
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Operator	: TL	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 58-146H	Sequence Line	: 2
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Acquired on	: 04 Mar 20 05:46 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 07 Jan 21 11:14 AM		



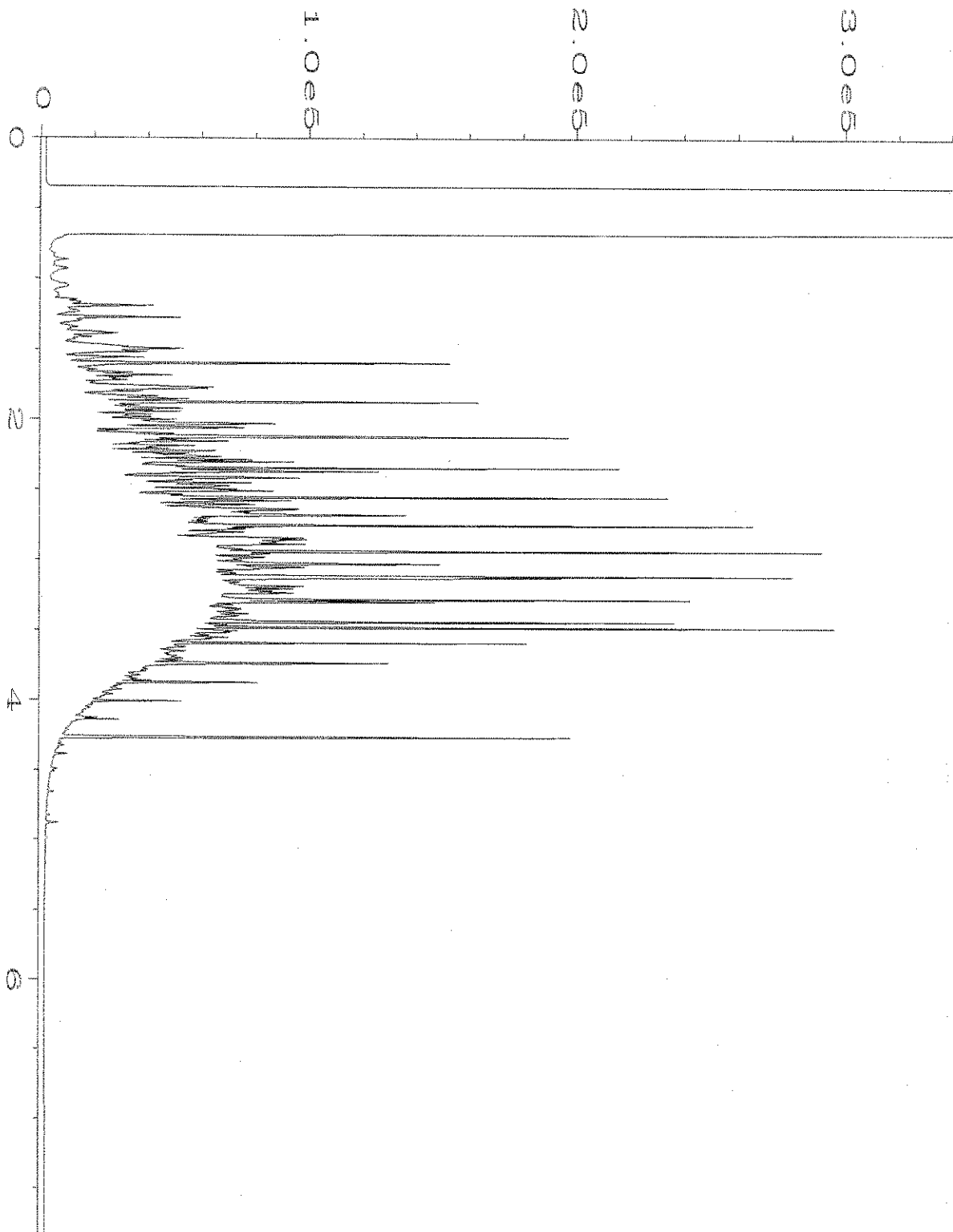
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Operator	: TL	Vial Number	: 2
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 MO 59-156B	Sequence Line	: 2
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 04 Mar 20 05:33 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 11:14 AM		



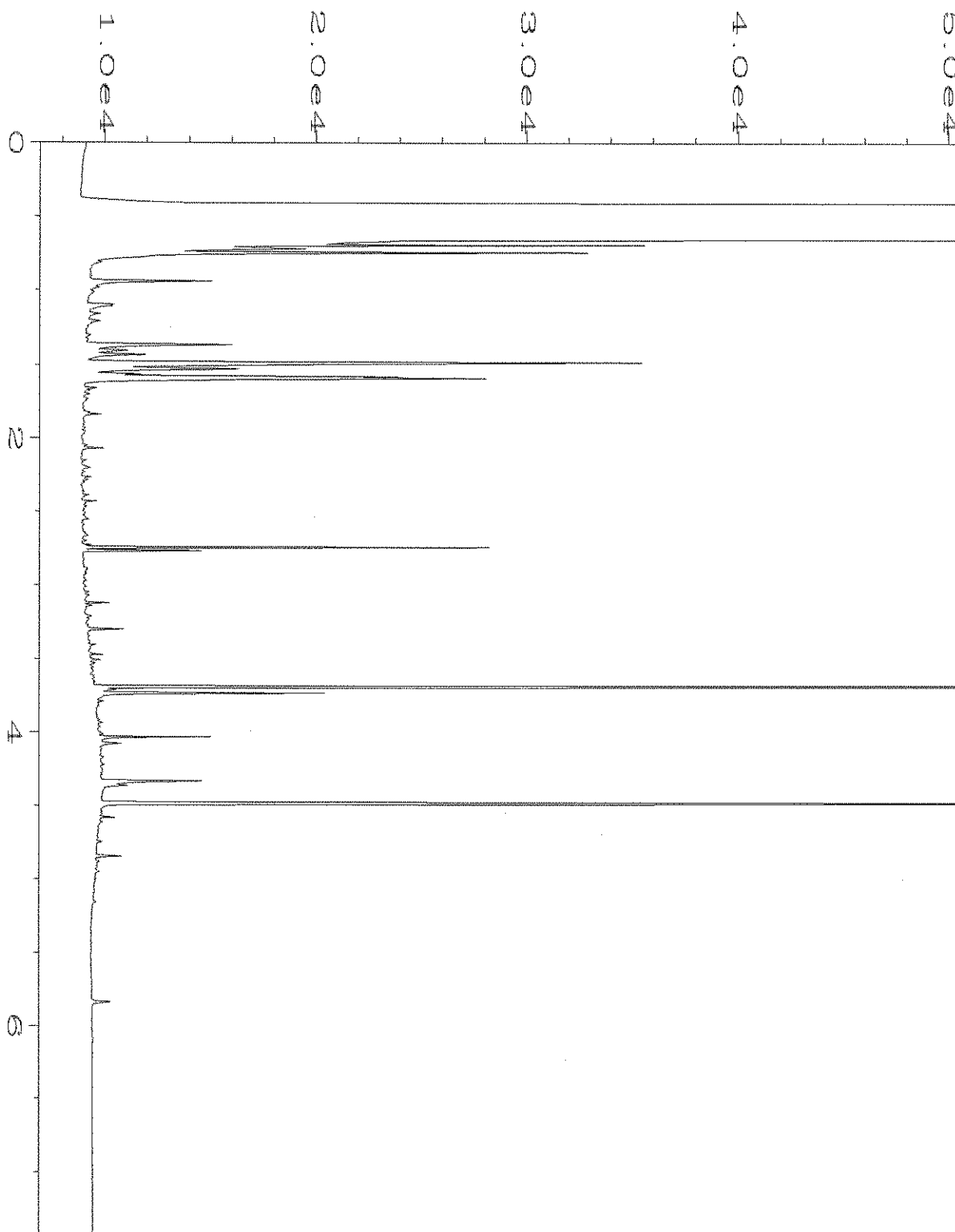
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Operator	: TL	Vial Number	: 30
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 009053-01	Sequence Line	: 7
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Acquired on	: 03 Sep 20 03:21 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 10:11 AM		



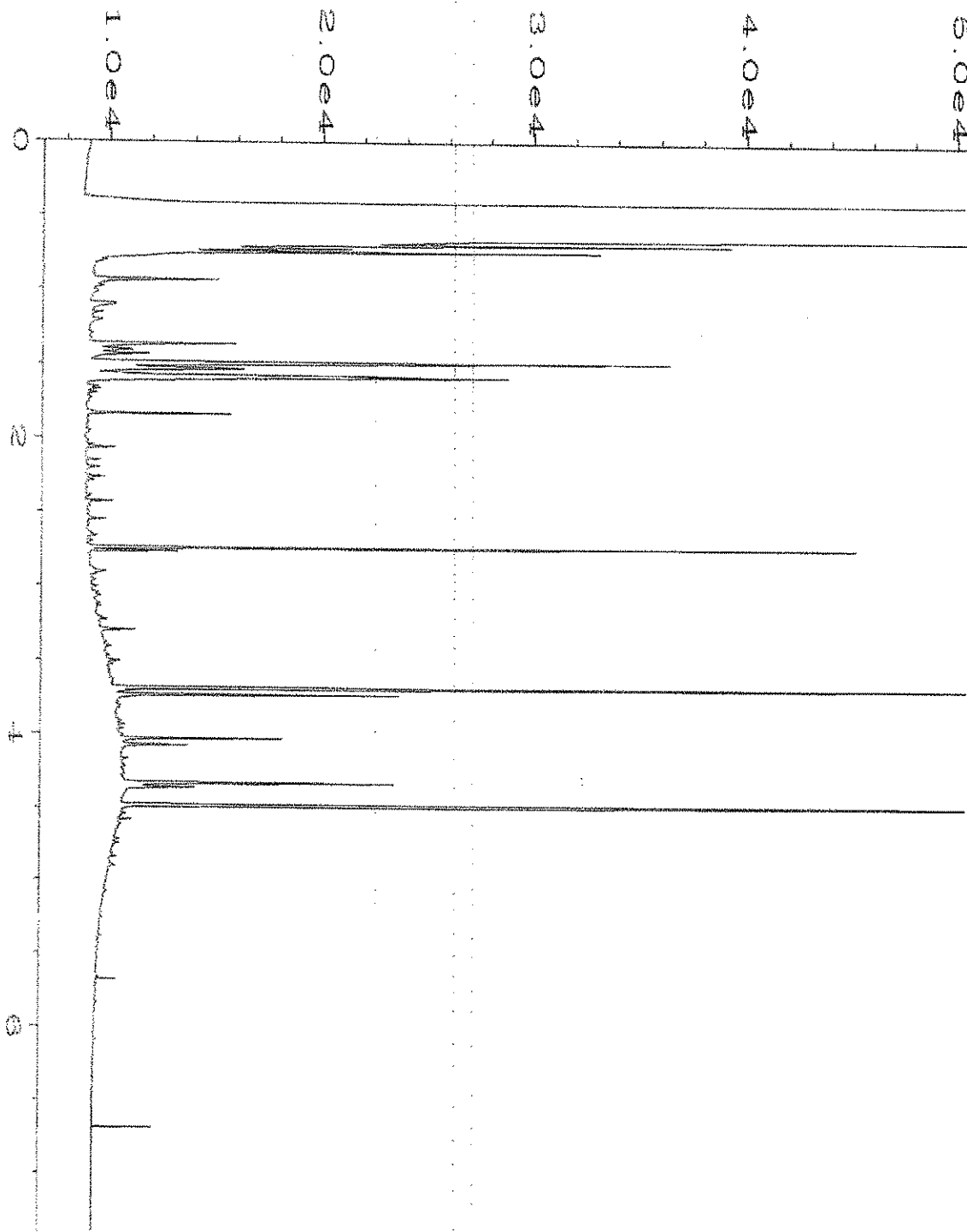
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Instrument	: GC#4	Injection Number	: 1
Sample Name	: 00-1986 mb	Sequence Line	: 7
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Report Created on:	07 Jan 21 10:11 AM		



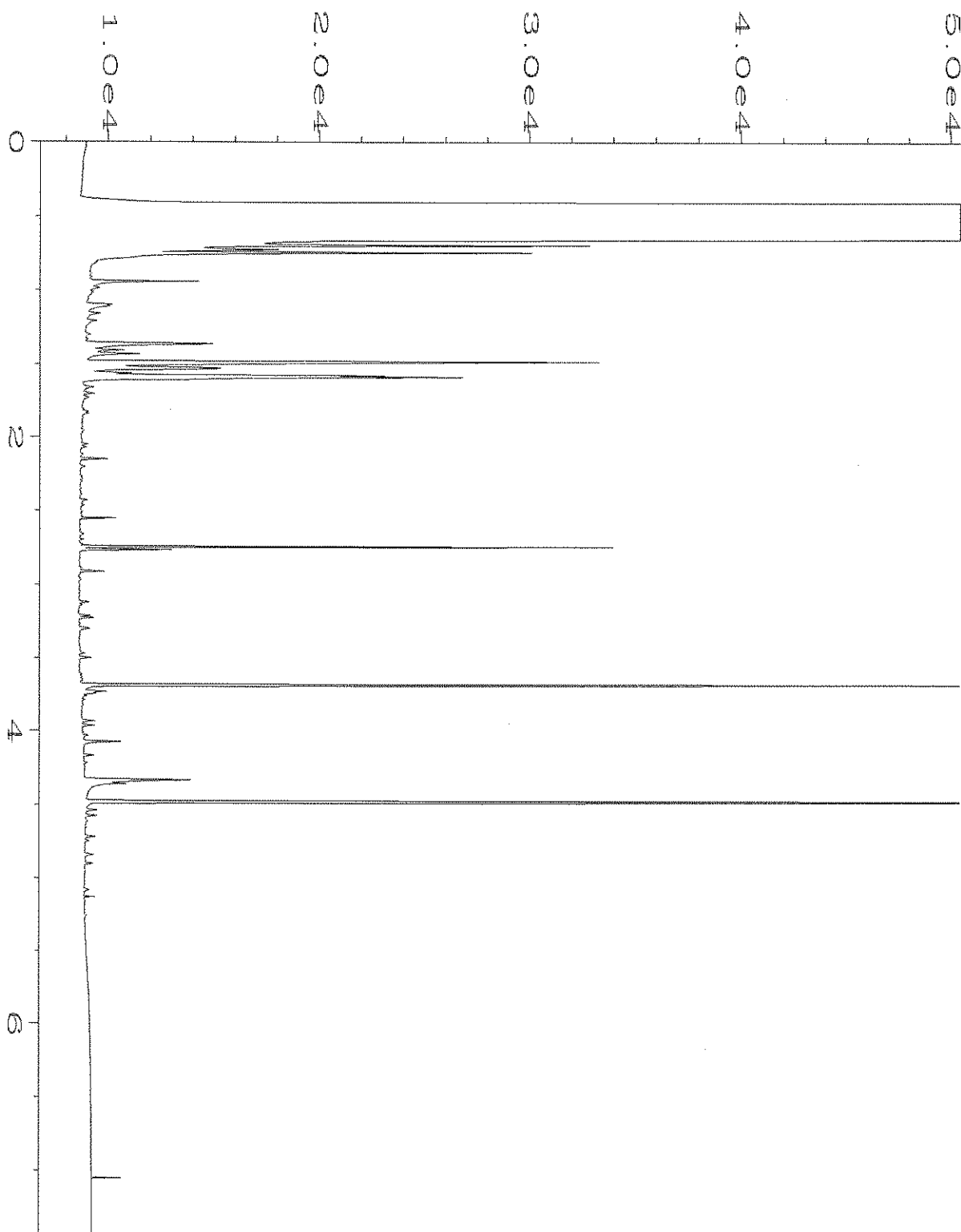
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Operator	: TL	Vial Number	: 5
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 1000 Dx 60-170B	Sequence Line	: 6
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 03 Sep 20 02:17 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	07 Jan 21 10:11 AM		



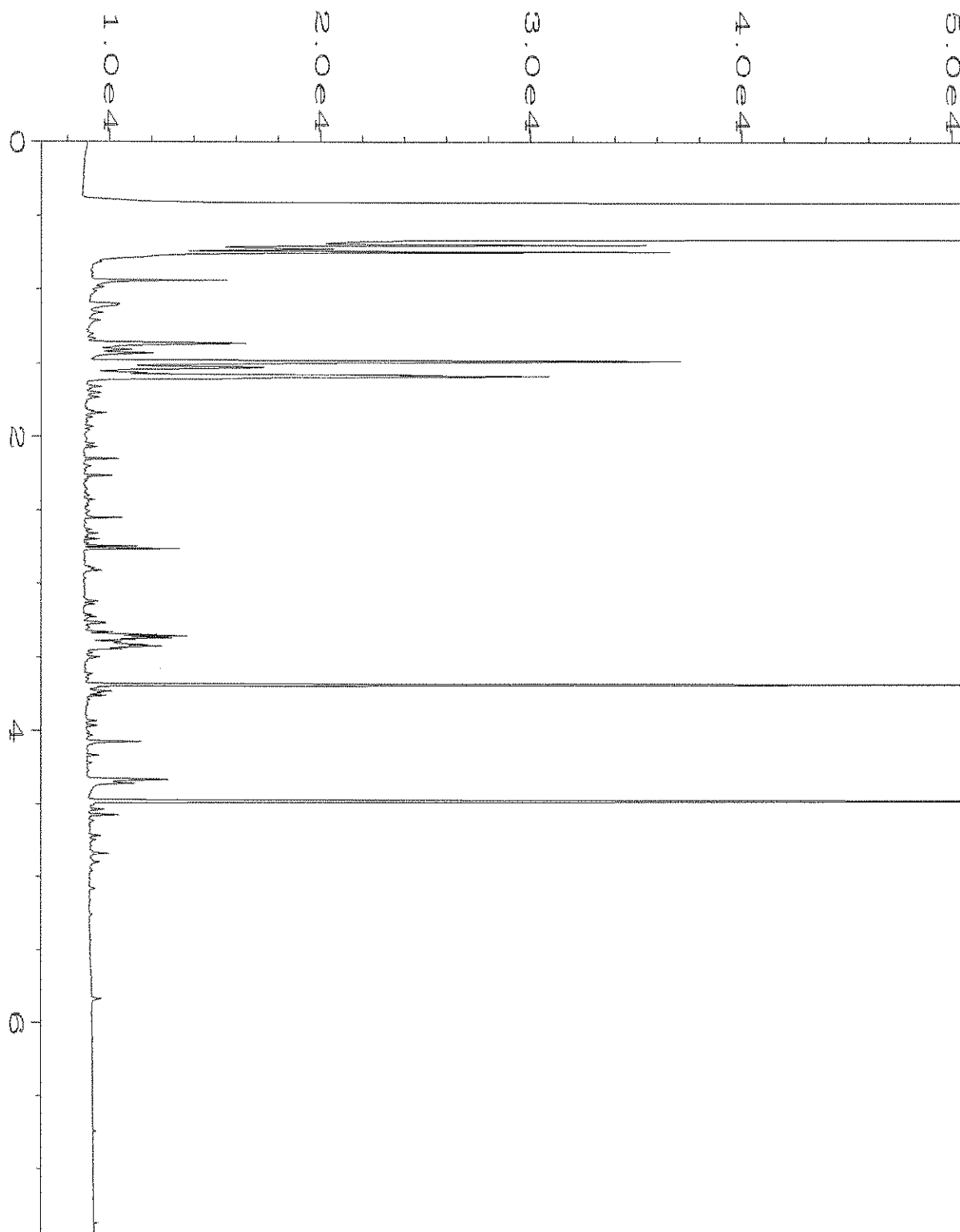
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Operator	: TL	Vial Number	: 8
Instrument	: GC1	Injection Number	: 1
Sample Name	: 011044-01	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 04 Nov 20 10:26 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	12 Jan 21 12:58 PM		



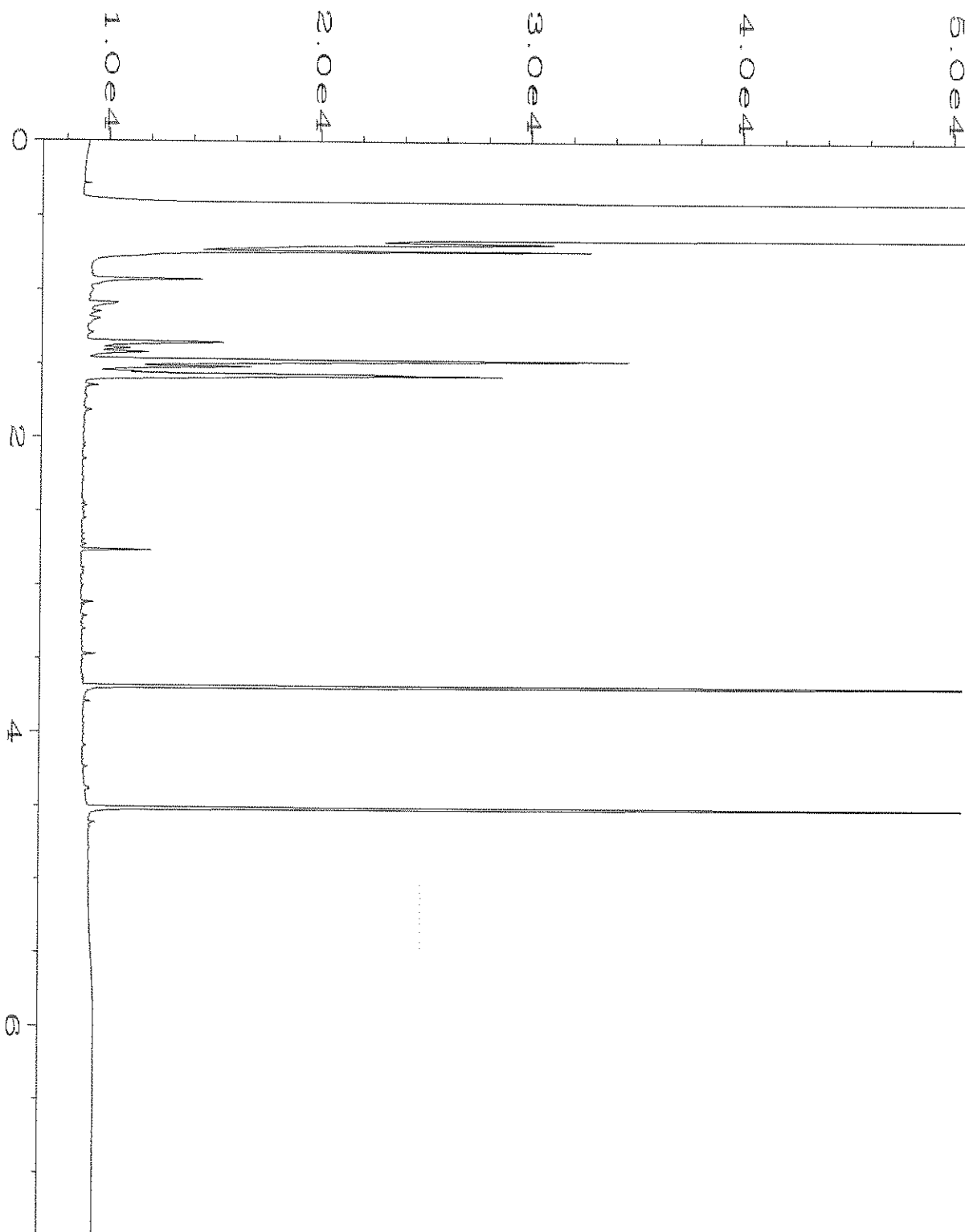
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Operator	: TL	Vial Number	: 9
Instrument	: GC1	Injection Number	: 1
Sample Name	: 011044-02	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 04 Nov 20 10:38 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	05 Nov 20 10:15 AM		



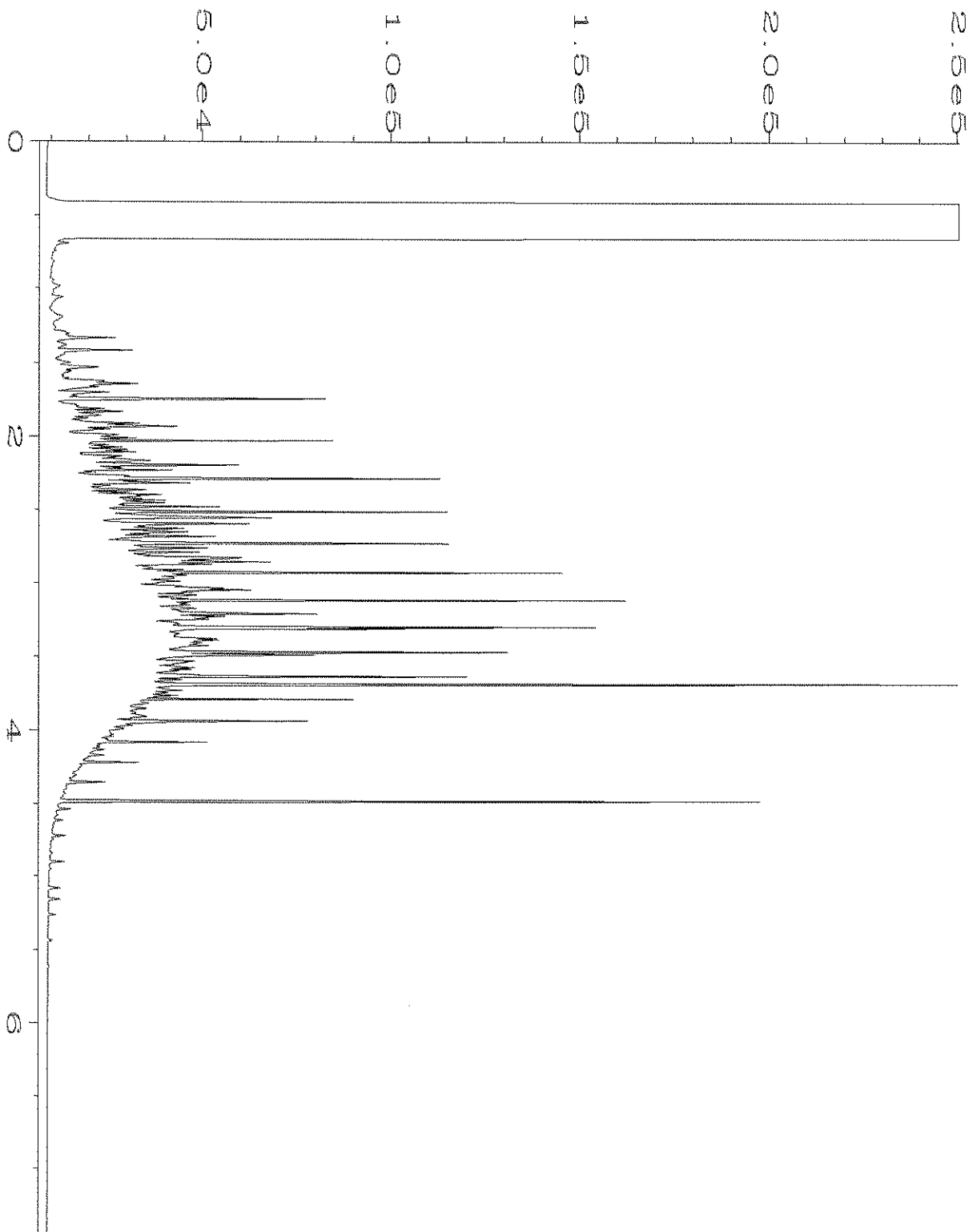
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Operator	: TL	Vial Number	: 10
Instrument	: GC1	Injection Number	: 1
Sample Name	: 011044-03	Sequence Line	: 3
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Report Created on:	12 Jan 21 12:58 PM		



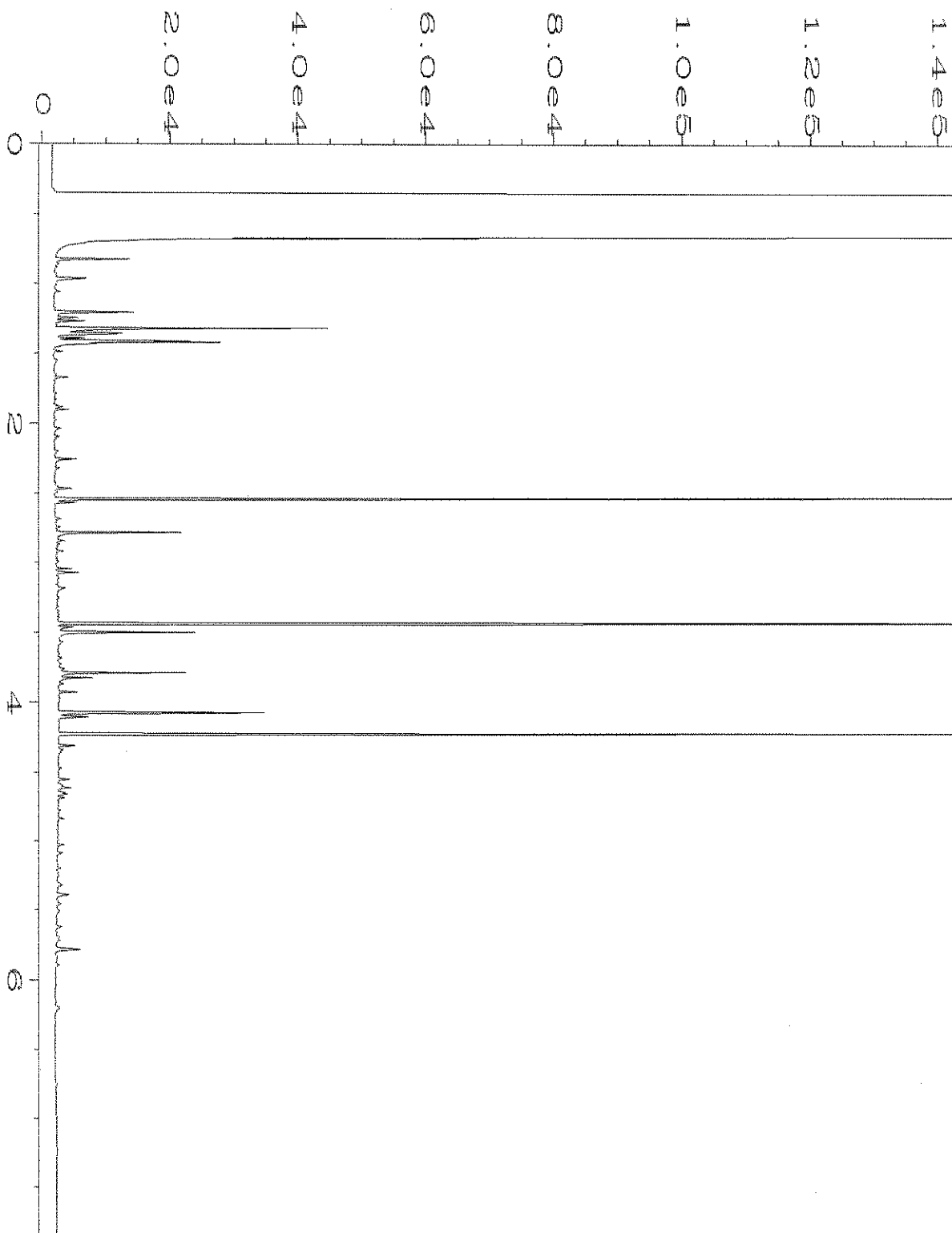
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Operator	: TL	Vial Number	: 11
Instrument	: GC1	Injection Number	: 1
Sample Name	: 011044-04	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 04 Nov 20 11:01 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	12 Jan 21 12:59 PM		



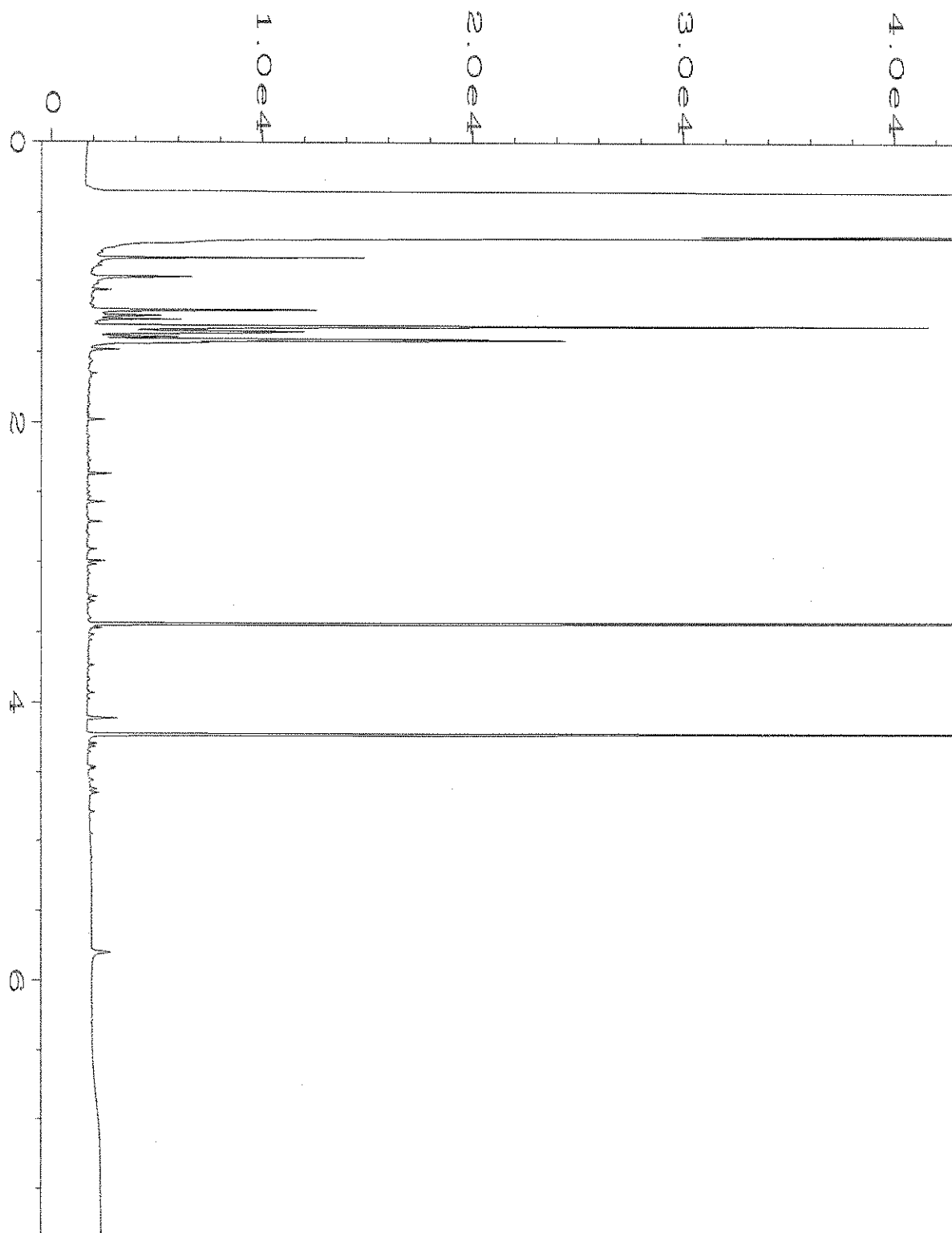
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Operator	: TL	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-2465 mb2	Sequence Line	: 3
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 04 Nov 20 10:05 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 12 Jan 21 12:59 PM		



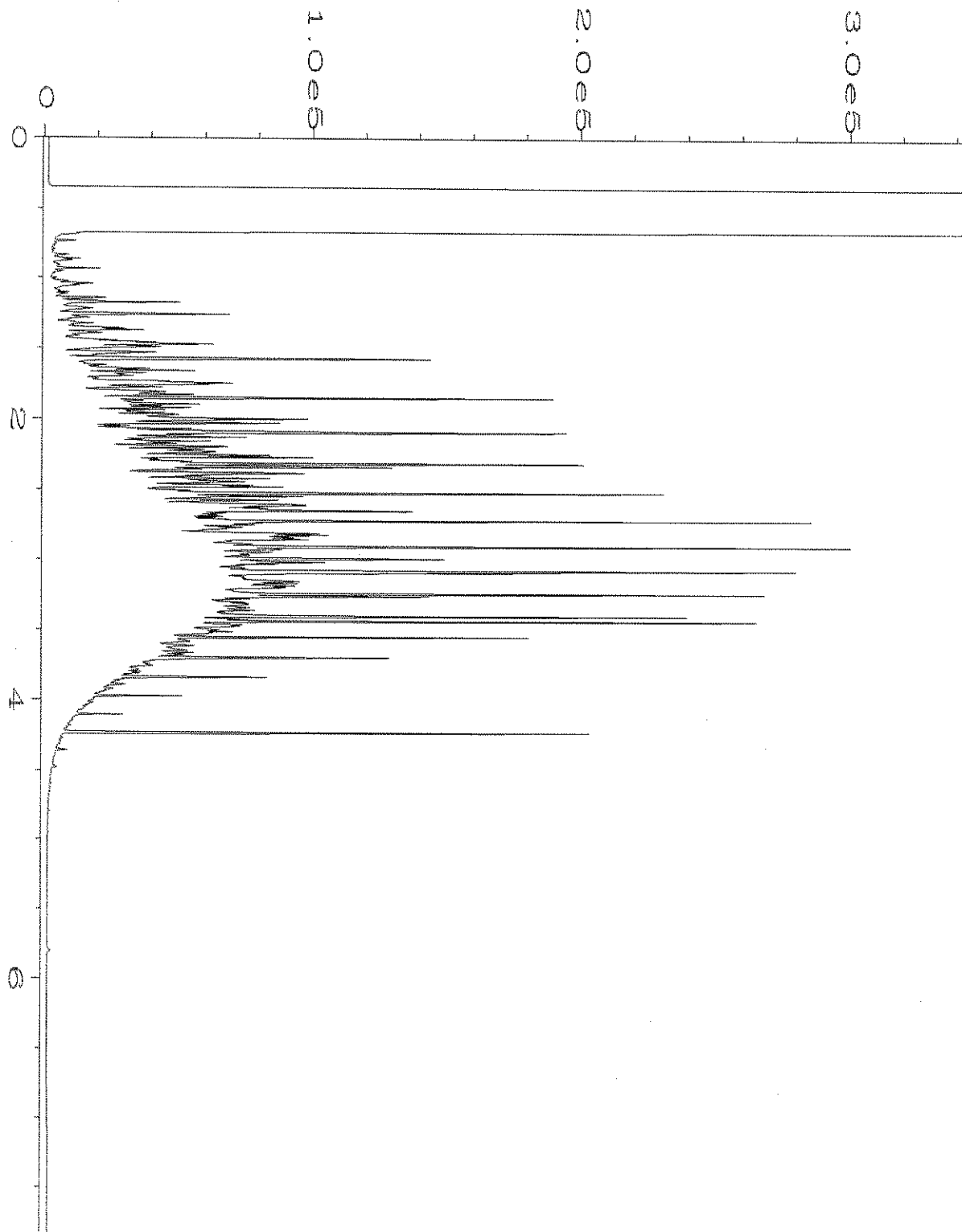
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Operator	: TL	Vial Number	: 3
Instrument	: GC1	Injection Number	: 1
Sample Name	: 500 Dx 61-146D	Sequence Line	: 2
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Acquired on	: 04 Nov 20 05:46 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	12 Jan 21 12:59 PM		



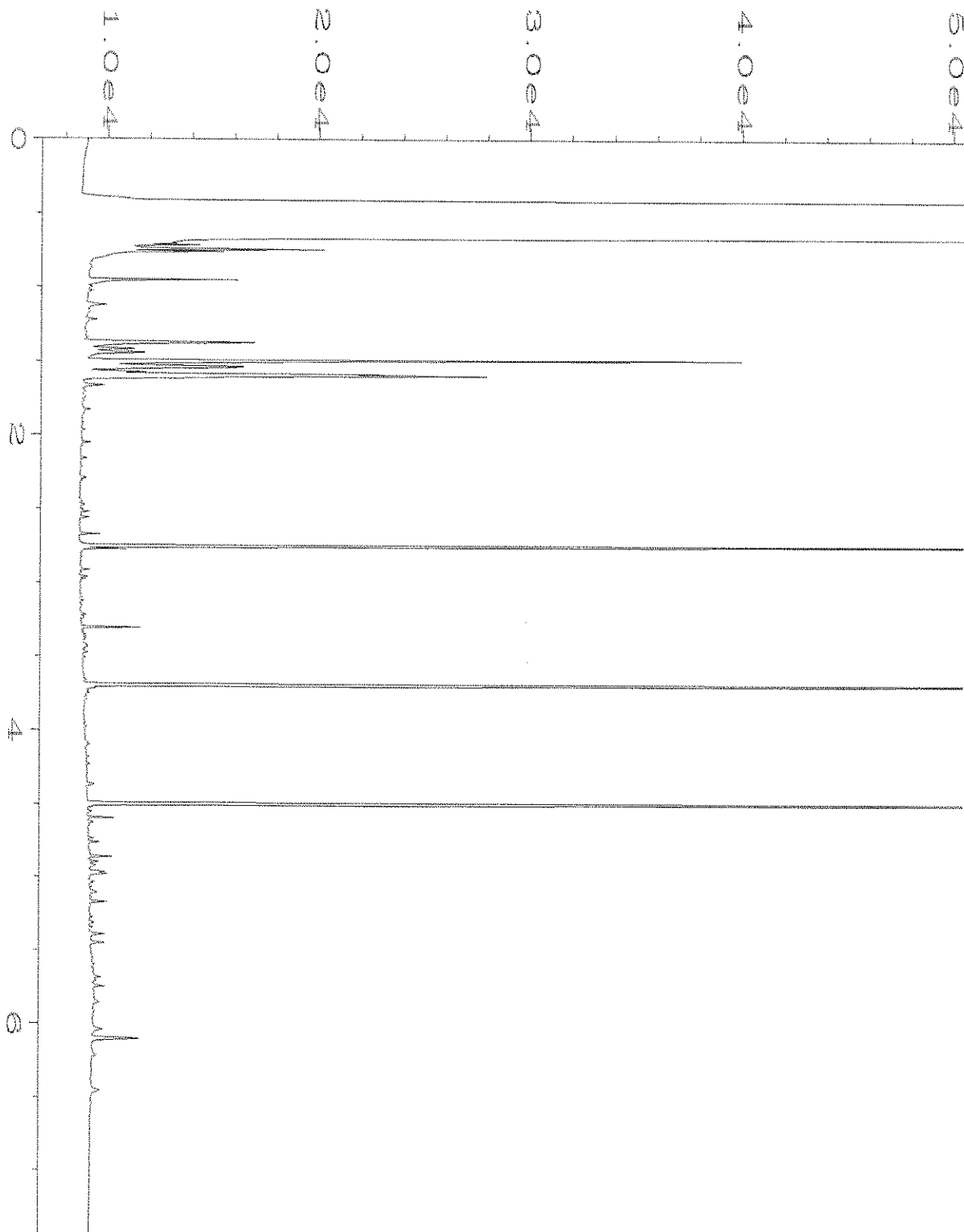
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Operator	: TL	Vial Number	: 23
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 010245-01	Sequence Line	: 6
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Acquired on	: 15 Oct 20 01:57 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	16 Oct 20 11:05 AM		



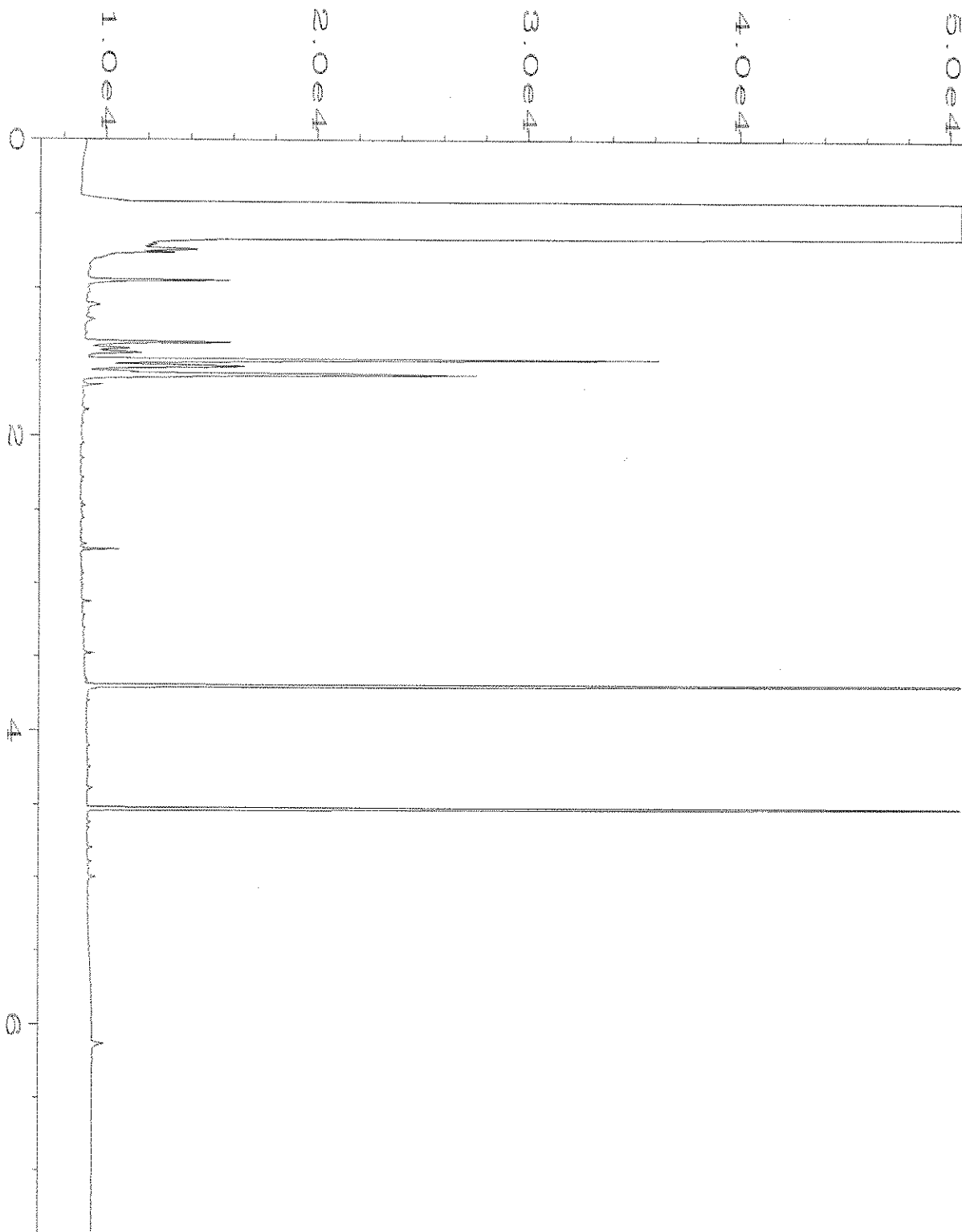
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Operator	: TL	Vial Number	: 22
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 00-2331 mb2	Sequence Line	: 6
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Acquired on	: 15 Oct 20 01:44 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	16 Oct 20 11:05 AM		



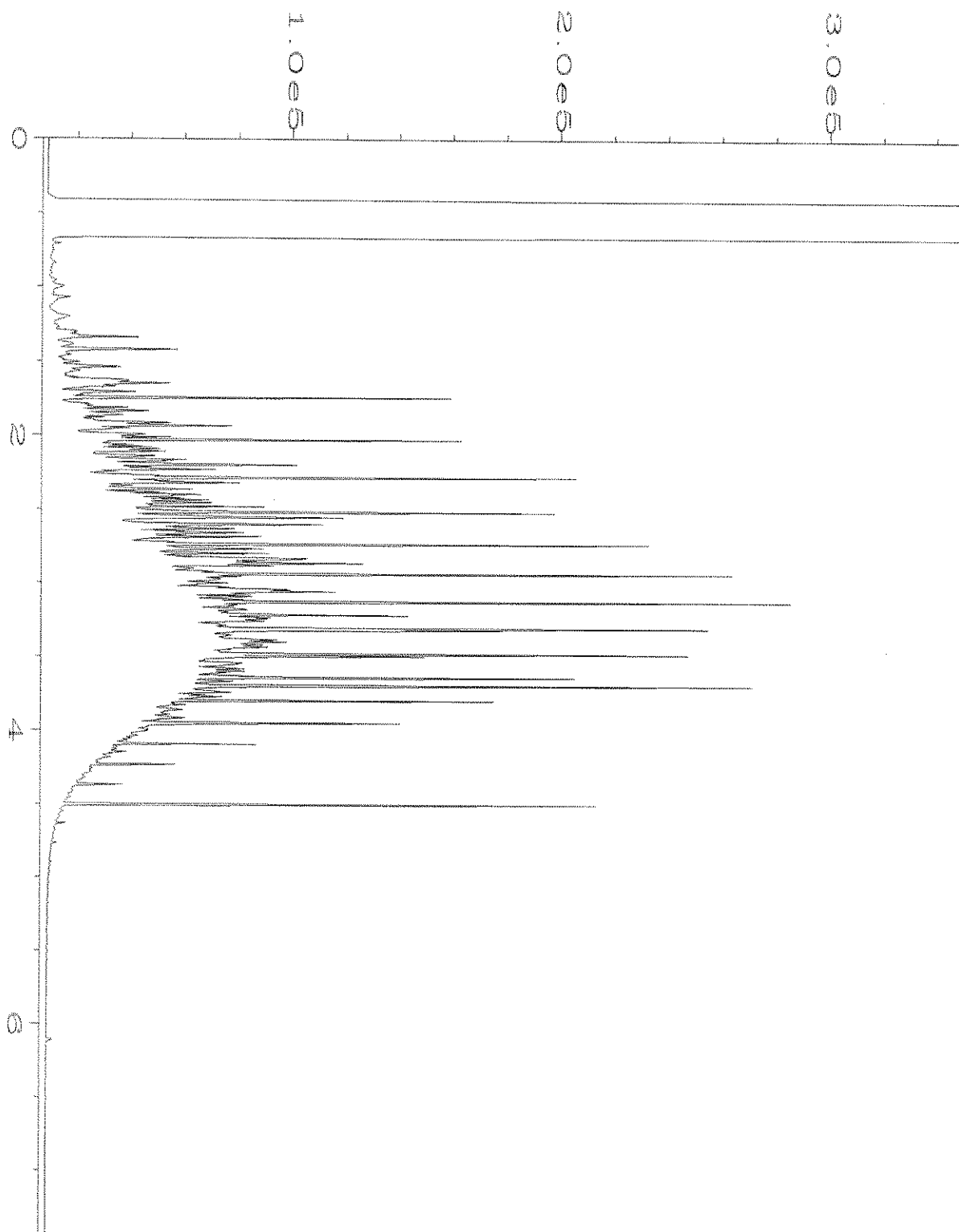
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Operator	: TL	Vial Number	: 5
Instrument	: GC#4	Injection Number	: 1
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Acquired on	: 15 Oct 20 02:22 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	16 Oct 20 11:05 AM		



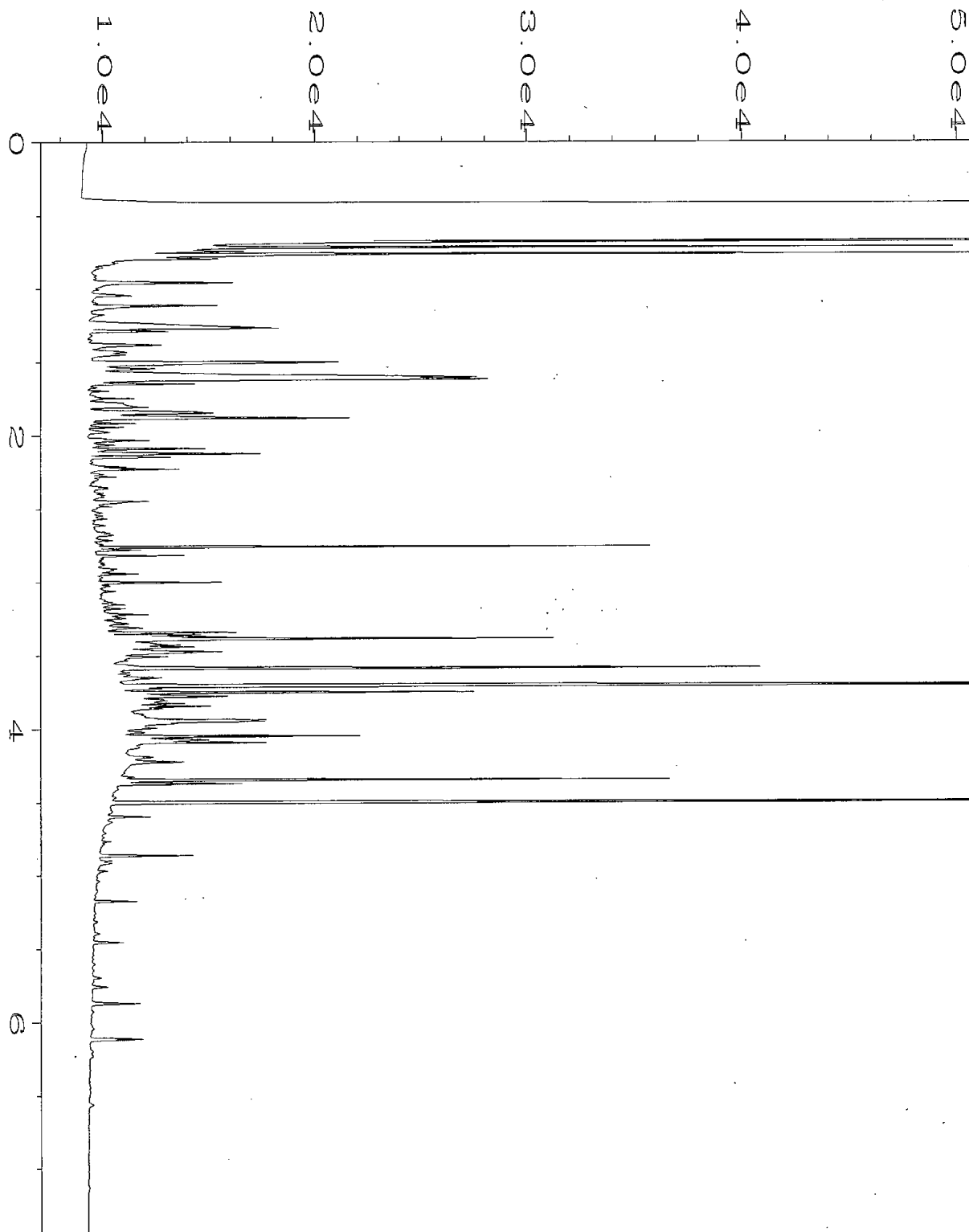
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Operator	: TL	Vial Number	: 22
Instrument	: GC1	Injection Number	: 1
Sample Name	: 010245-01 sg	Sequence Line	: 5
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 15 Oct 20 02:43 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 03:06 PM		



Data File Name	: C:\HPCHEM\1\DATA\10-15-20\021F0501.D	Page Number	: 1
Operator	: TL	Vial Number	: 21
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-2331 mb2 sg	Sequence Line	: 5
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Report Created on:	16 Oct 20 10:55 AM		

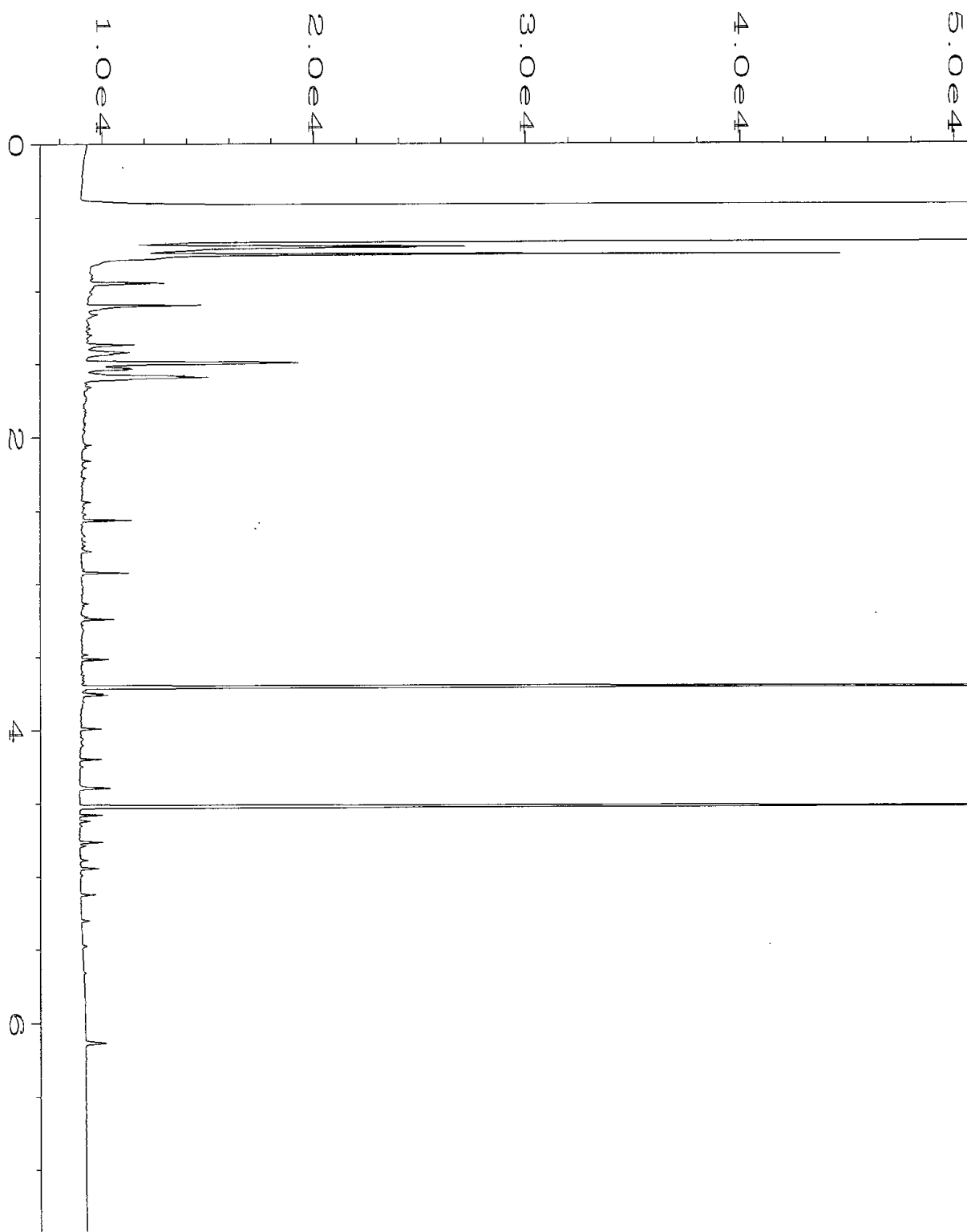


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Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 60-170B	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 15 Oct 20 02:11 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	16 Oct 20 10:55 AM		

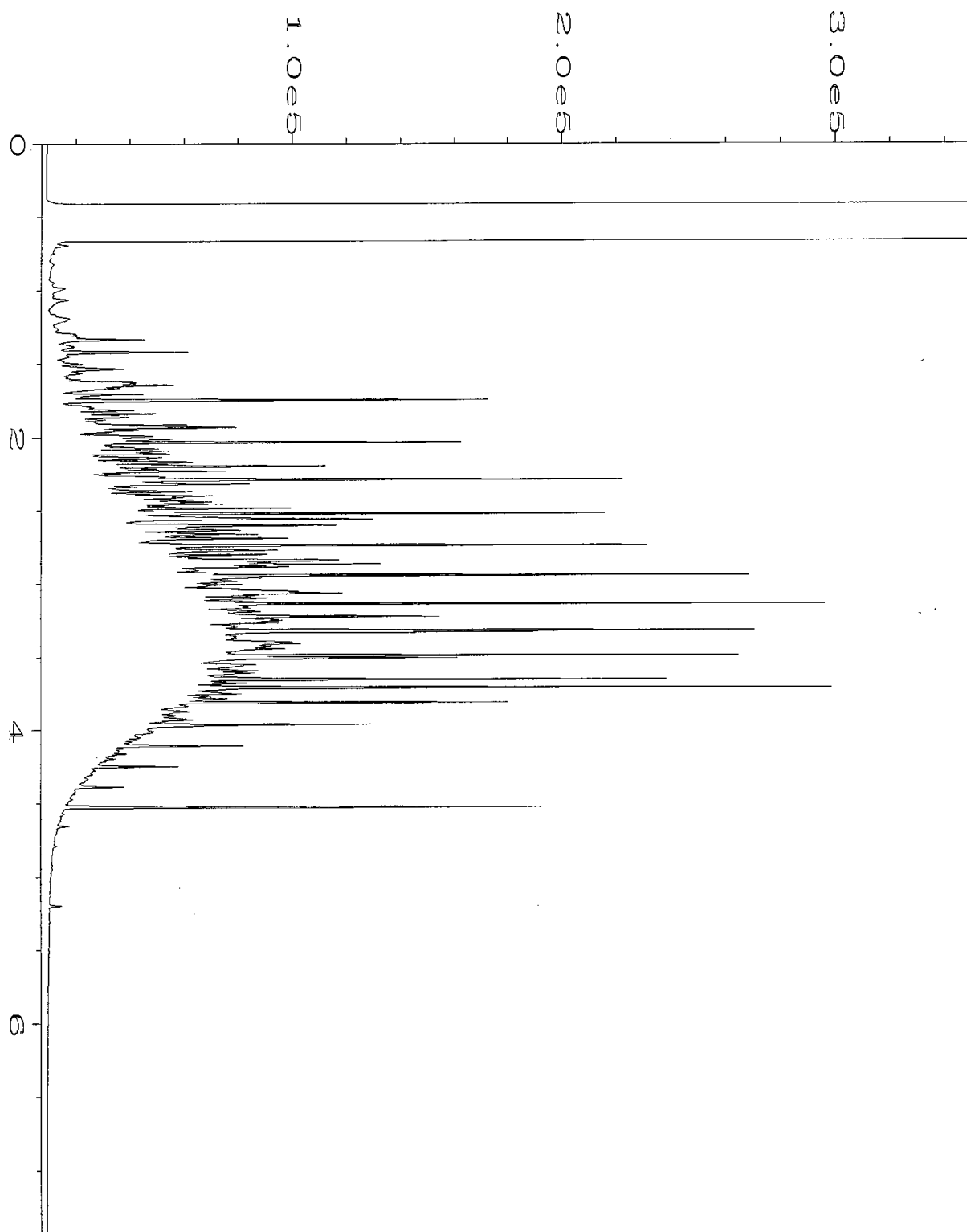


HMW-16IB

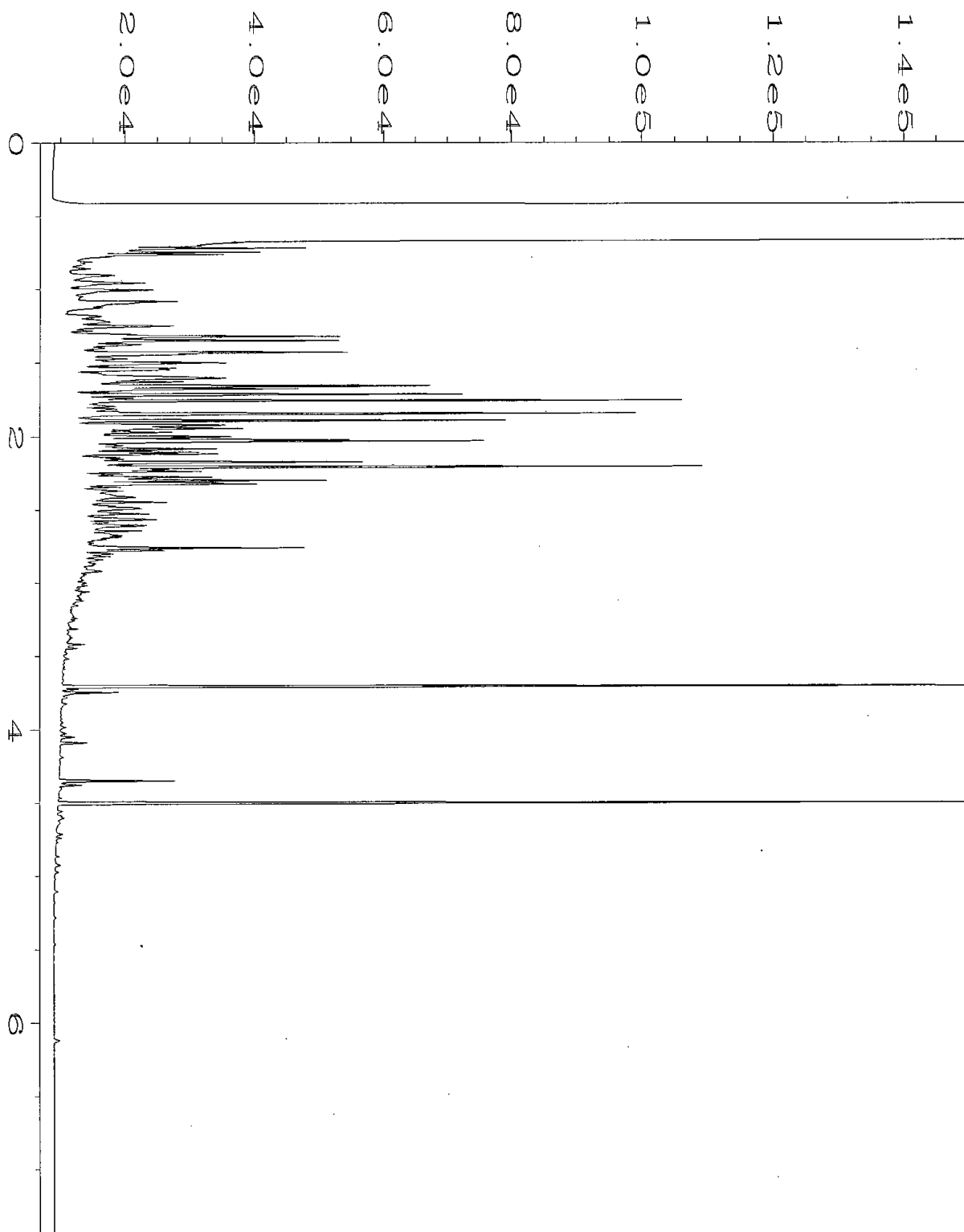
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Operator	: TL	Vial Number	: 22
Instrument	: GC1	Injection Number	: 1
Sample Name	: 009314-02	Sequence Line	: 3
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Sep 20 01:31 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:38 AM		



Data File Name	: C:\HPCHEM\1\DATA\09-18-20\026F0501.D	Page Number	: 1
Operator	: TL	Vial Number	: 26
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-2096 mb	Sequence Line	: 5
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Acquired on	: 18 Sep 20 03:36 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:38 AM		

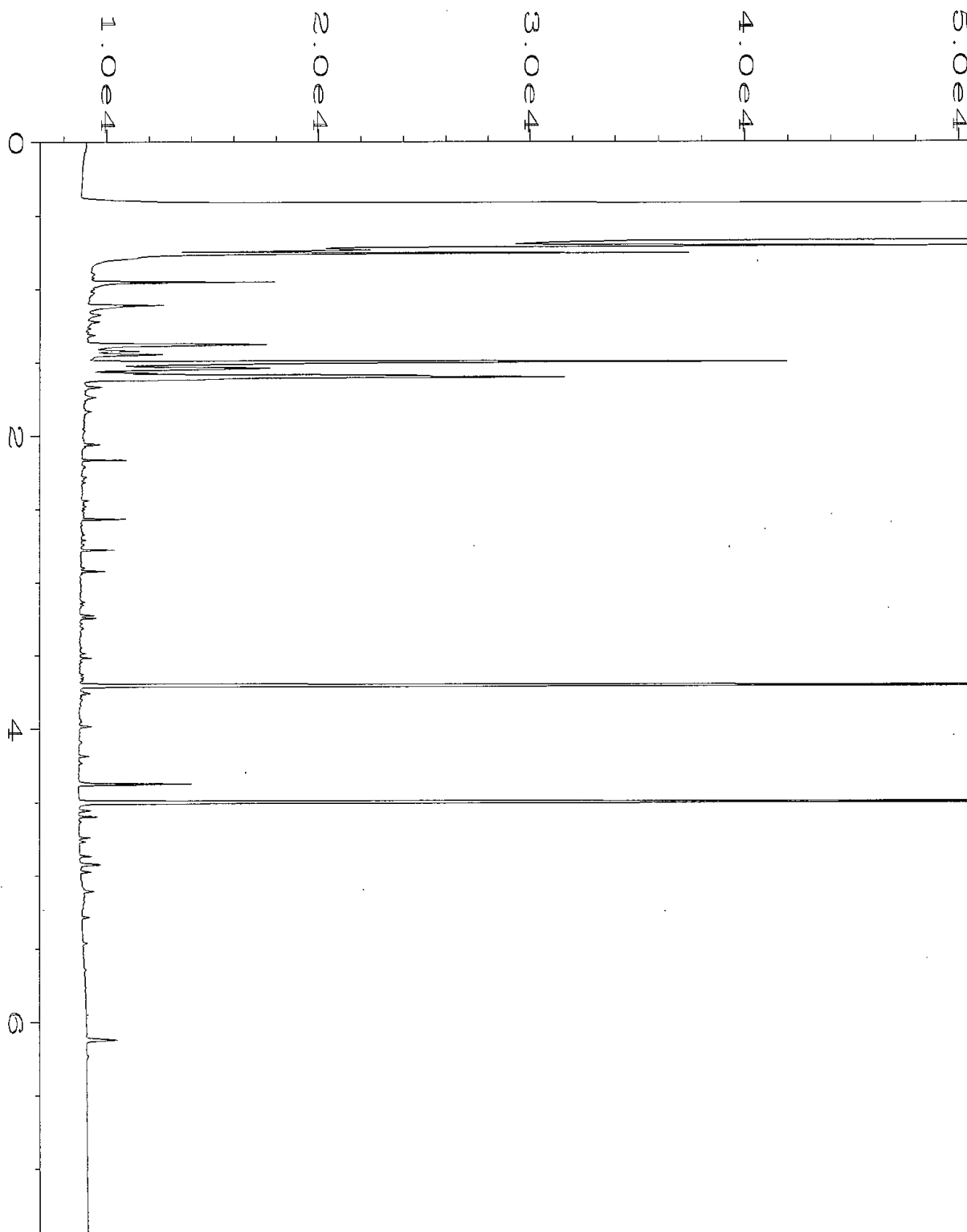


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Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 60-170B	Sequence Line	: 4
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Acquired on	: 18 Sep 20 02:43 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:38 AM		

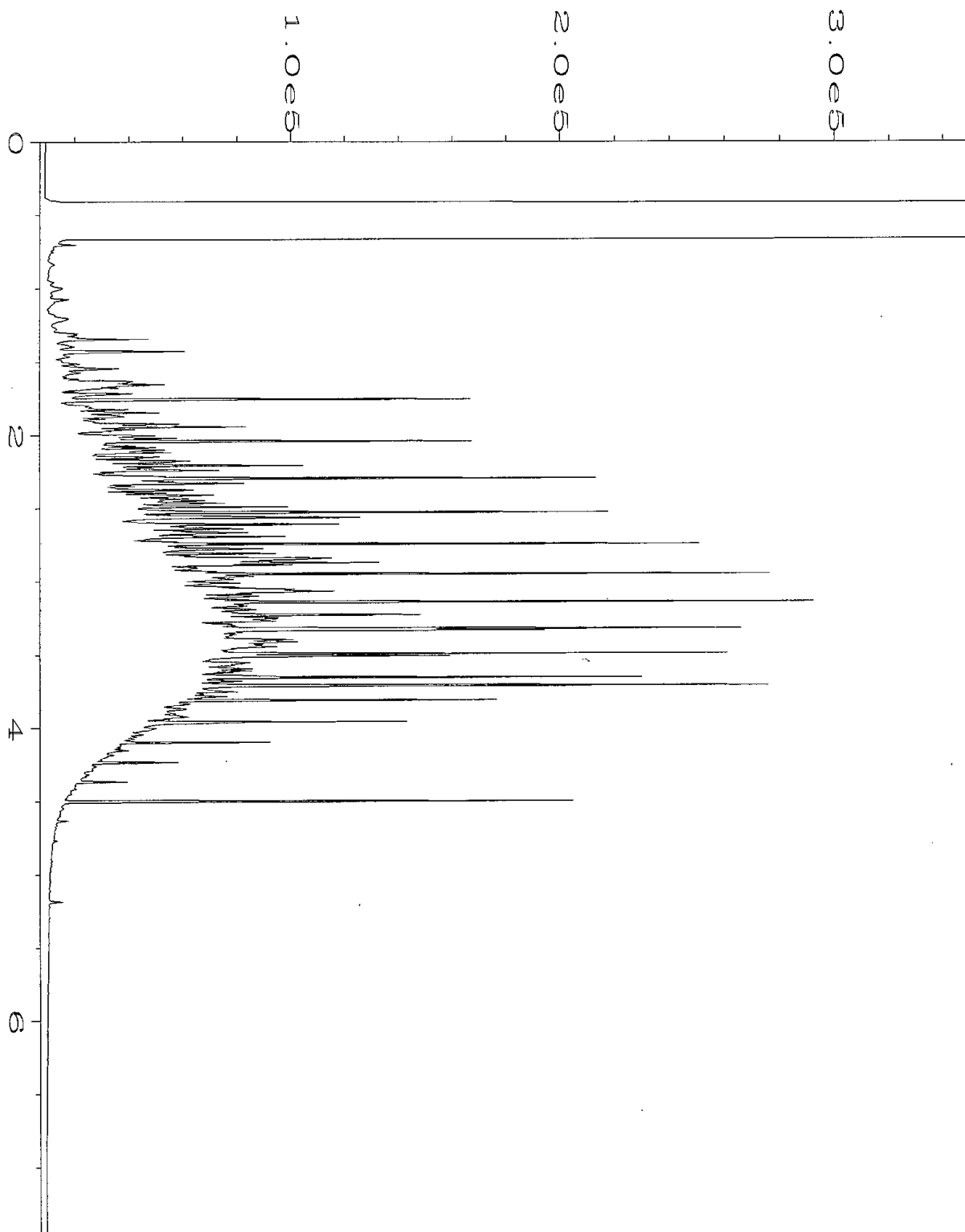


MRB-24

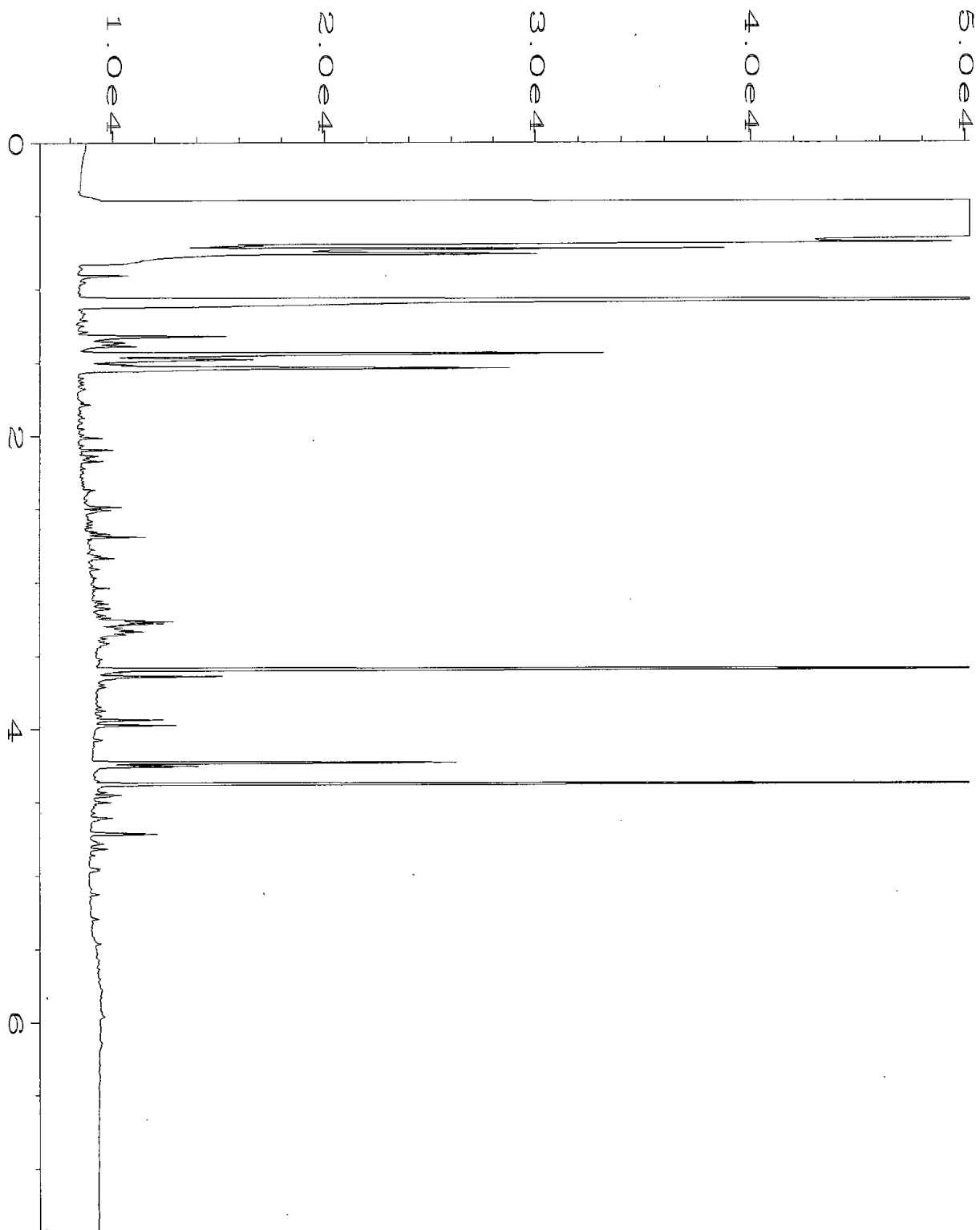
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Operator	: TL	Vial Number	: 27
Instrument	: GC1	Injection Number	: 1
Sample Name	: 009184-01	Sequence Line	: 7
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 11 Sep 20 03:10 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:36 AM		



Data File Name	: C:\HPCHEM\1\DATA\09-11-20\026F0701.D	Page Number	: 1
Operator	: TL	Vial Number	: 26
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-2060 mb2	Sequence Line	: 7
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 11 Sep 20 02:58 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:36 AM		

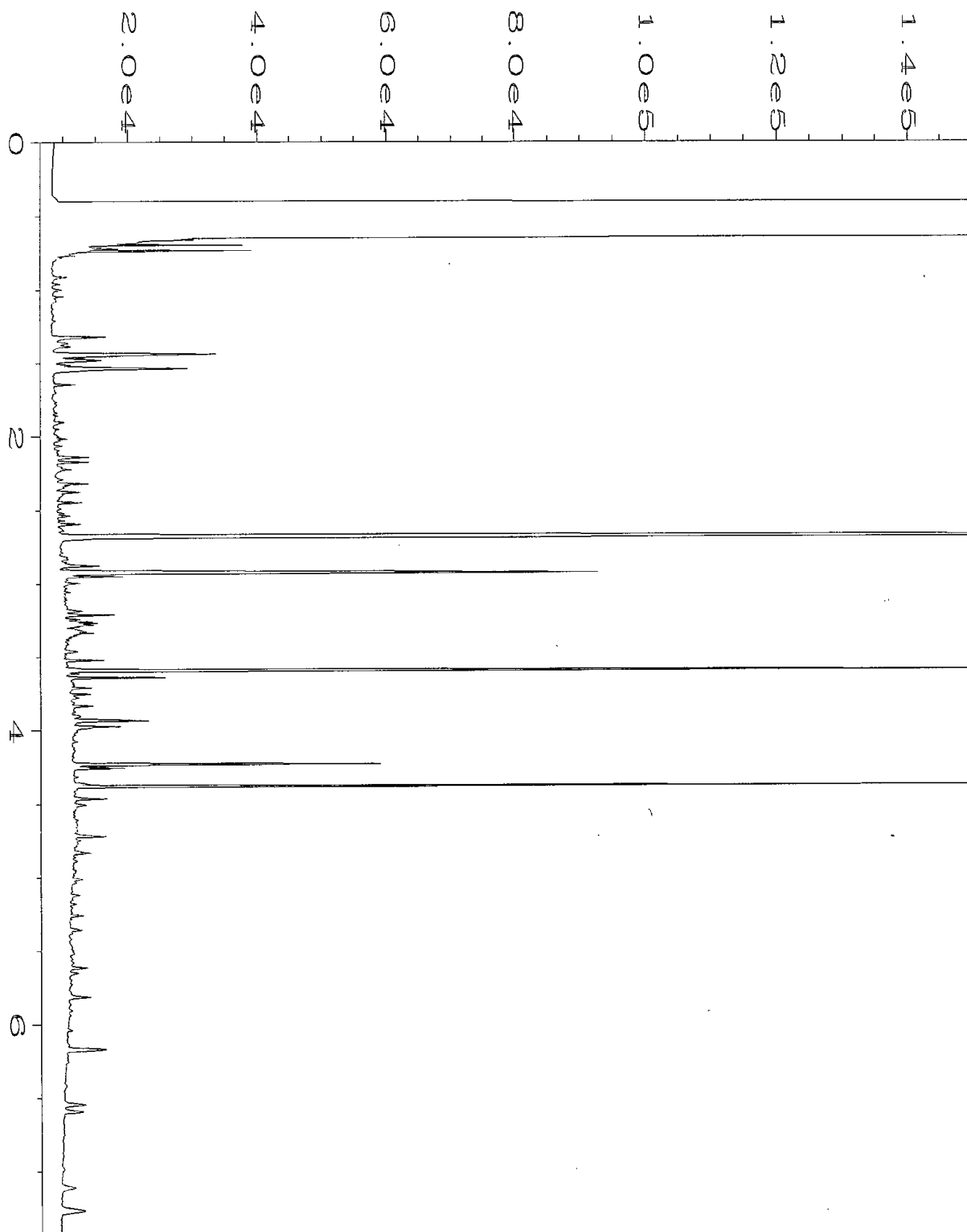


Data File Name	: C:\HPCHEM\1\DATA\09-11-20\005F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 60-170B	Sequence Line	: 6
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 11 Sep 20 02:46 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:36 AM		



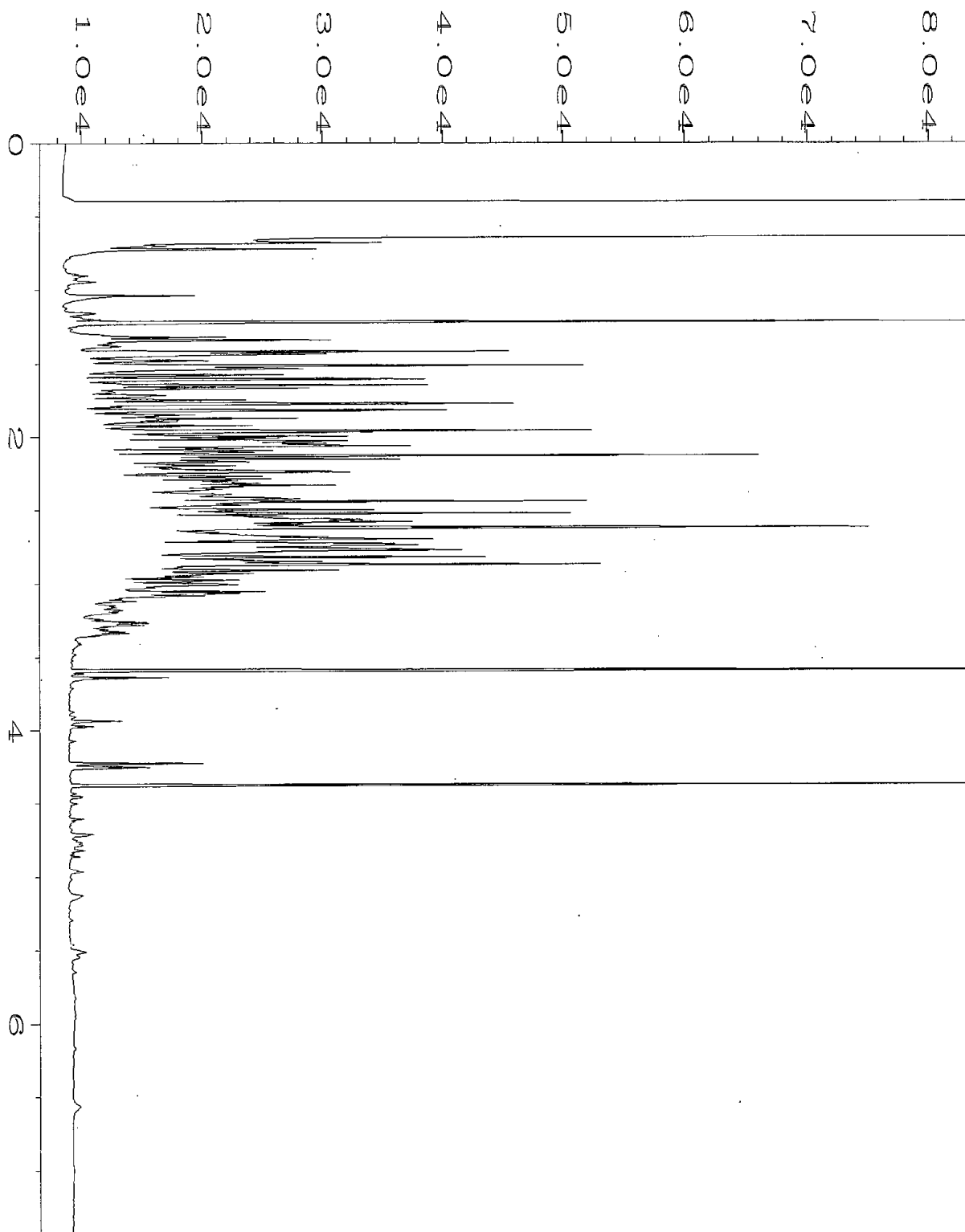
HMW-9IB

Data File Name	: C:\HPCHEM\1\DATA\03-23-20\010F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 10
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003357-01	Sequence Line	: 3
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 23 Mar 20 11:44 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:12 AM		



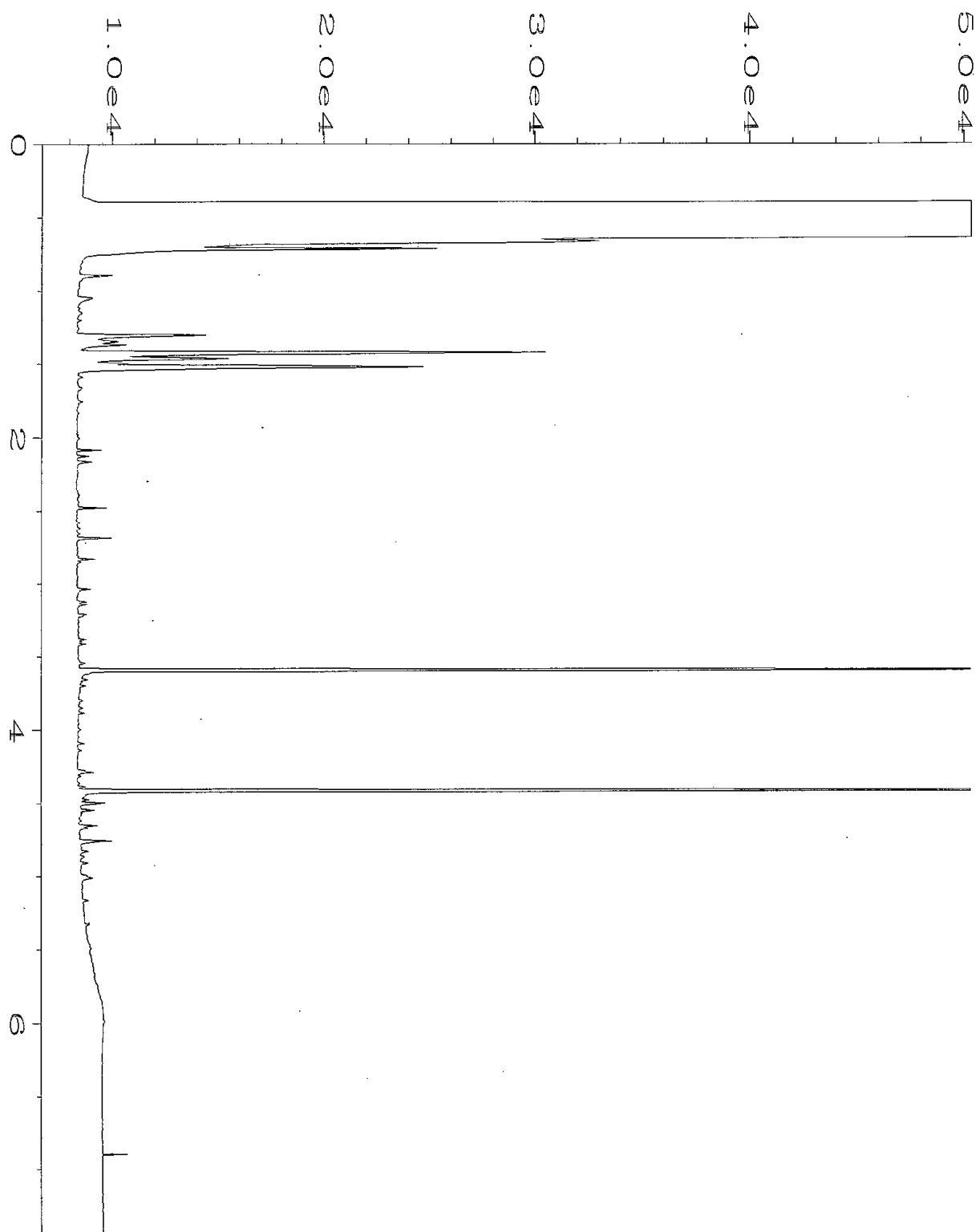
DMM - 5IA

Data File Name	: C:\HPCHEM\1\DATA\03-23-20\012F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 12
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003357-03	Sequence Line	: 3
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 23 Mar 20 12:07 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:13 AM		

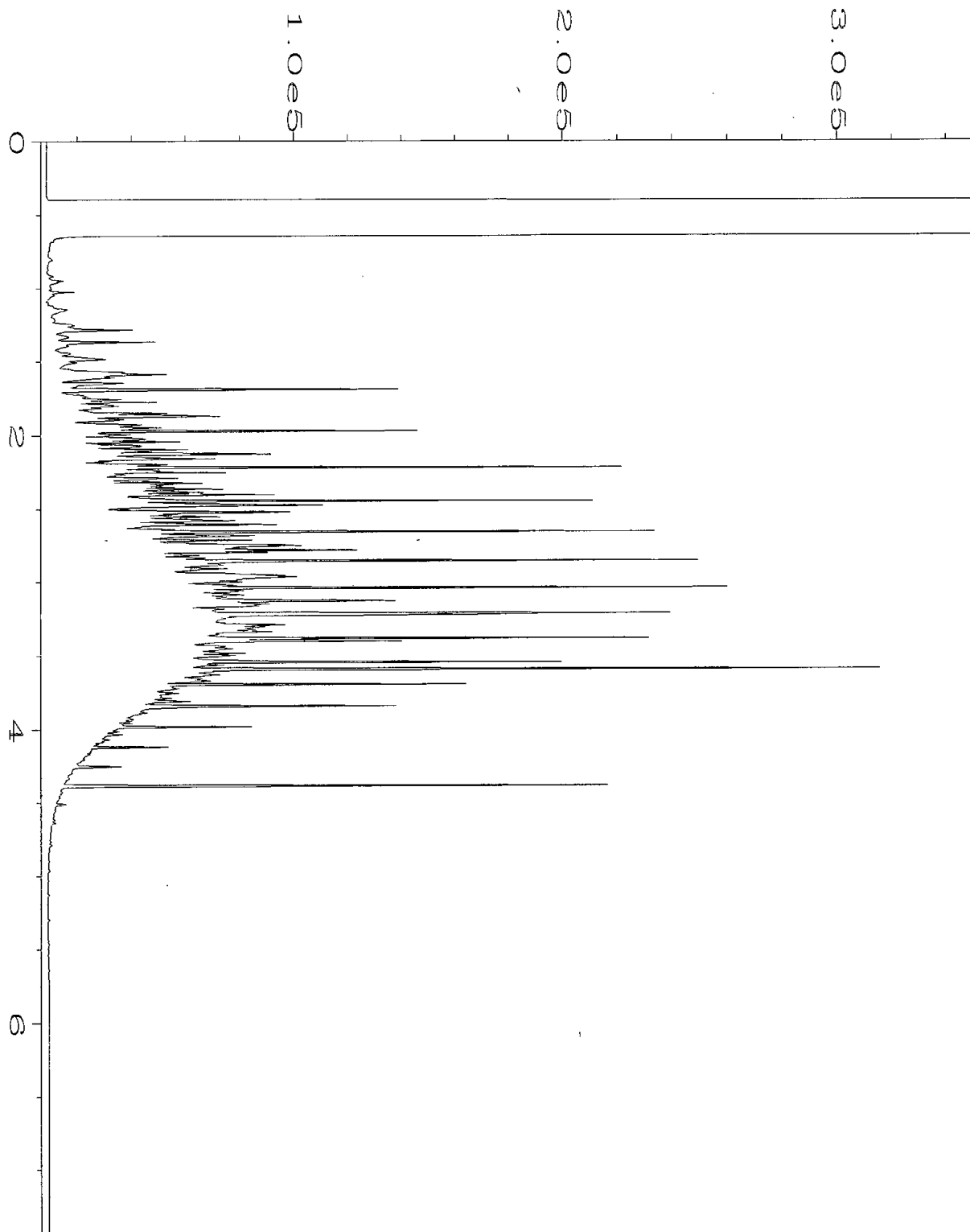


DMW-4S

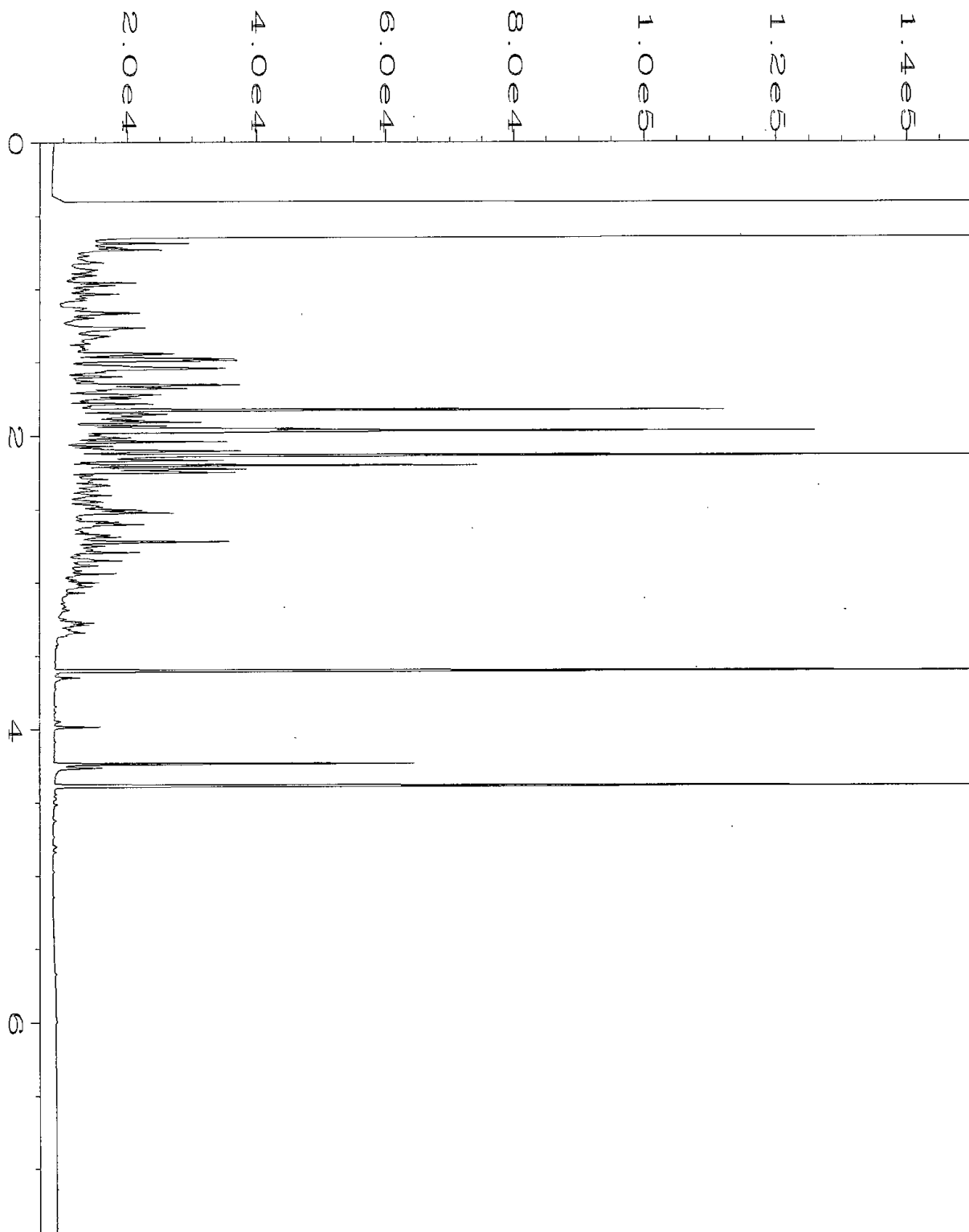
Data File Name	: C:\HPCHEM\1\DATA\03-23-20\013F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 13
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003357-04	Sequence Line	: 3
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 23 Mar 20 12:18 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:14 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-23-20\006F0301.D		
Operator	: TL	Page Number	: 1
Instrument	: GC1	Vial Number	: 6
Sample Name	: 00-736 mb	Injection Number	: 1
Run Time Bar Code:		Sequence Line	: 3
Acquired on	: 23 Mar 20 11:01 AM	Instrument Method:	DX.MTH
Report Created on:	15 Oct 20 10:14 AM	Analysis Method	: DEFAULT.MTH

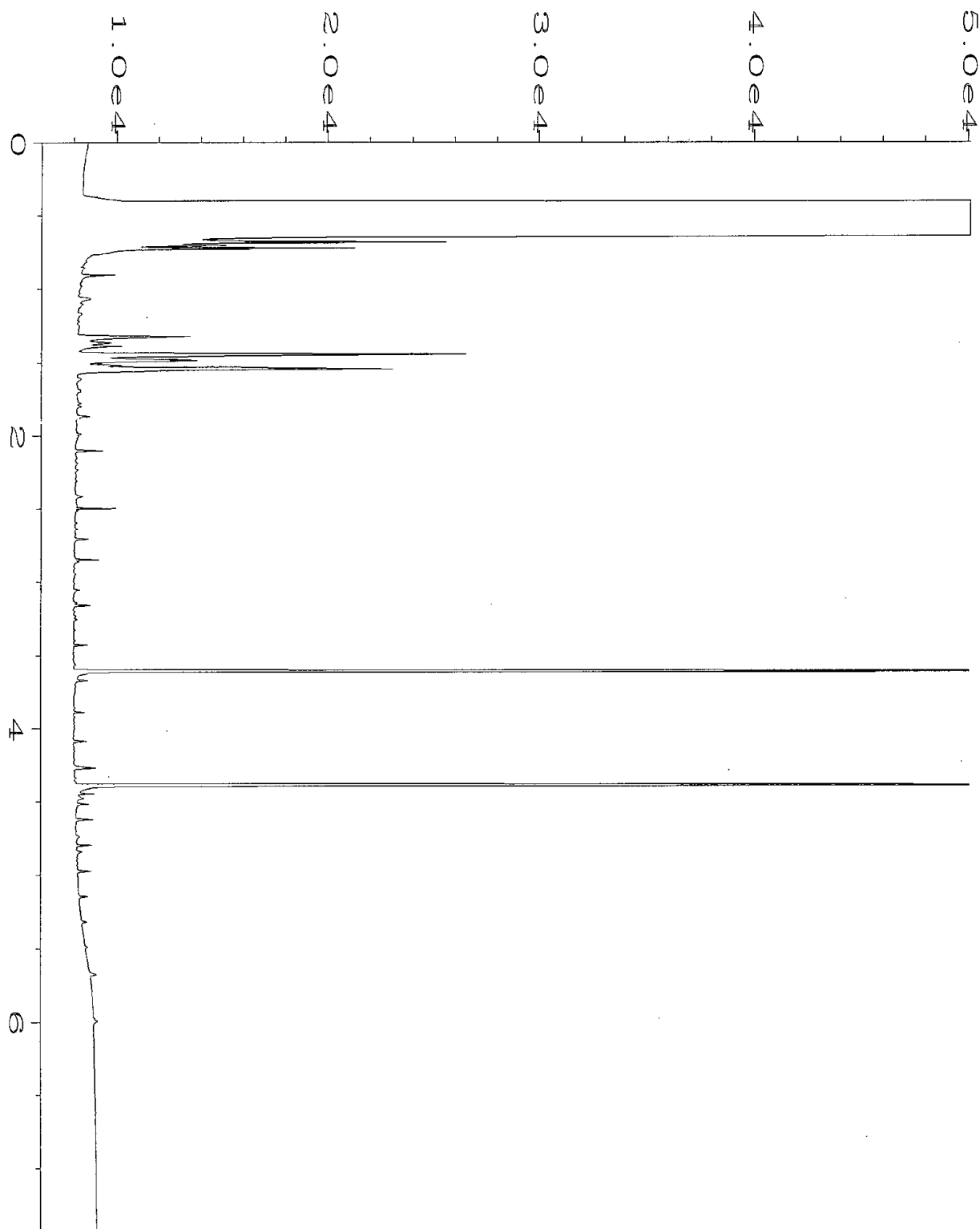


Data File Name	: C:\HPCHEM\1\DATA\03-23-20\005F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 23 Mar 20 02:11 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:14 AM		

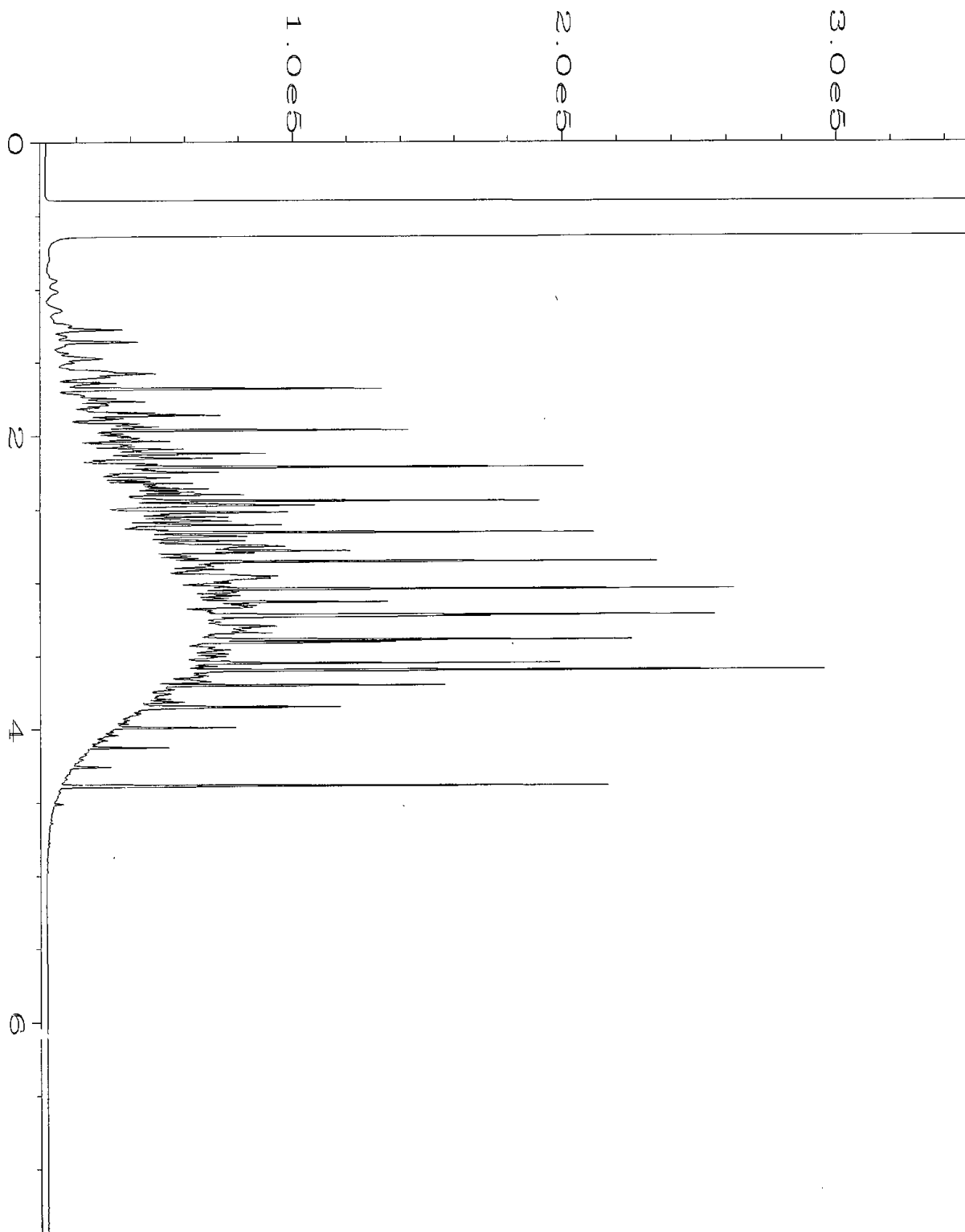


DMW-15

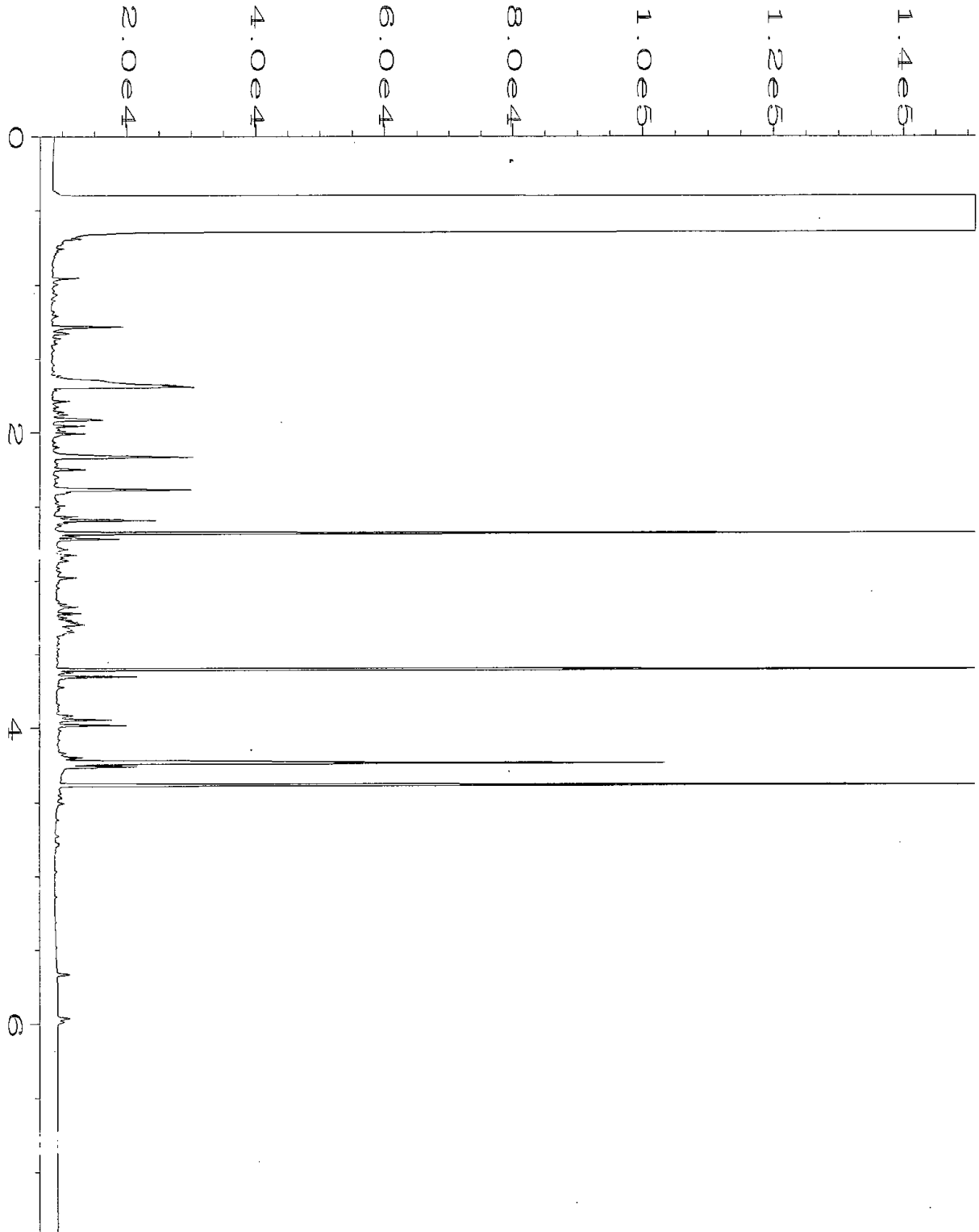
Data File Name	: C:\HPCHEM\1\DATA\03-19-20\016F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 16
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003307-01	Sequence Line	: 6
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 19 Mar 20 01:48 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:11 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-19-20\010F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 10
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-700 mb2	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 19 Mar 20 11:08 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:11 AM		

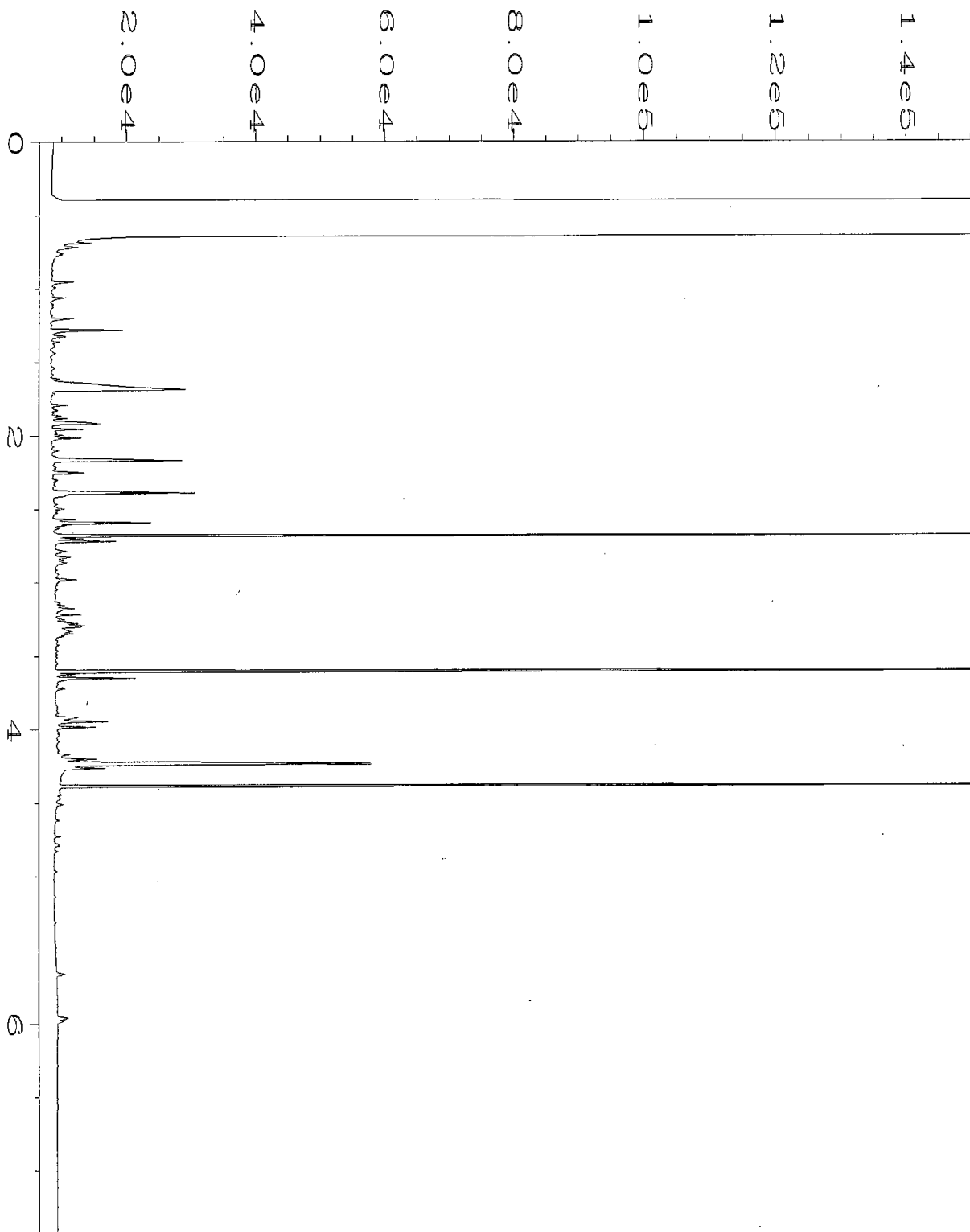


Data File Name	: C:\HPCHEM\1\DATA\03-19-20\005F0701.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 7
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 19 Mar 20 03:00 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:11 AM		

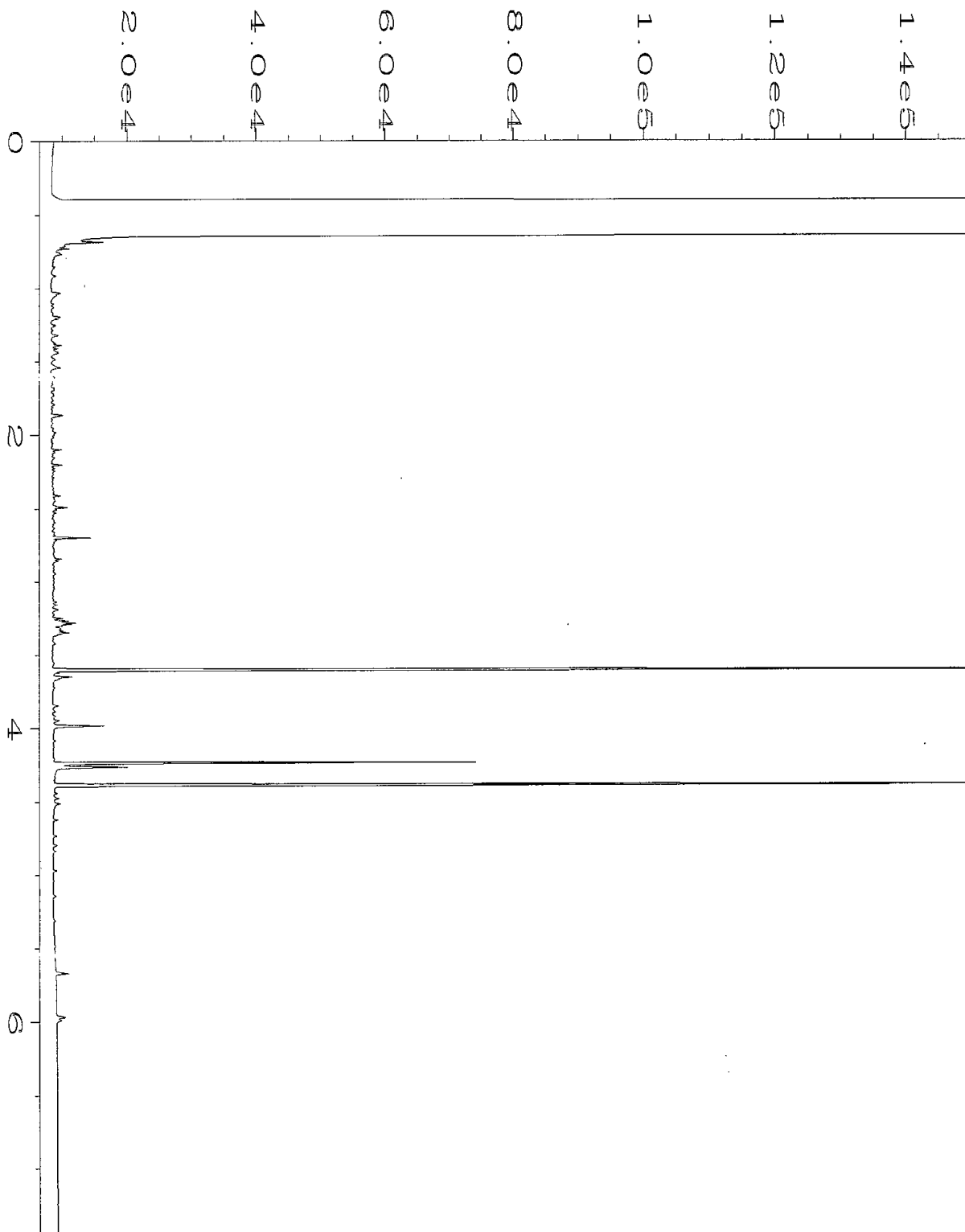


HMW-9D

Data File Name	: C:\HPCHEM\1\DATA\03-18-20\041F1101.D	Page Number	: 1
Operator	: TL	Vial Number	: 41
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003285-02	Sequence Line	: 11
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Mar 20 08:25 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:06 AM		

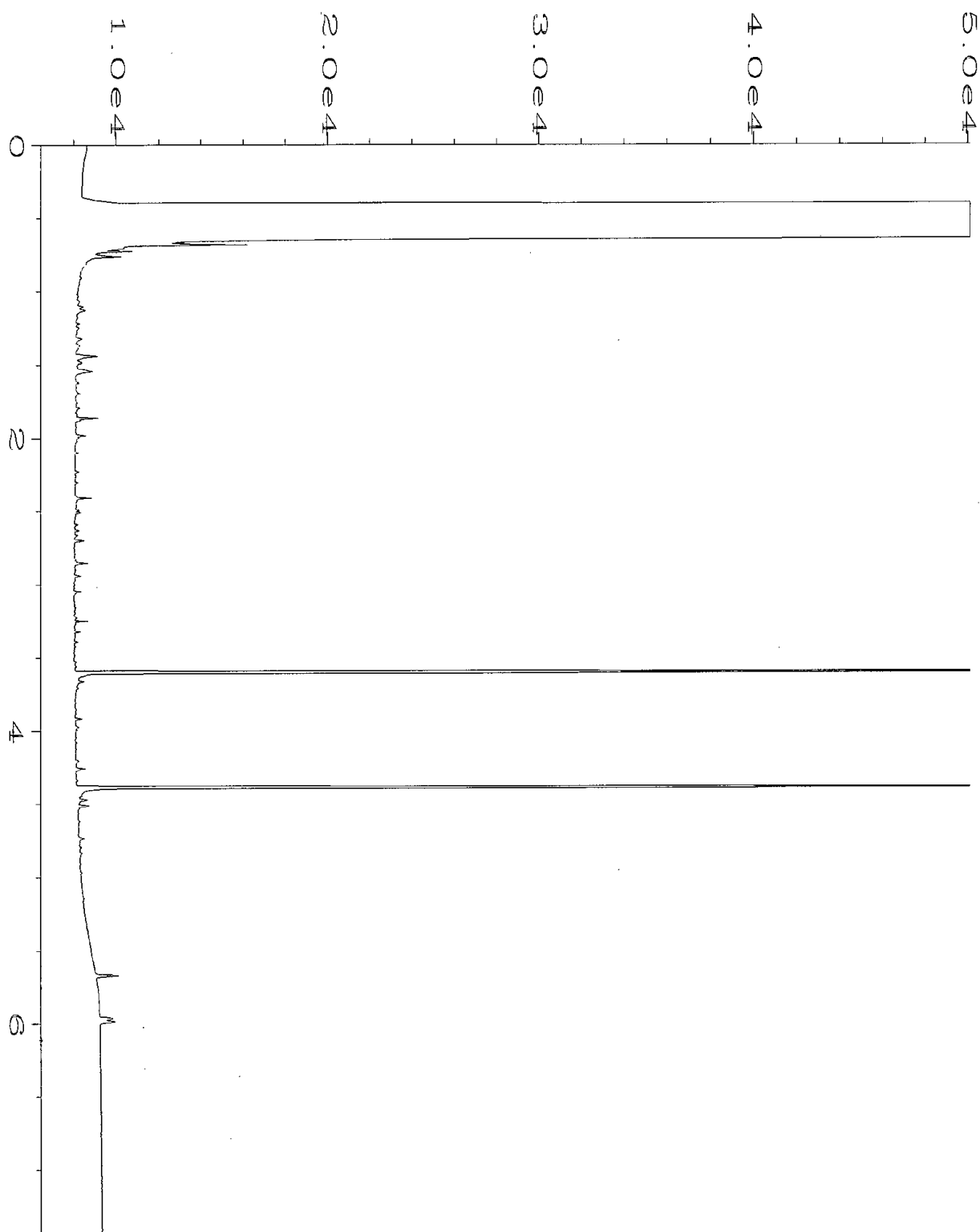


Data File Name	: C:\HPCHEM\1\DATA\03-18-20\042F1101.D	Page Number	: 1
Operator	: TL	Vial Number	: 42
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003285-03	Sequence Line	: 11
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Mar 20 08:37 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:08 AM		

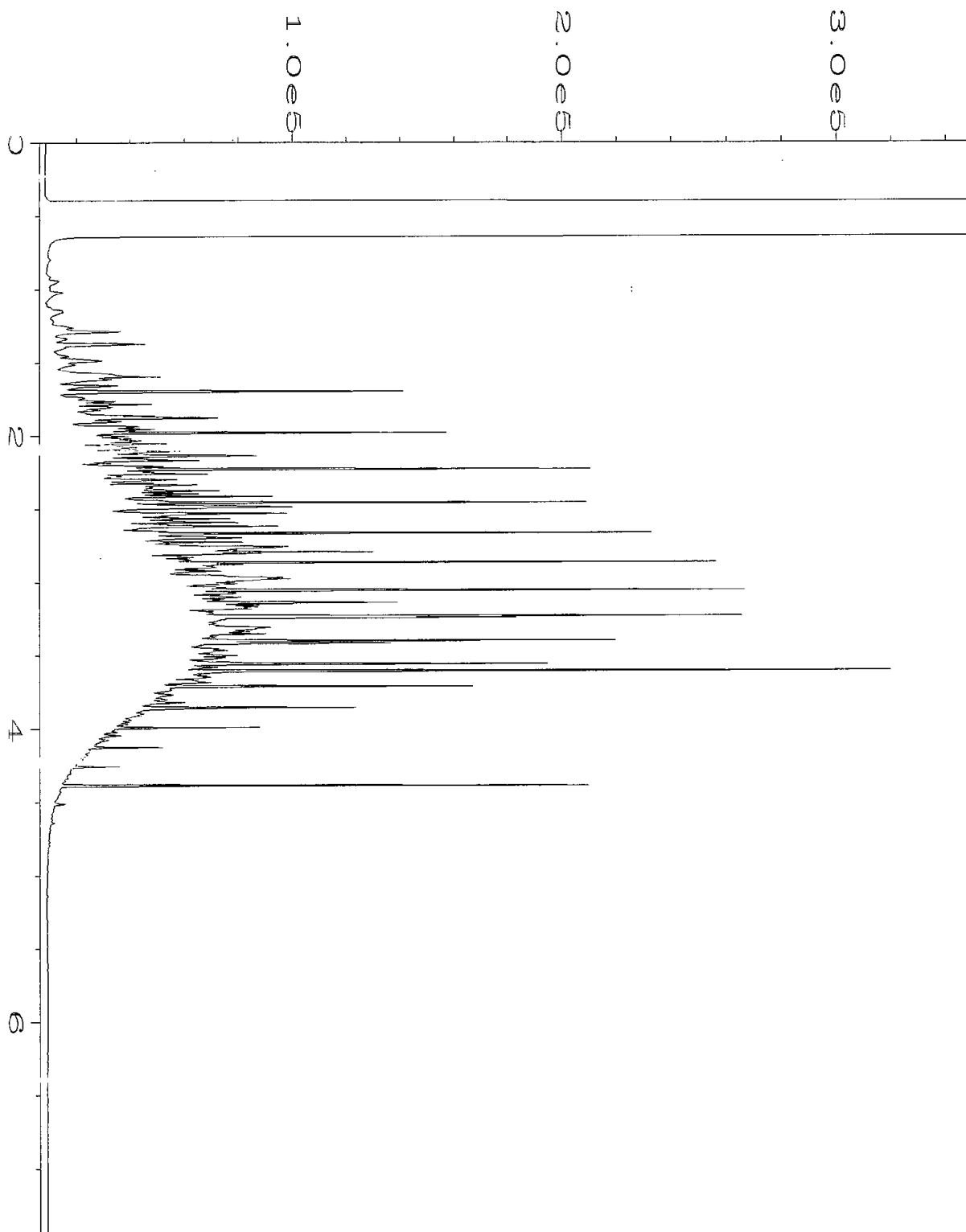


HMW-9S

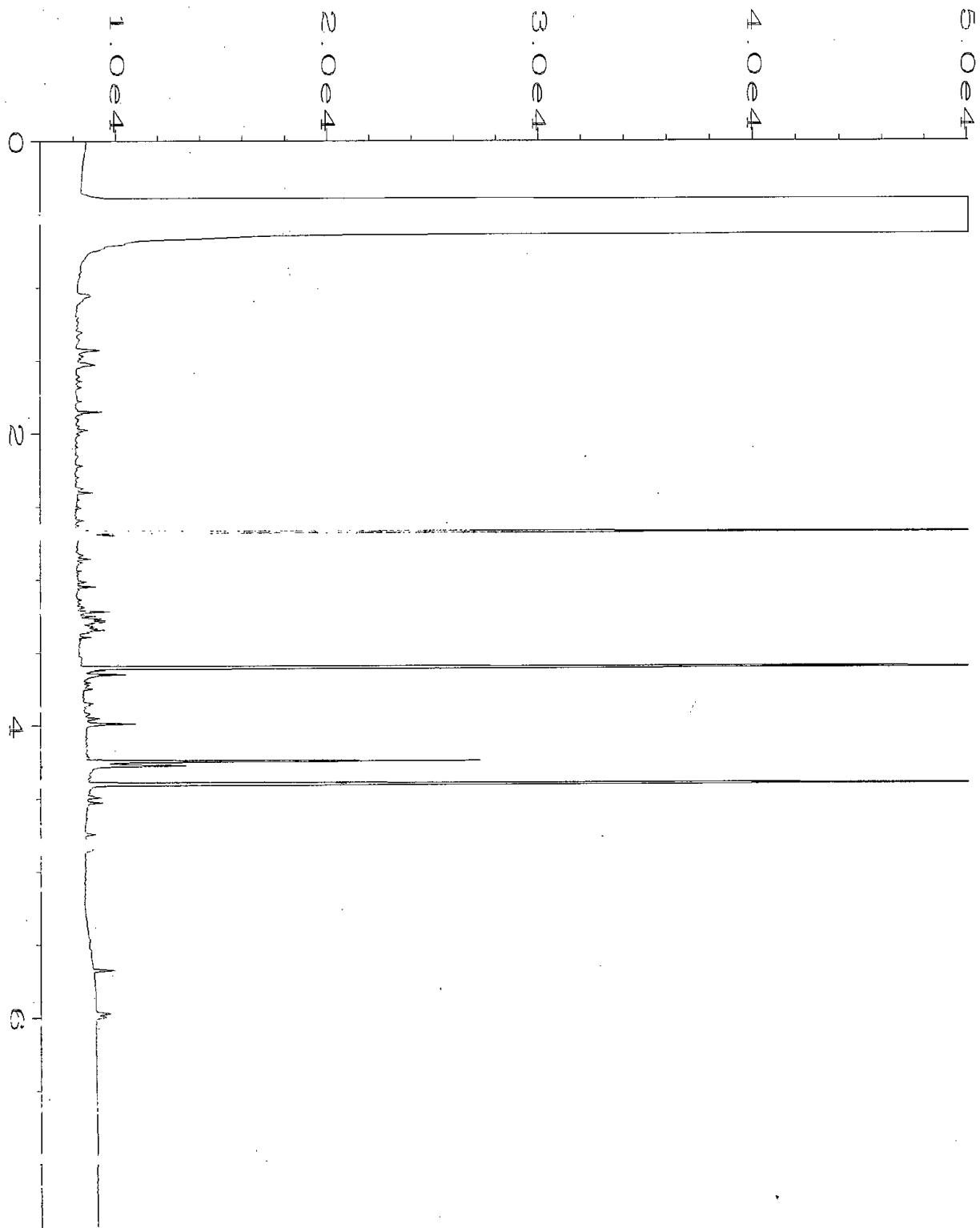
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\043F1101.D	Page Number	: 1
Operator	: TL	Vial Number	: 43
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003285-04	Sequence Line	: 11
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Mar 20 08:48 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:08 AM		



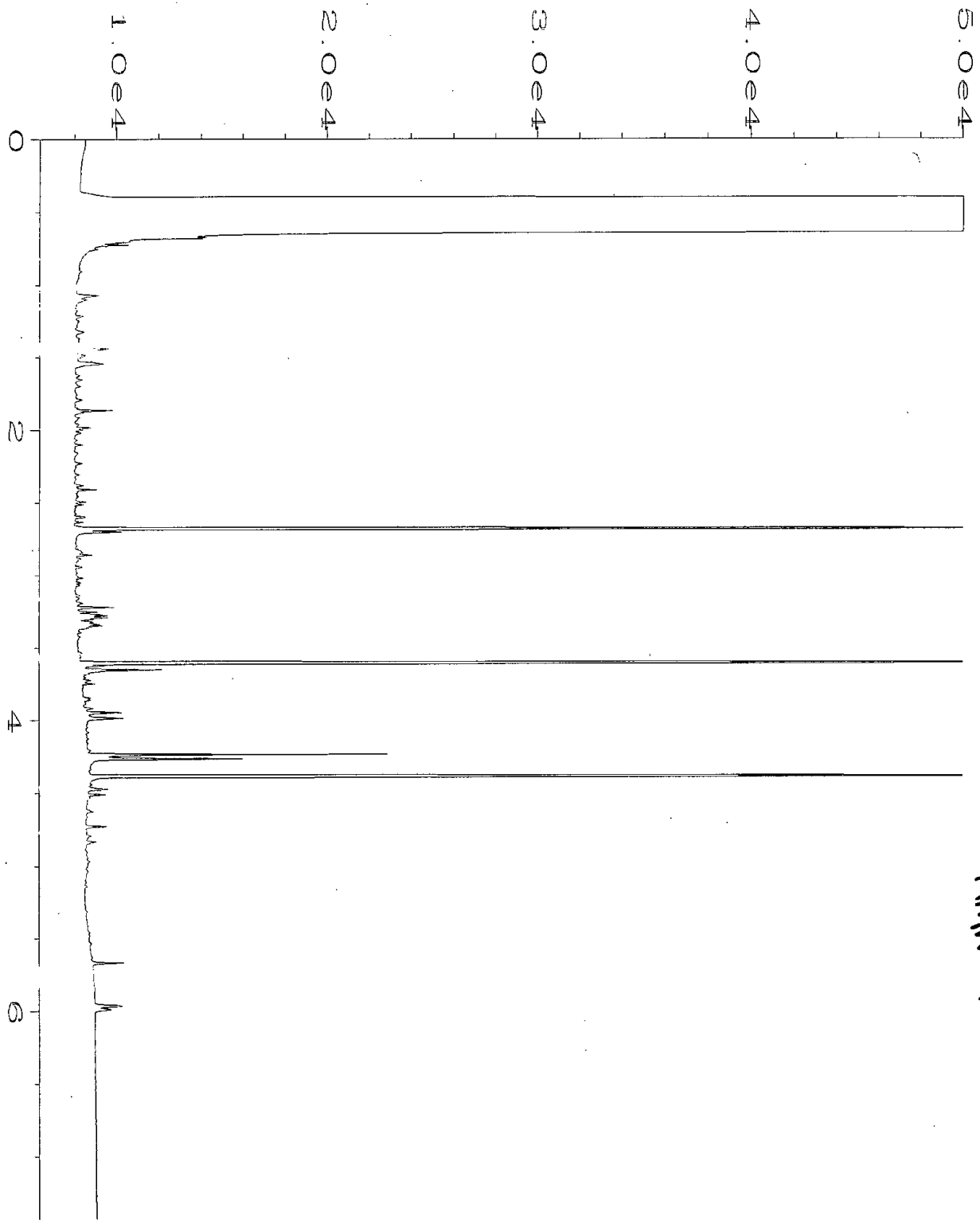
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\037F1101.D	Page Number	: 1
Operator	: TL	Vial Number	: 37
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-700 mb	Sequence Line	: 11
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Mar 20 07:39 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:08 AM		



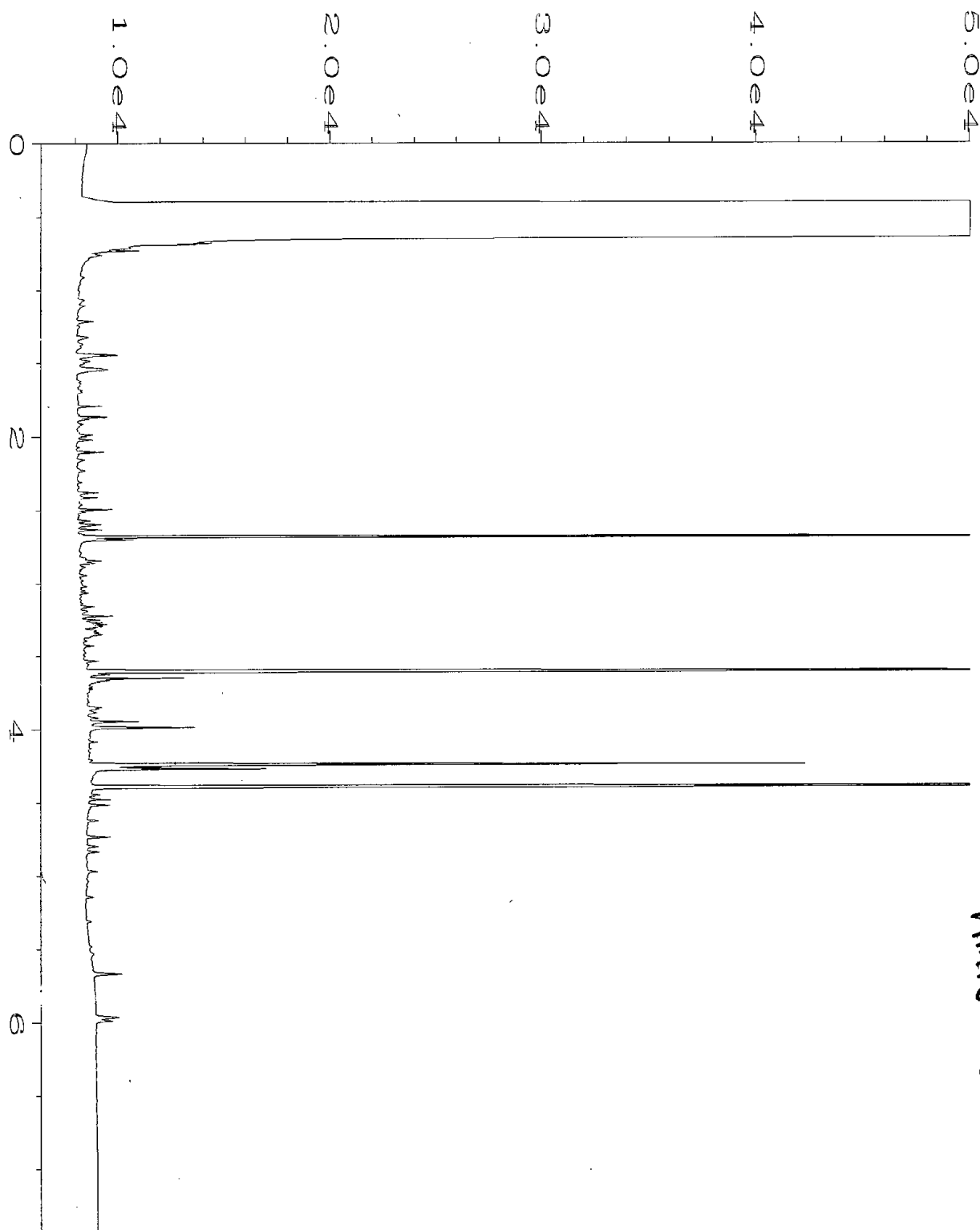
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\005F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 6
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Mar 20 02:54 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:05 AM		



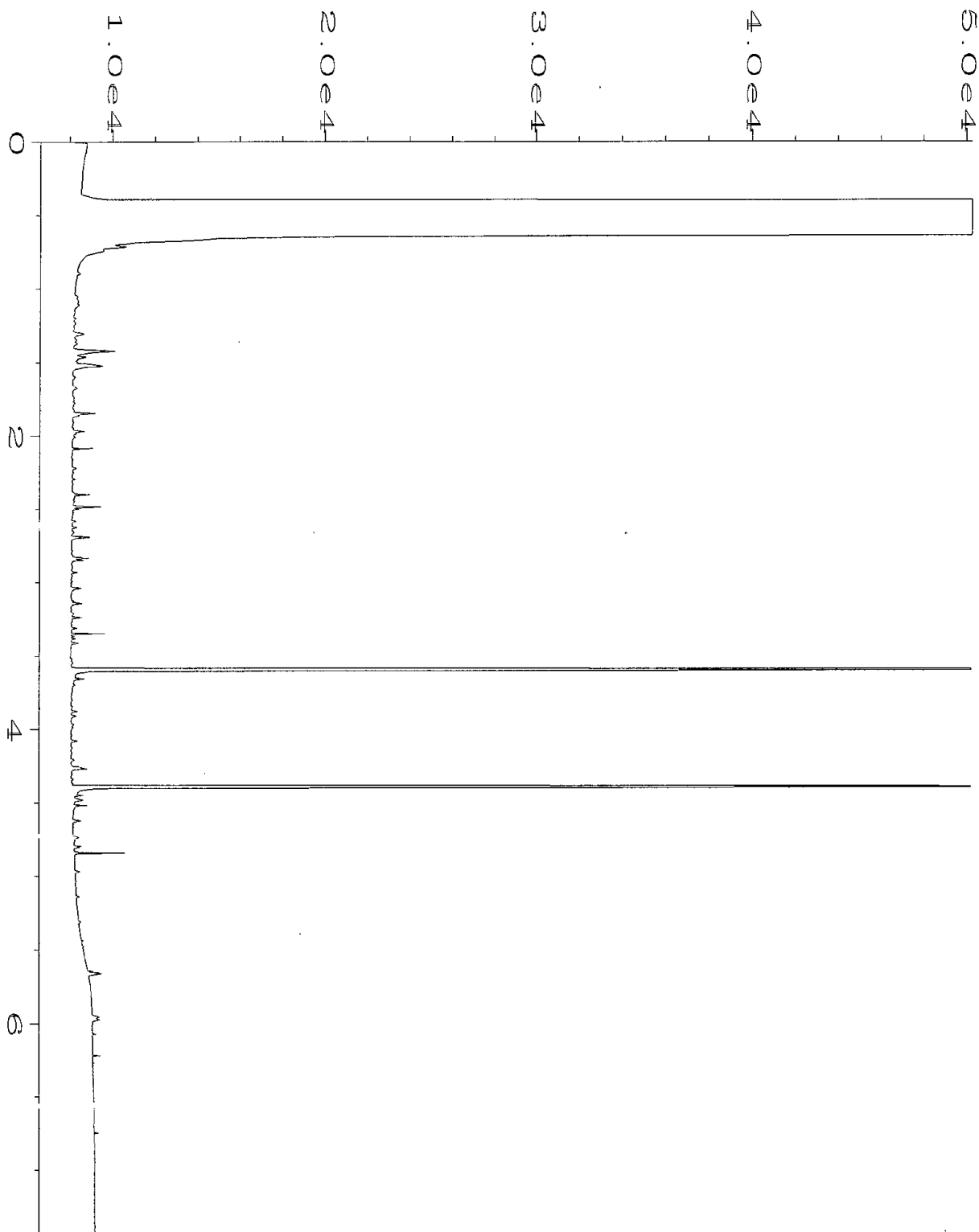
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\025F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 25
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003271-01	Sequence Line	: 9
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Mar 20 05:01 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:04 AM		



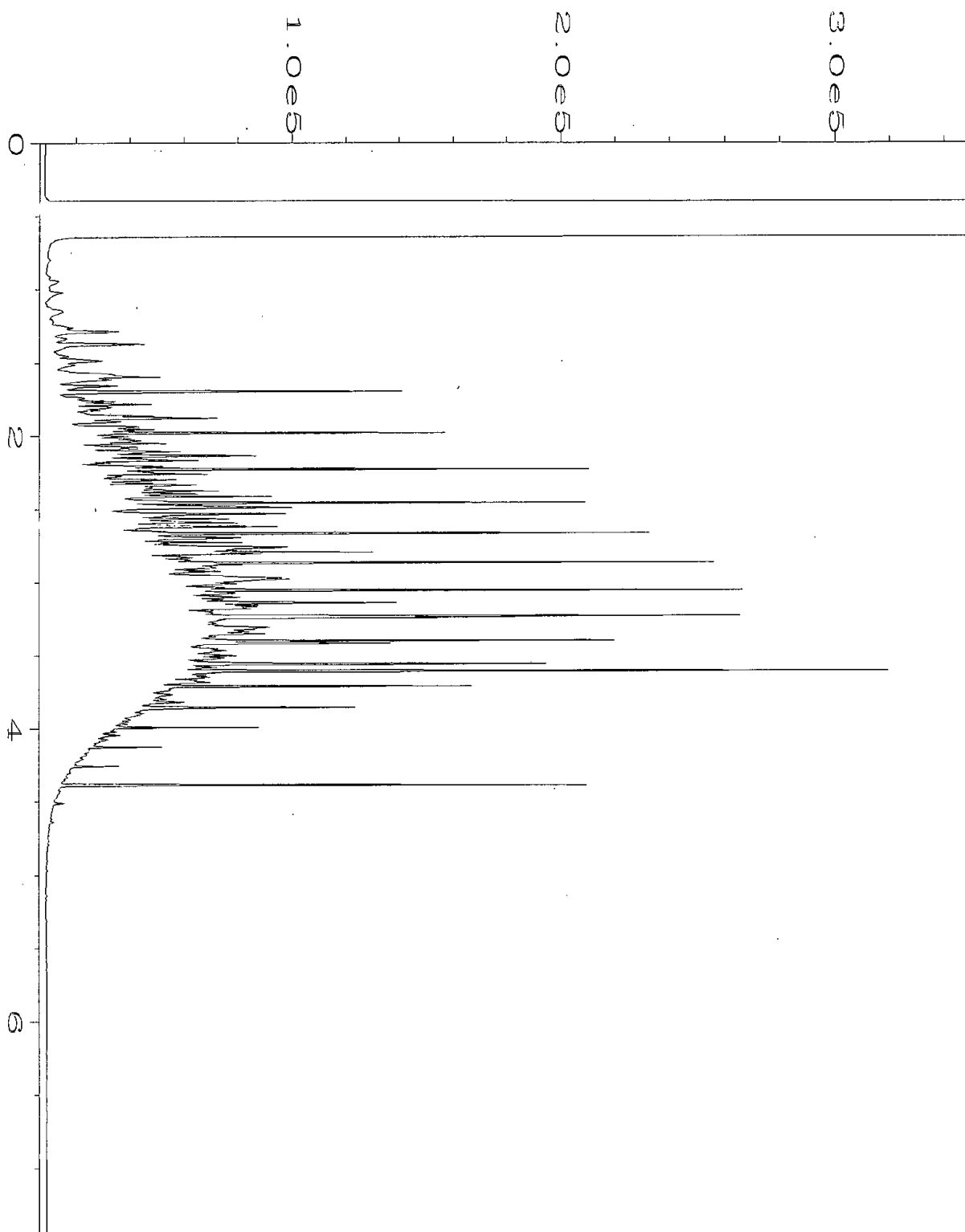
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\026F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 26
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003271-02	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 18 Mar 20 05:10 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:04 AM		



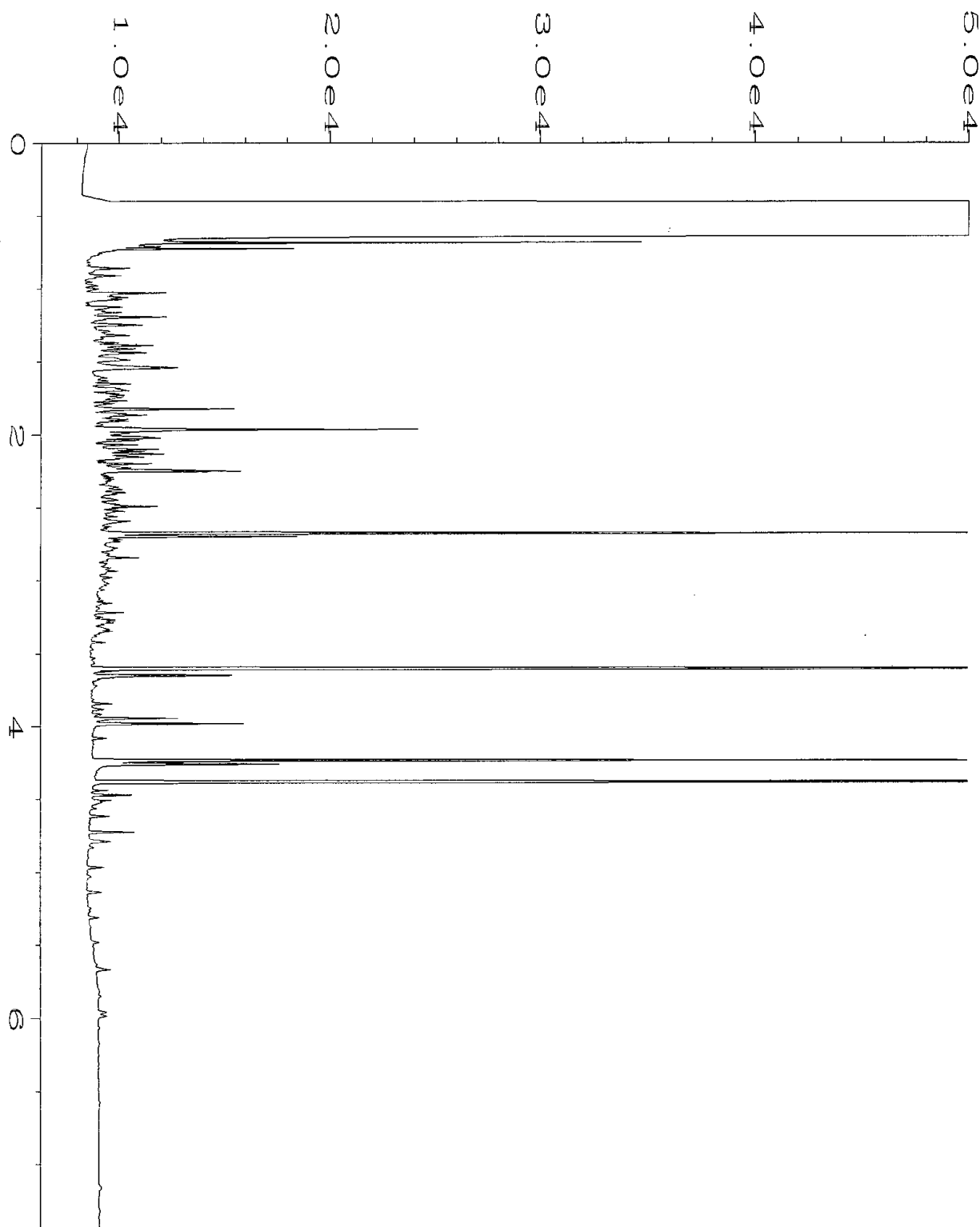
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\028F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 28
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003271-04	Sequence Line	: 9
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 18 Mar 20 05:33 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 10:05 AM		



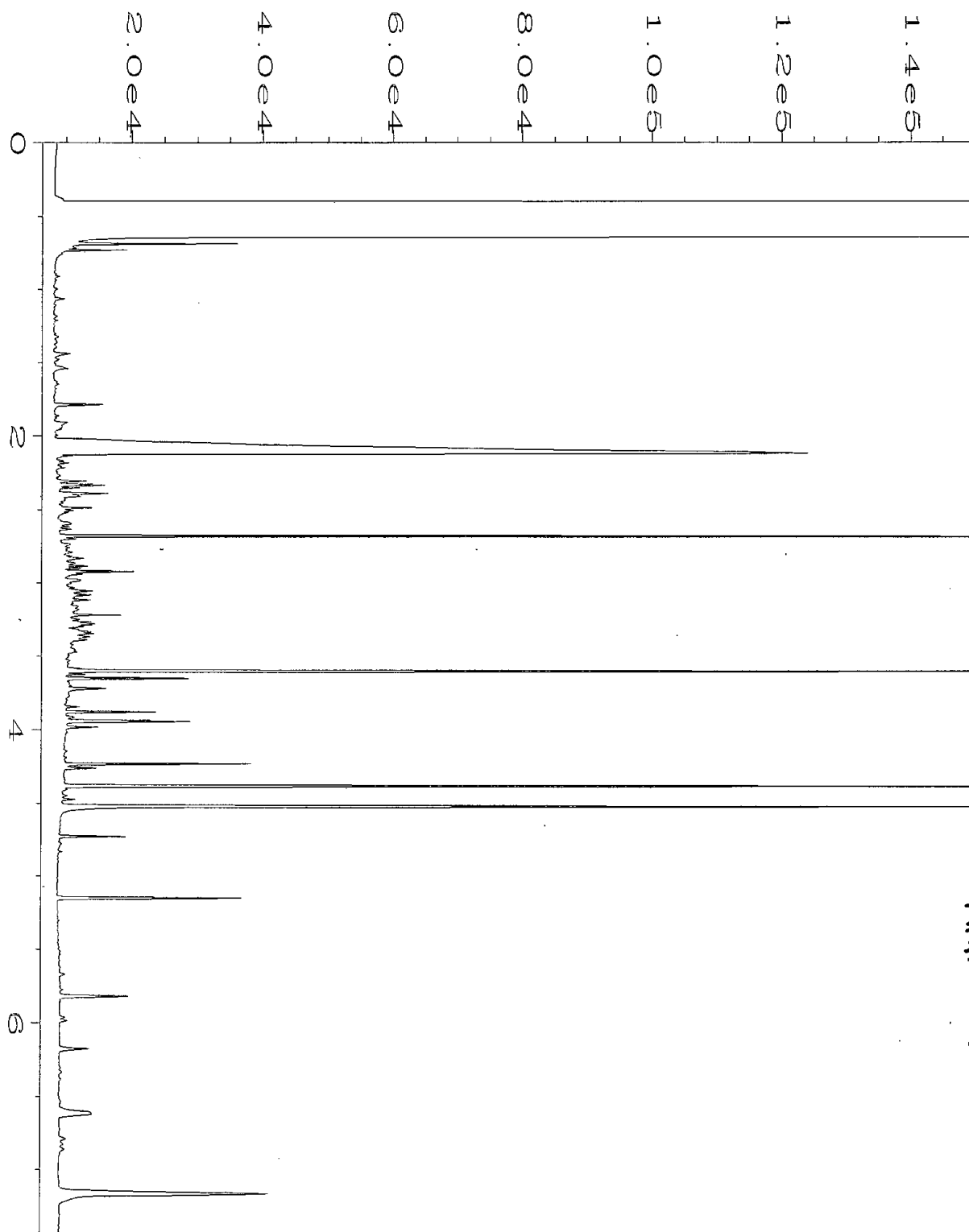
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\014F0501.D	Page Number	: 1
Operator	: TL	Vial Number	: 14
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-698 mb	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 18 Mar 20 01:55 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:05 AM		



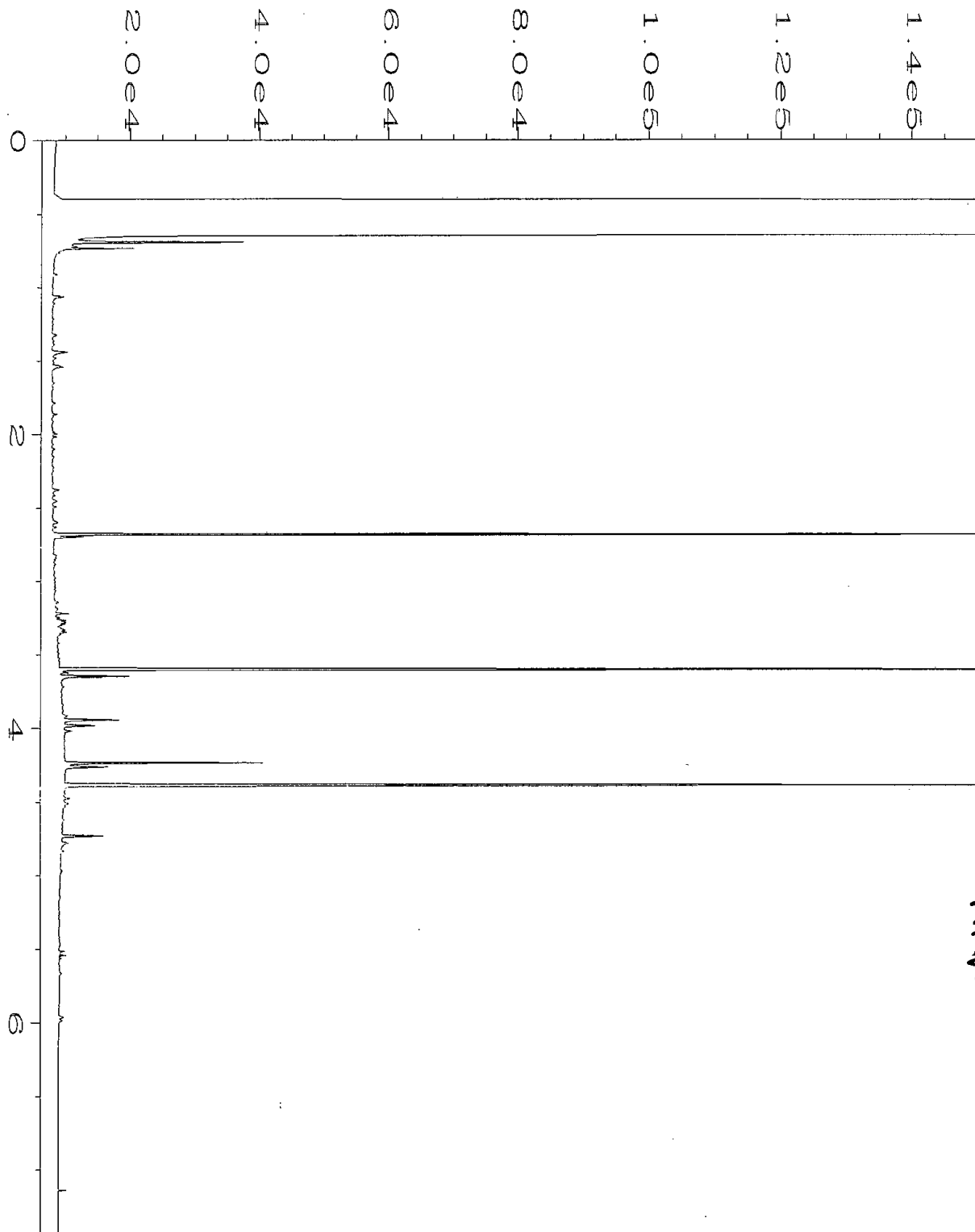
Data File Name	: C:\HPCHEM\1\DATA\03-18-20\005F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 6
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 18 Mar 20 02:54 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 10:05 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-16-20\021F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 21
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003245-01	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 04:16 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:56 AM		

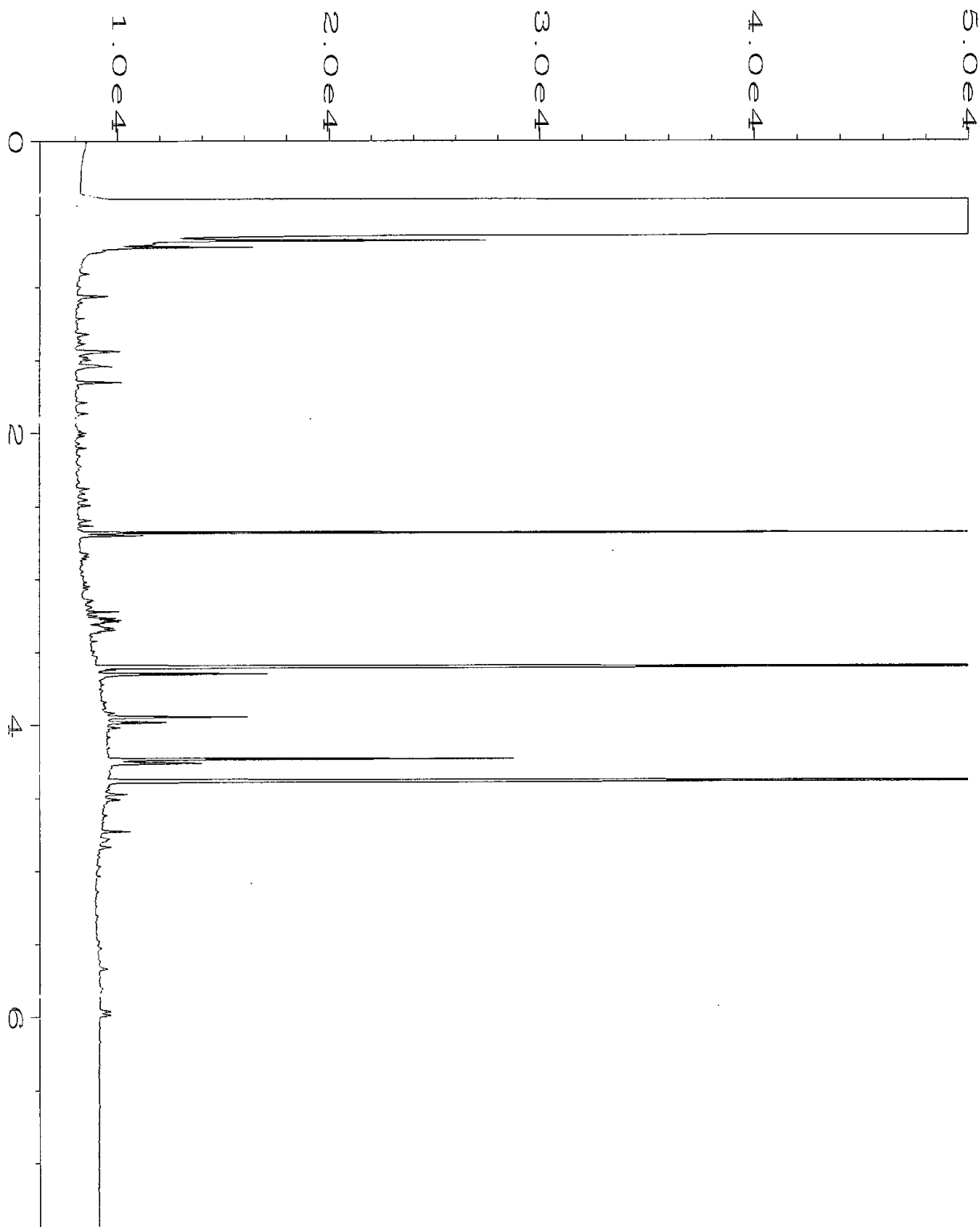


Data File Name	: C:\HPCHEM\1\DATA\03-16-20\022F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 22
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003245-02	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 04:27 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:56 AM		



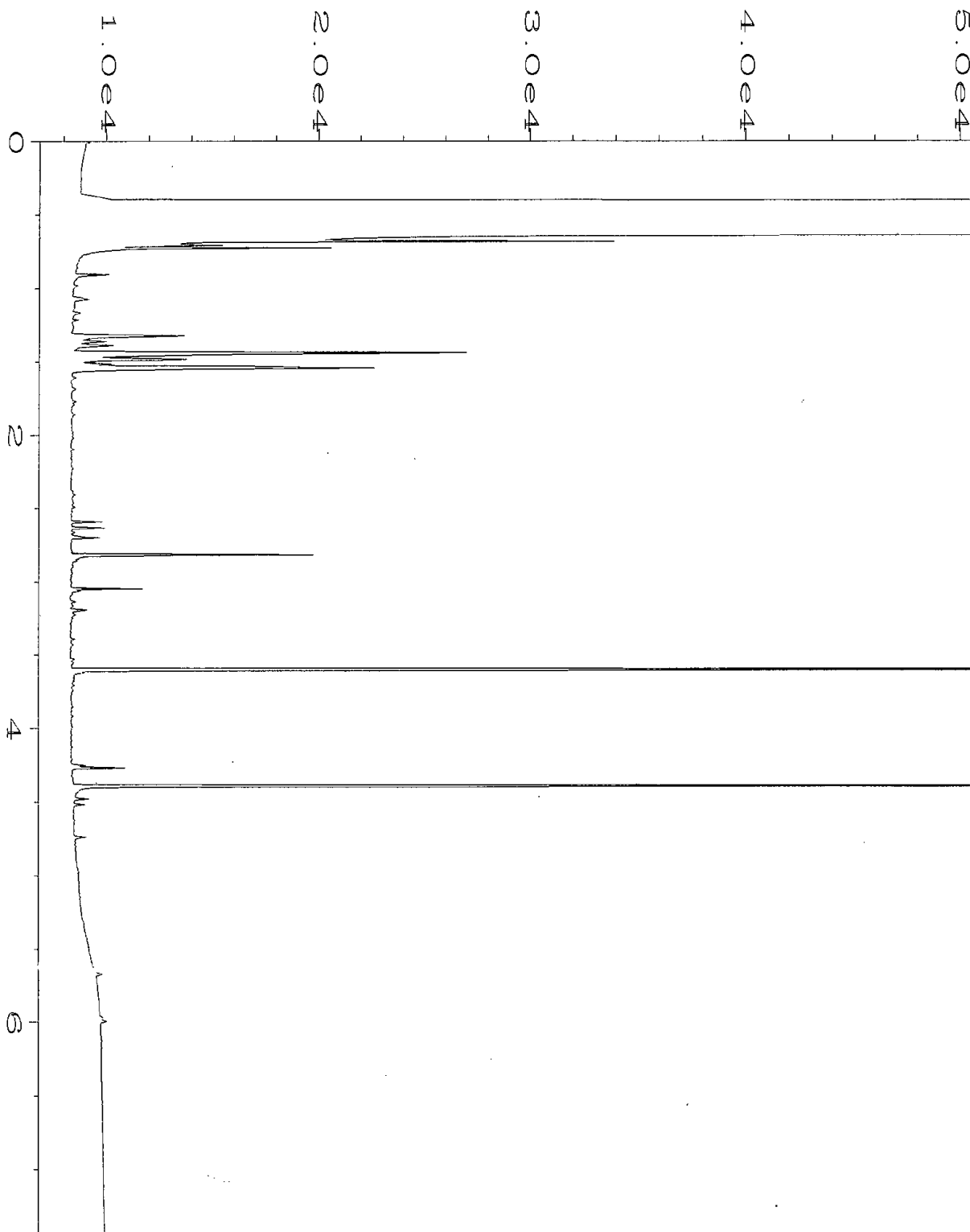
HMW-6IA

Data File Name	: C:\HPCHEM\1\DATA\03-16-20\023F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 23
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003245-03	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 04:38 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:57 AM		

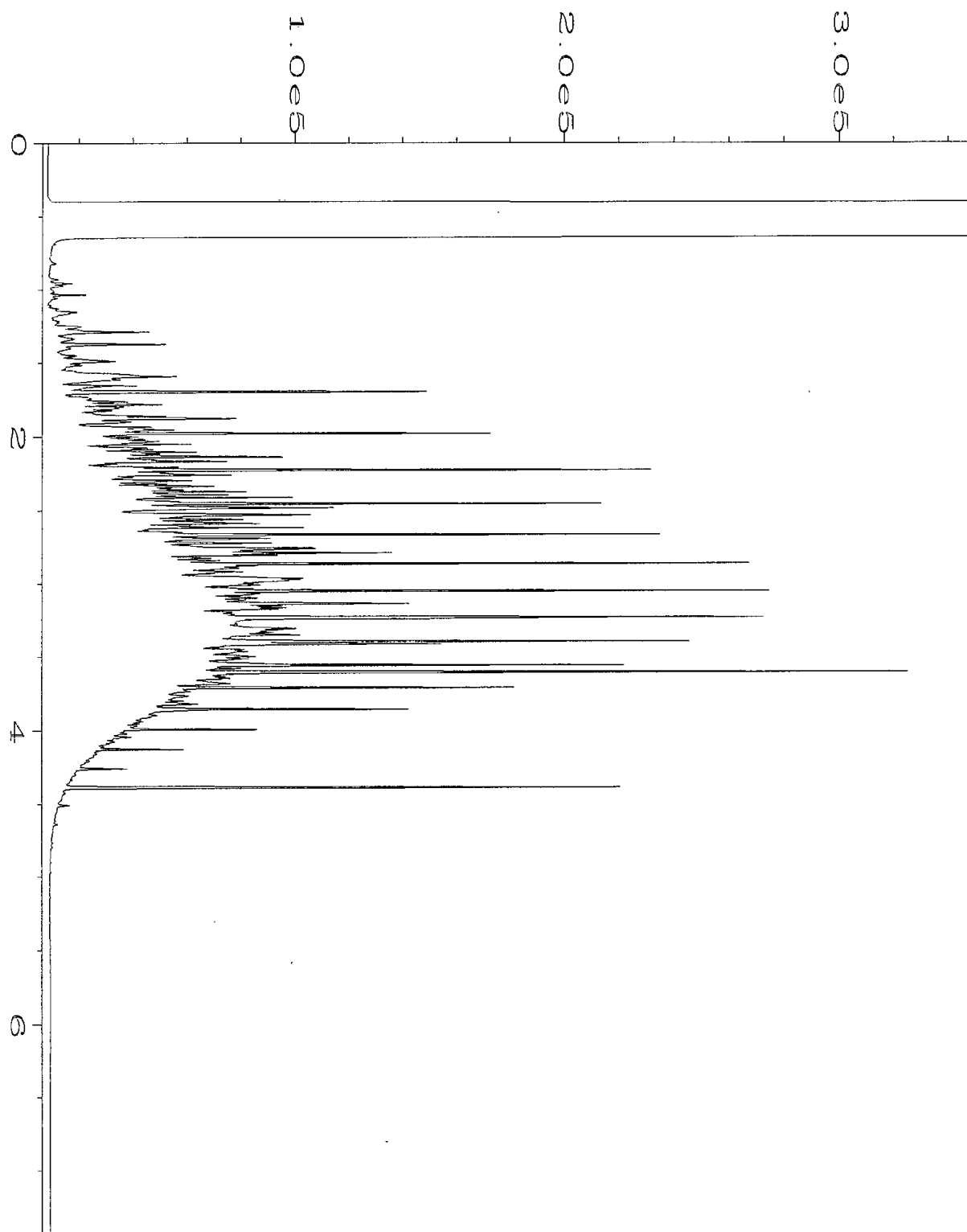


HMW-6IB

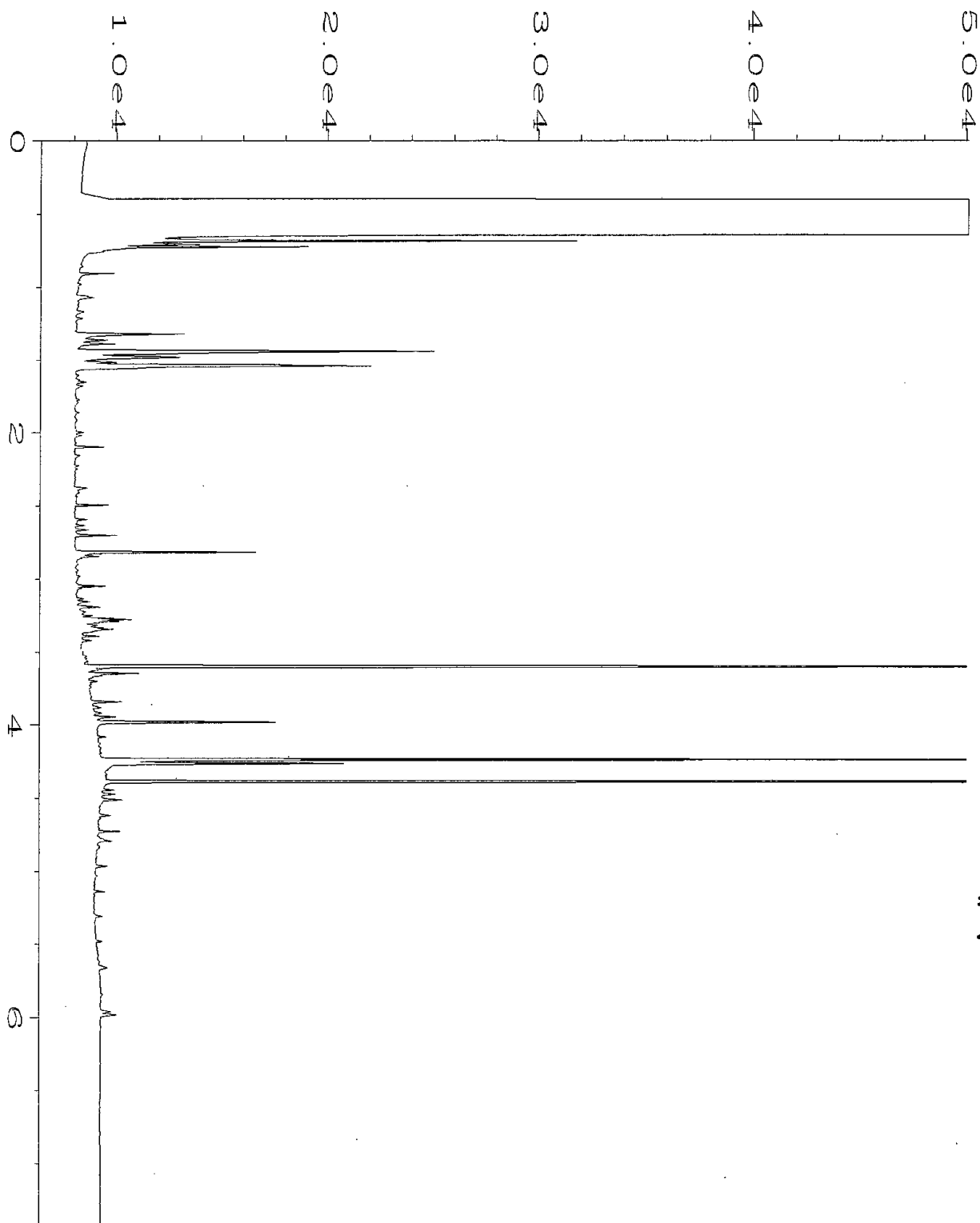
Data File Name	: C:\HPCHEM\1\DATA\03-16-20\024F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 24
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003245-04	Sequence Line	: 9
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 16 Mar 20 04:50 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 09:57 AM		



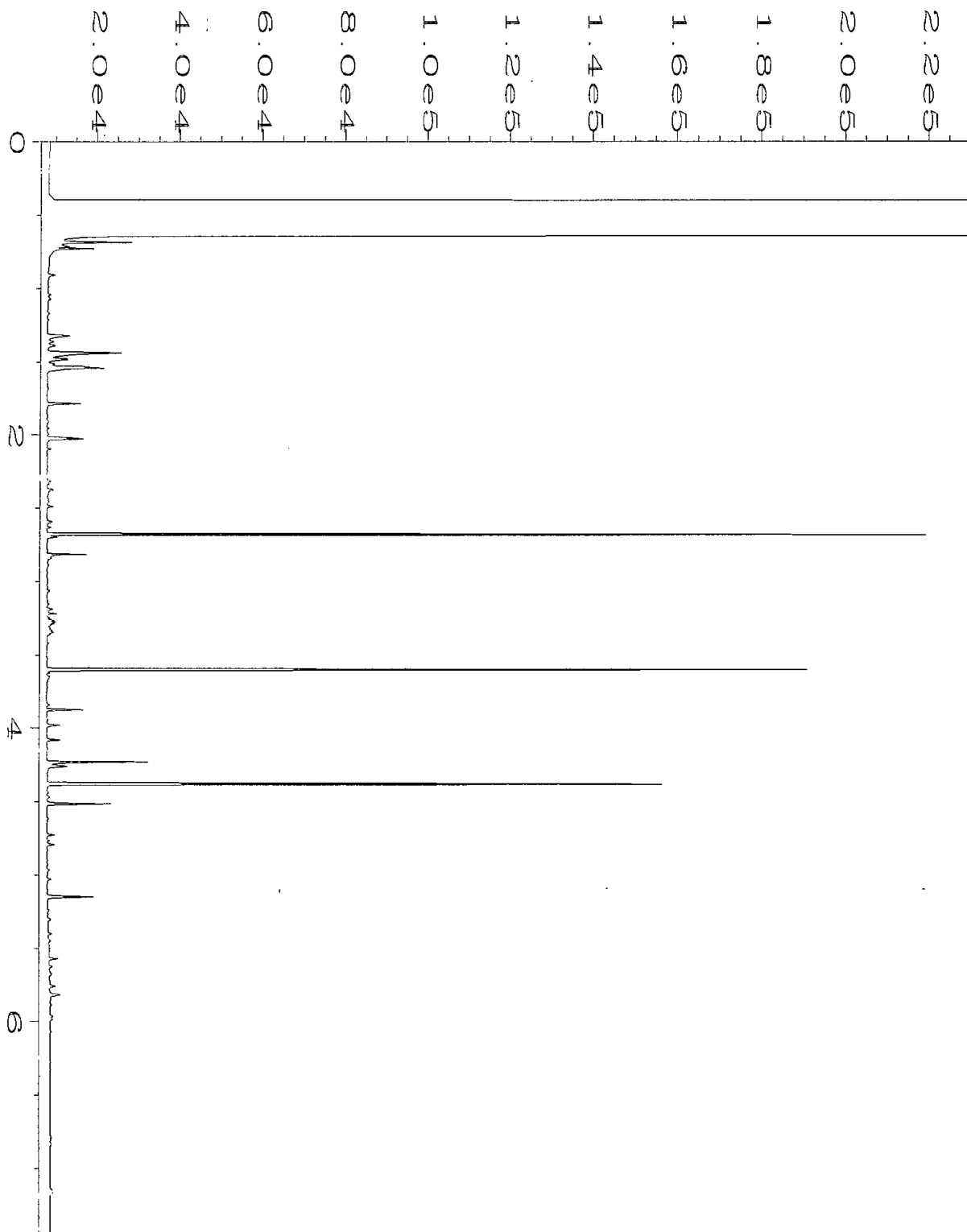
Data File Name	: C:\HPCHEM\1\DATA\03-16-20\006F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-636 mb	Sequence Line	: 6
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 11:42 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:56 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-16-20\005F0801.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 8
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 02:44 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:56 AM		

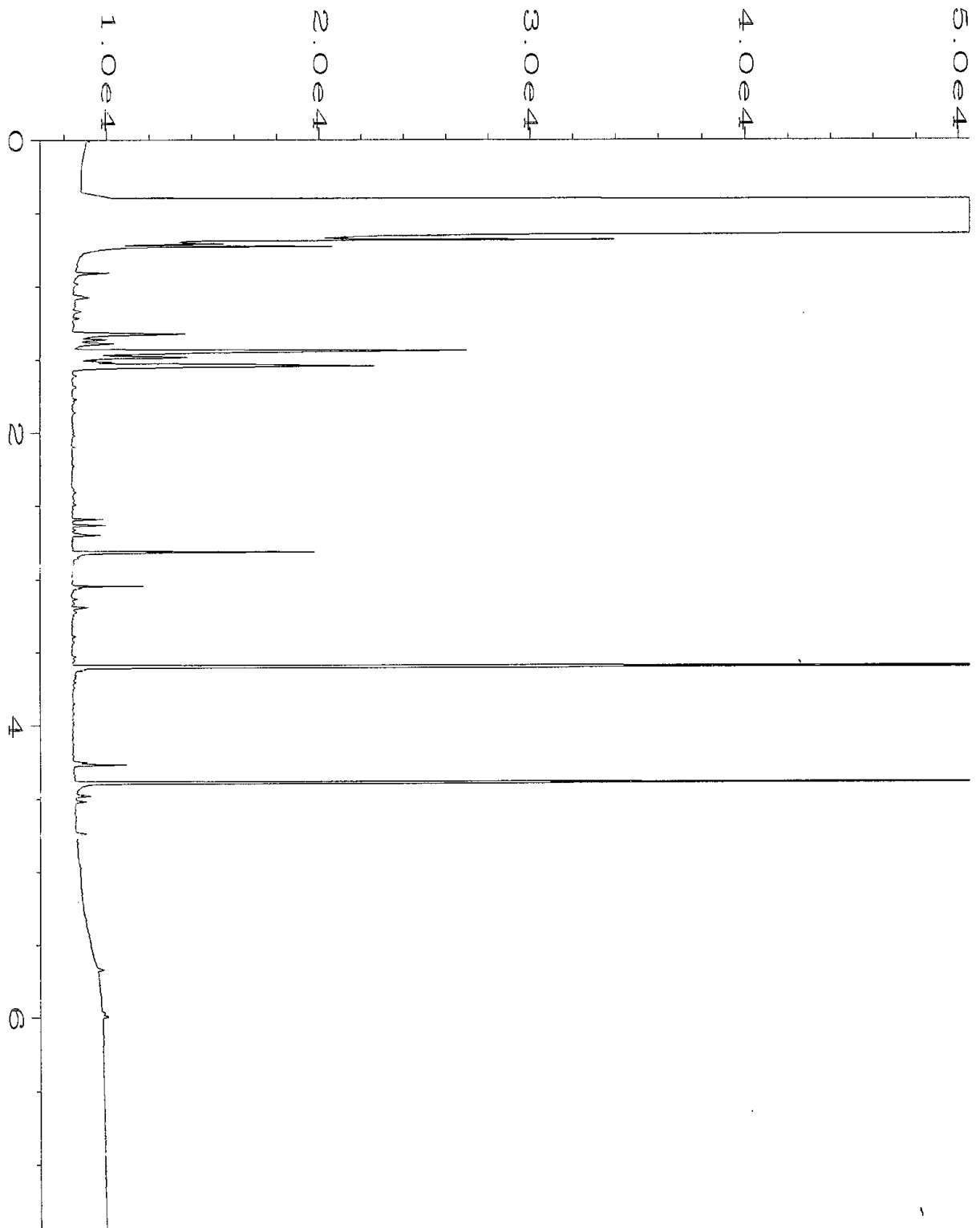


Data File Name	: C:\HPCHEM\1\DATA\03-16-20\016F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 16
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003233-01	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 03:19 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:54 AM		

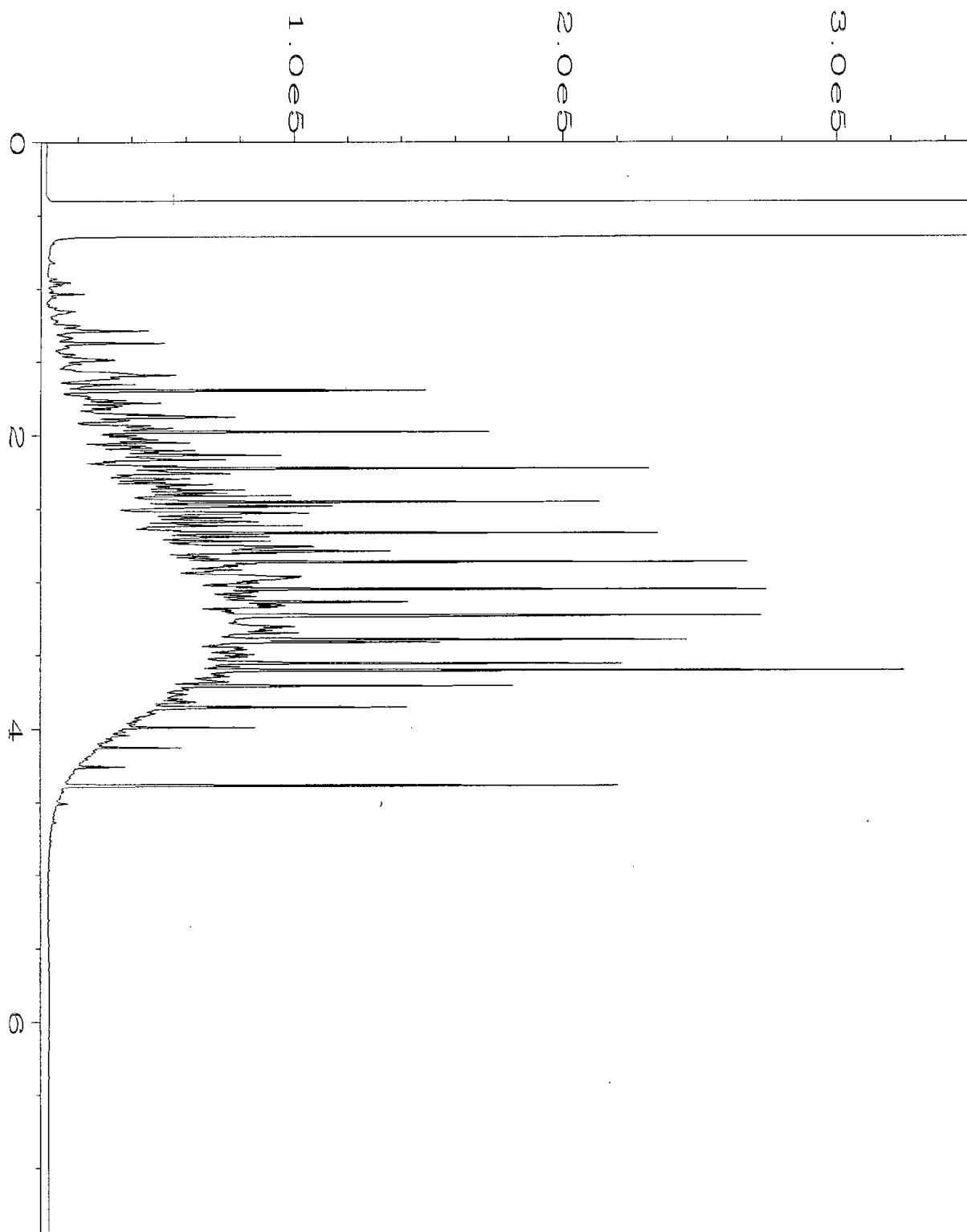


HMM-2D

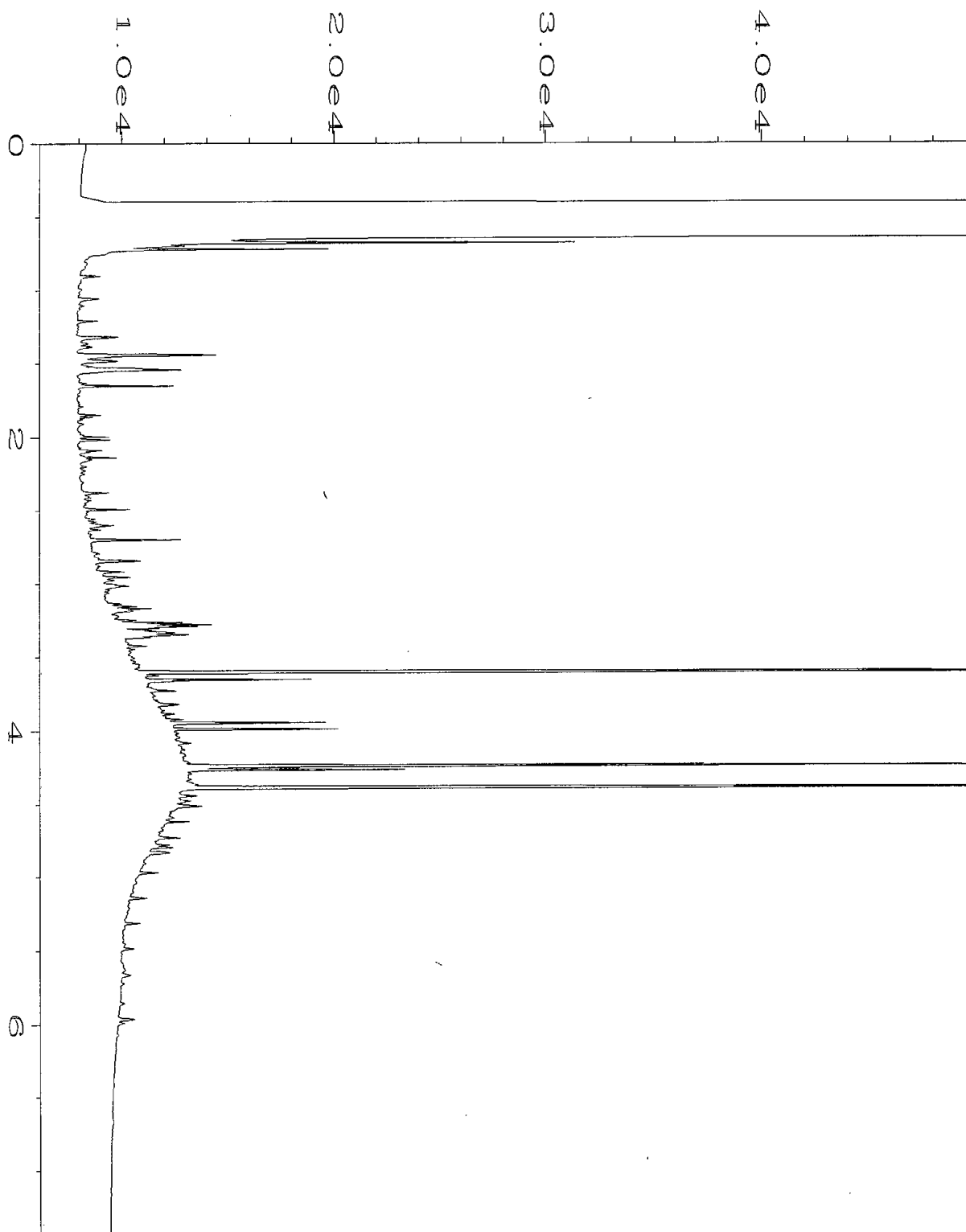
Data File Name	: C:\HPCHEM\1\DATA\03-16-20\018F0901.D	Page Number	: 1
Operator	: TL	Vial Number	: 18
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003233-03	Sequence Line	: 9
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 03:42 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:55 AM		



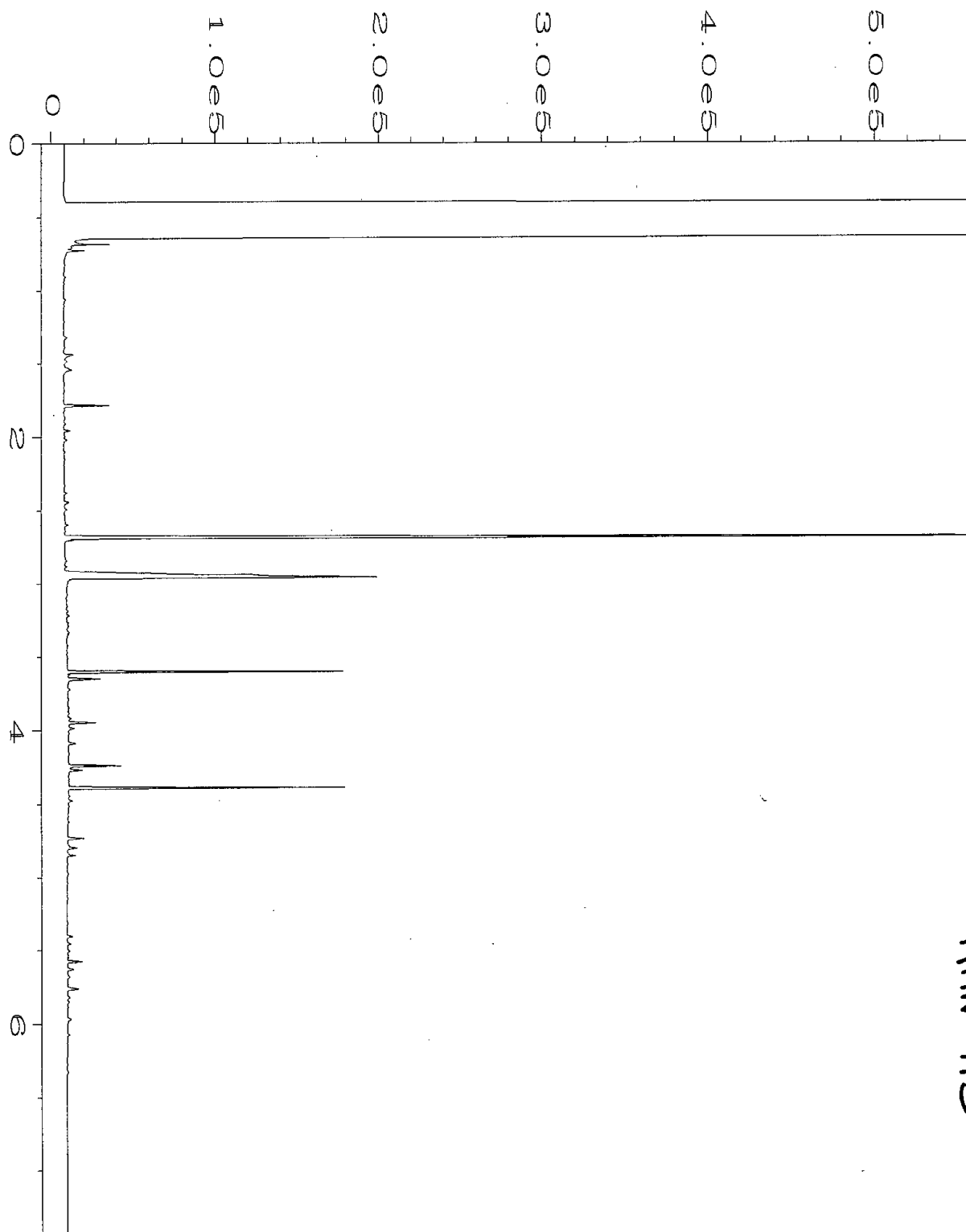
Data File Name	: C:\HPCHEM\1\DATA\03-16-20\006F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-636 mb	Sequence Line	: 6
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 16 Mar 20 11:42 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 09:56 AM		



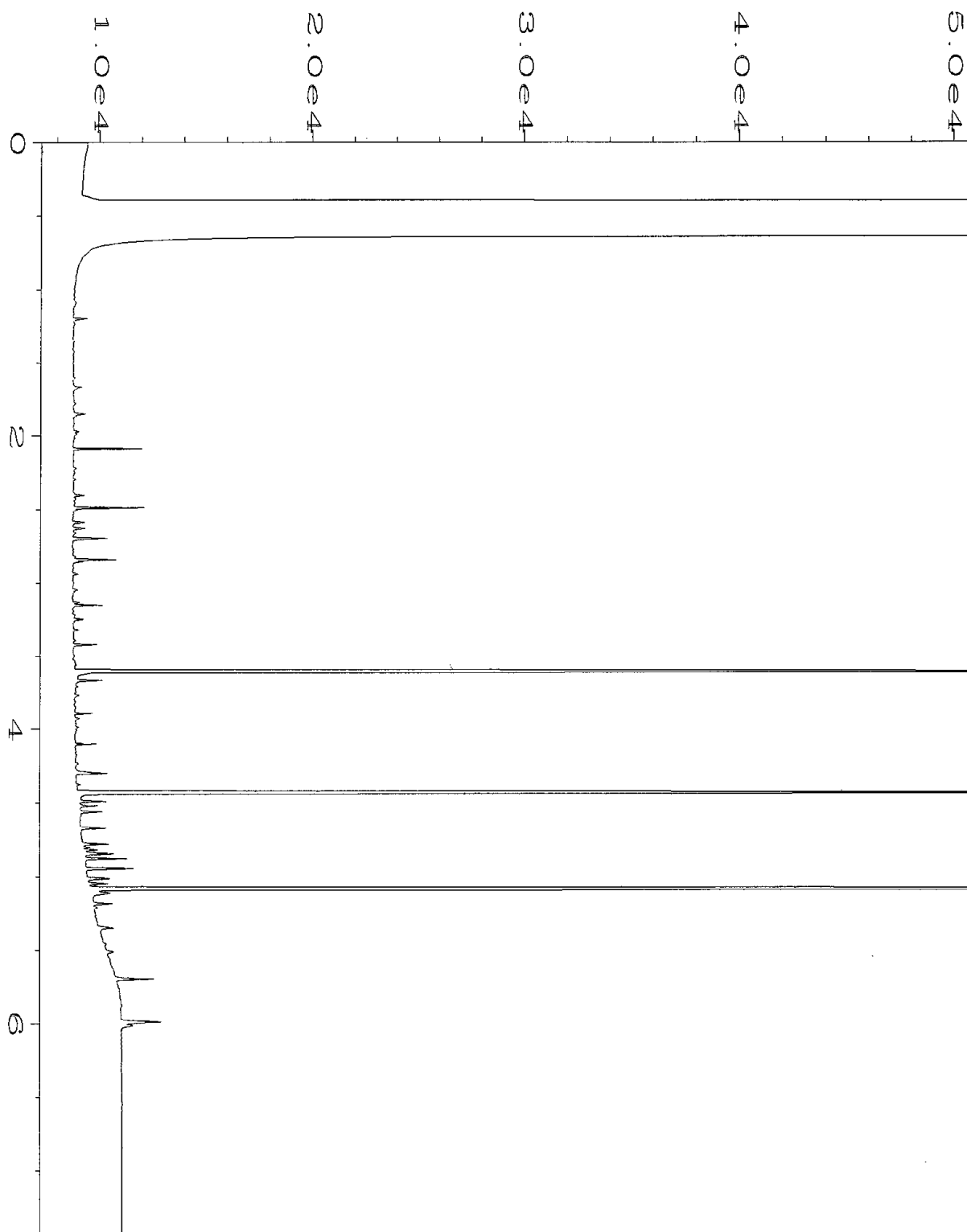
Data File Name	: C:\HPCHEM\1\DATA\03-16-20\005F0801.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 8
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 16 Mar 20 02:44 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:56 AM		



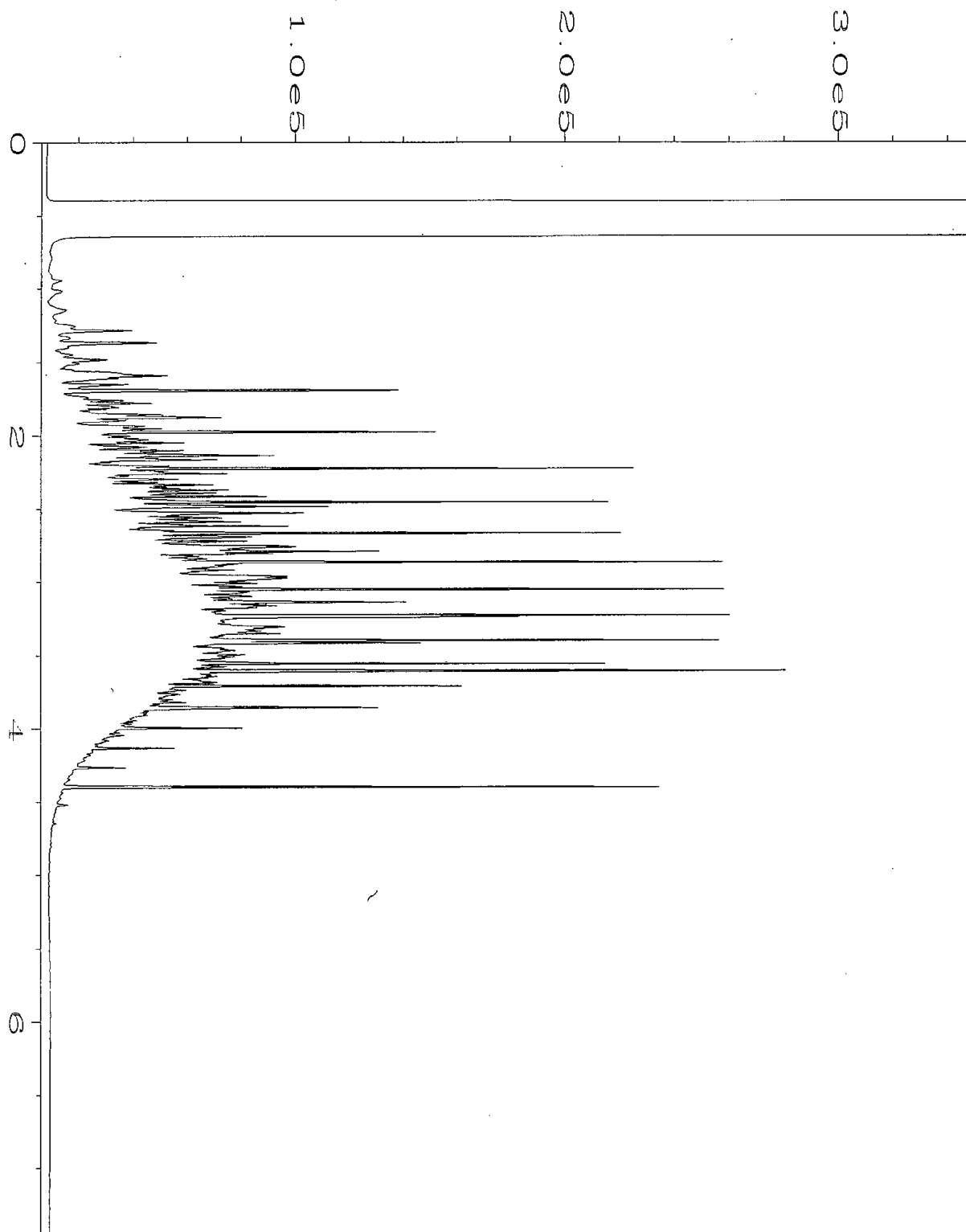
Data File Name	: C:\HPCHEM\1\DATA\03-13-20\025F0701.D	Page Number	: 1
Operator	: TL	Vial Number	: 25
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003203-04	Sequence Line	: 7
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 13 Mar 20 03:26 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 09:53 AM		



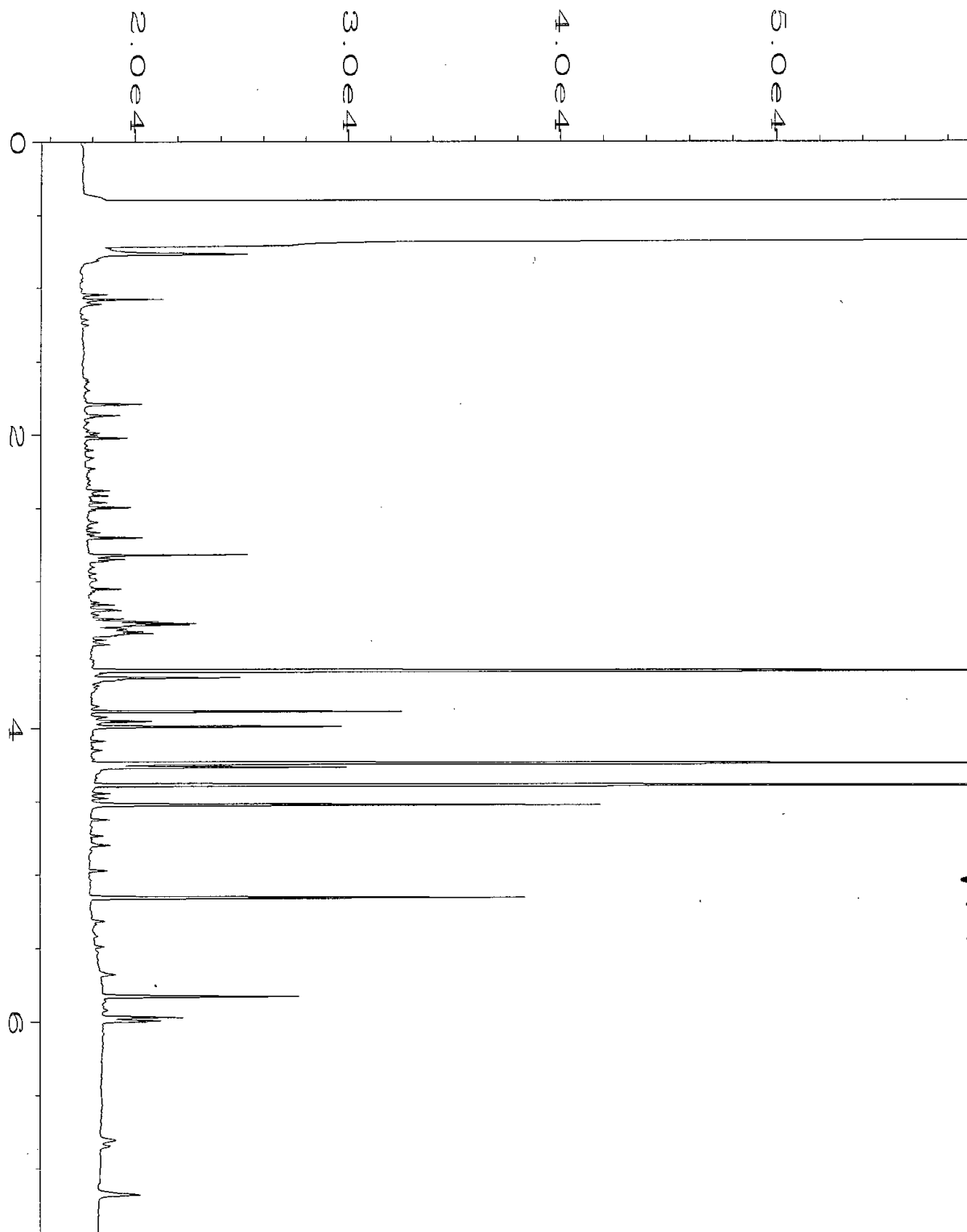
Data File Name	: C:\HPCHEM\1\DATA\03-13-20\027F0701.D	Page Number	: 1
Operator	: TL	Vial Number	: 27
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003203-06	Sequence Line	: 7
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 13 Mar 20 03:49 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:53 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-13-20\006F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-632 mb2	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 13 Mar 20 07:19 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:53 AM		

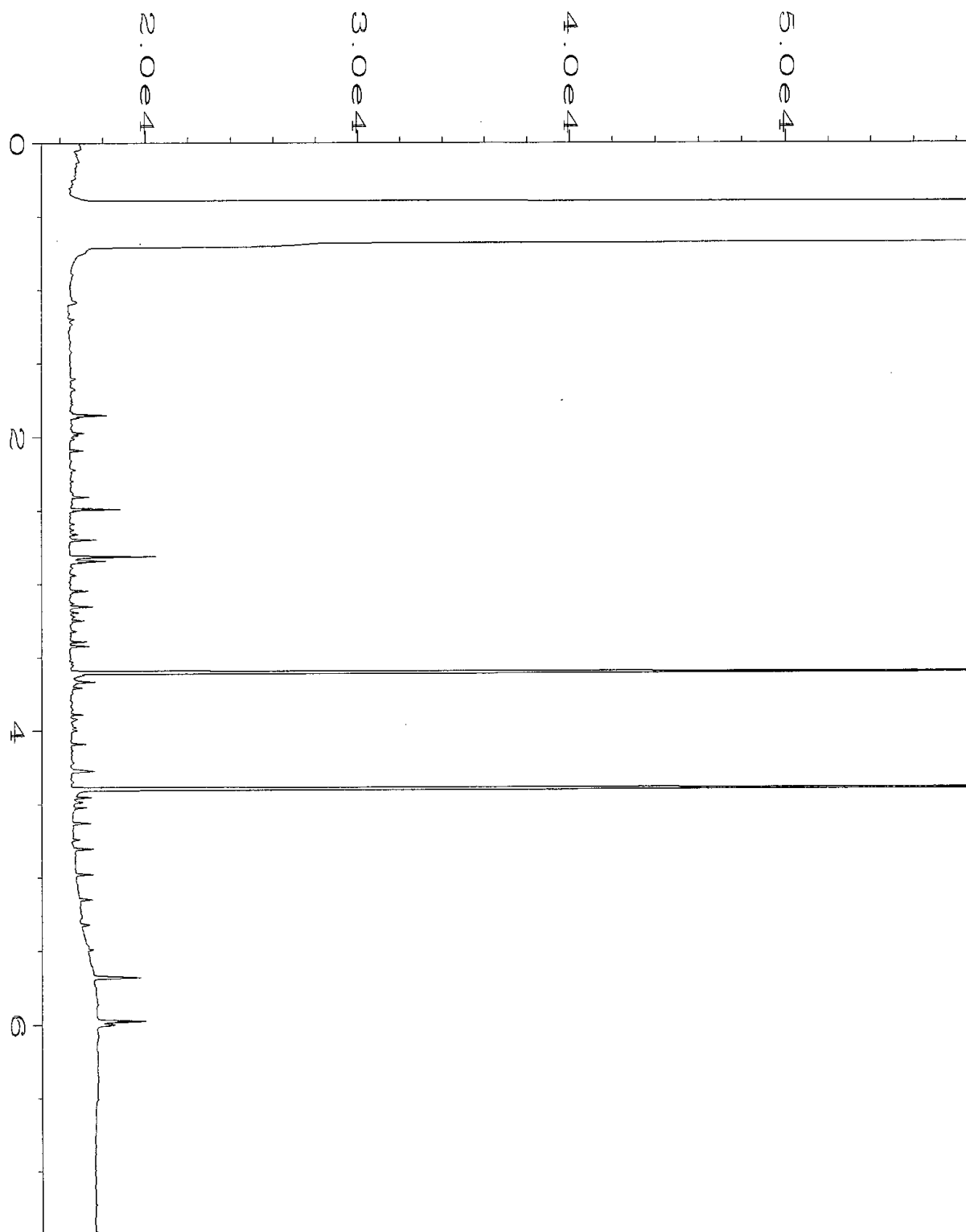


Data File Name	: C:\HPCHEM\1\DATA\03-13-20\005F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 6
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 13 Mar 20 02:51 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:53 AM		

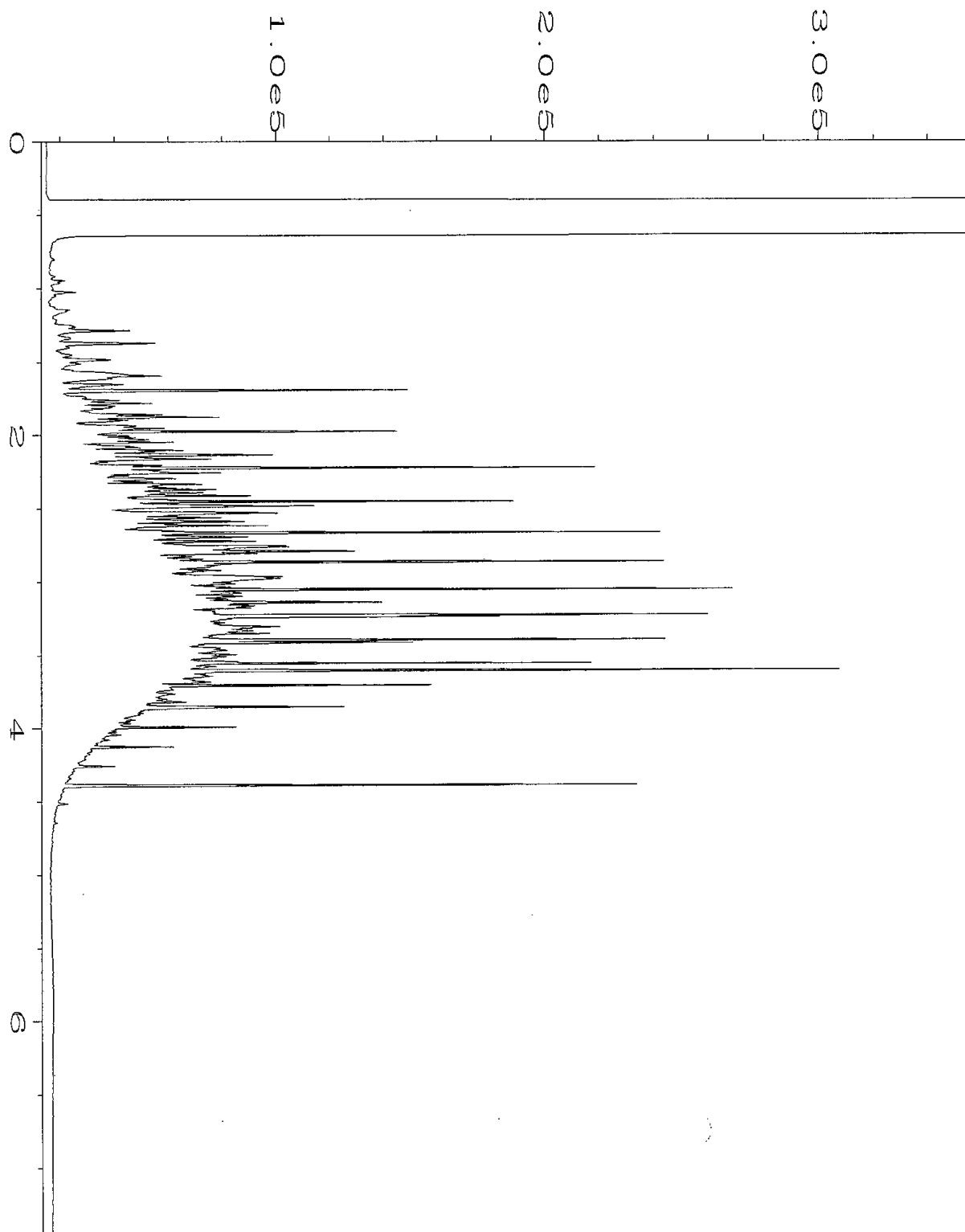


HMW-1D-GW-0309

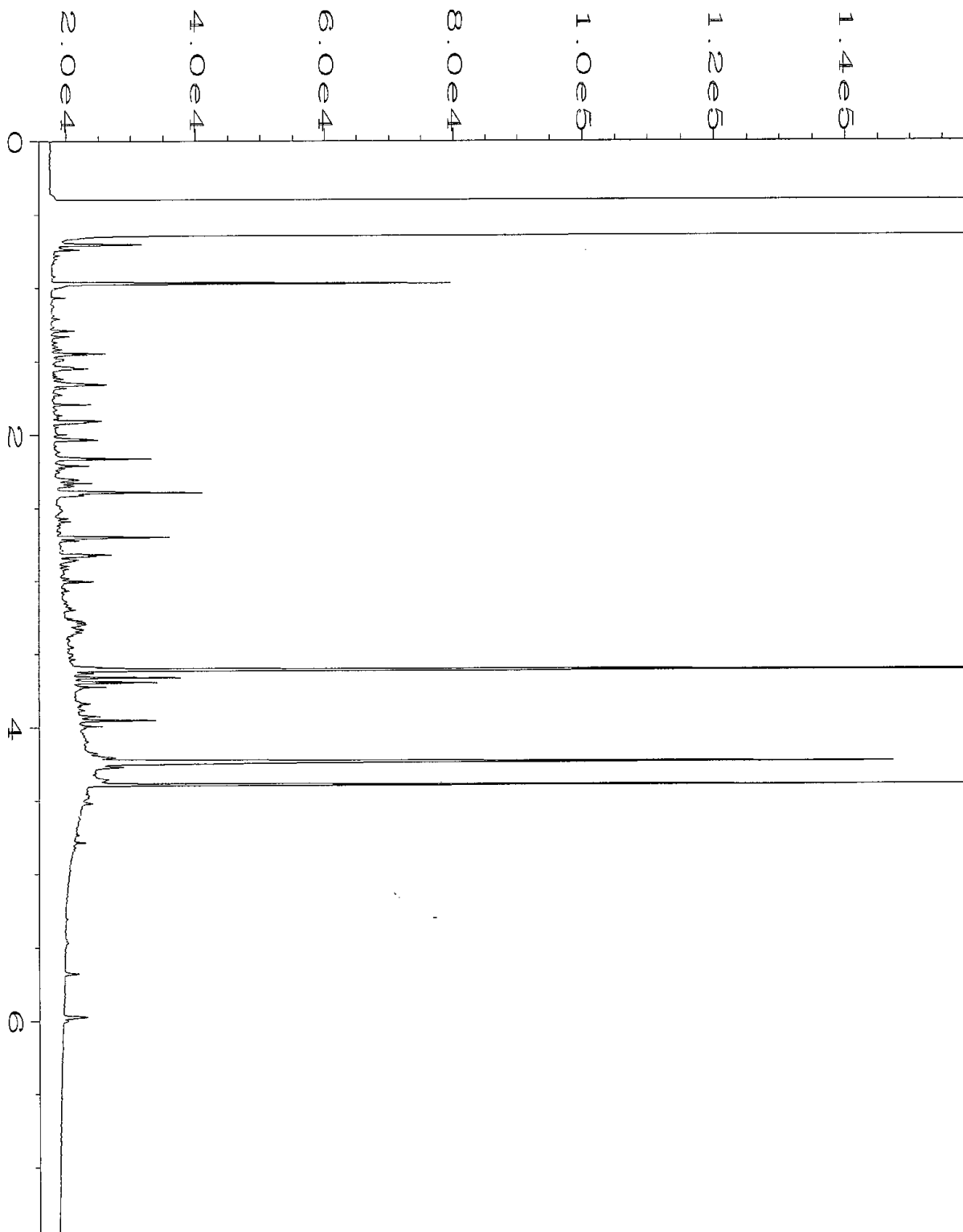
Data File Name	: C:\HPCHEM\1\DATA\03-11-20\009F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 9
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003160-03	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 11 Mar 20 08:50 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:52 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-11-20\006F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-602 mb	Sequence Line	: 3
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 11 Mar 20 08:18 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 09:52 AM		

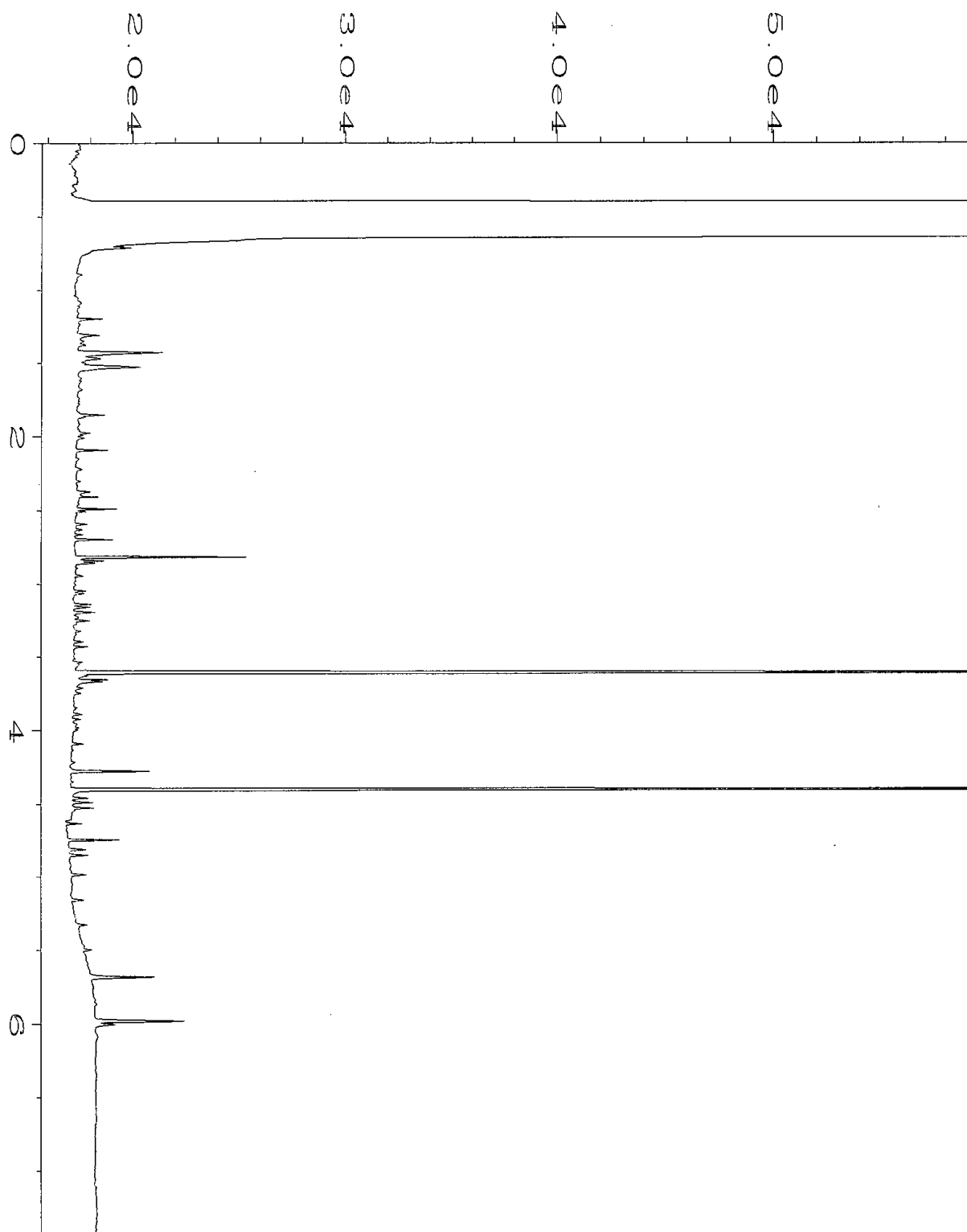


Data File Name	: C:\HPCHEM\1\DATA\03-11-20\005F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 11 Mar 20 02:08 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:52 AM		

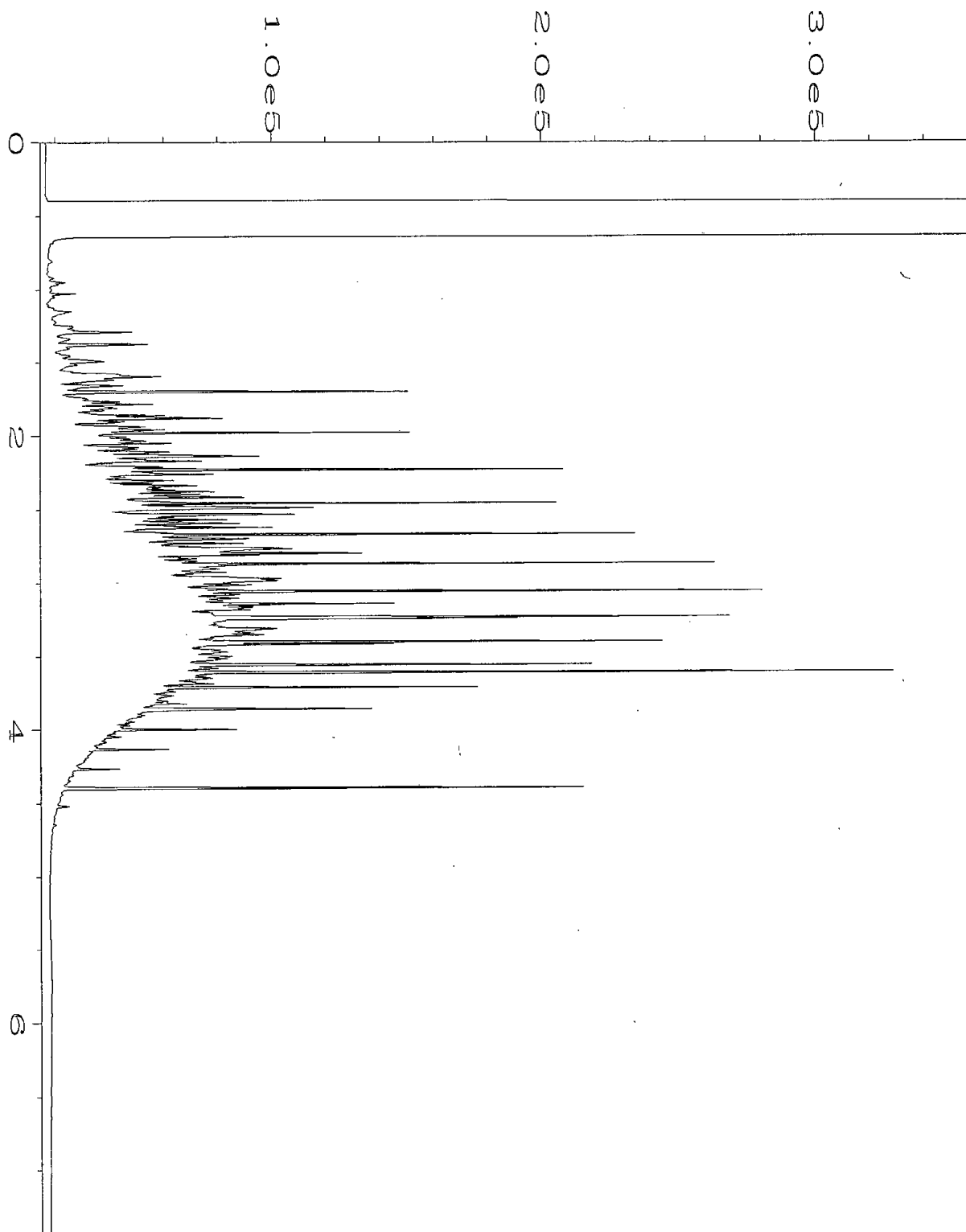


MBBIS-GW

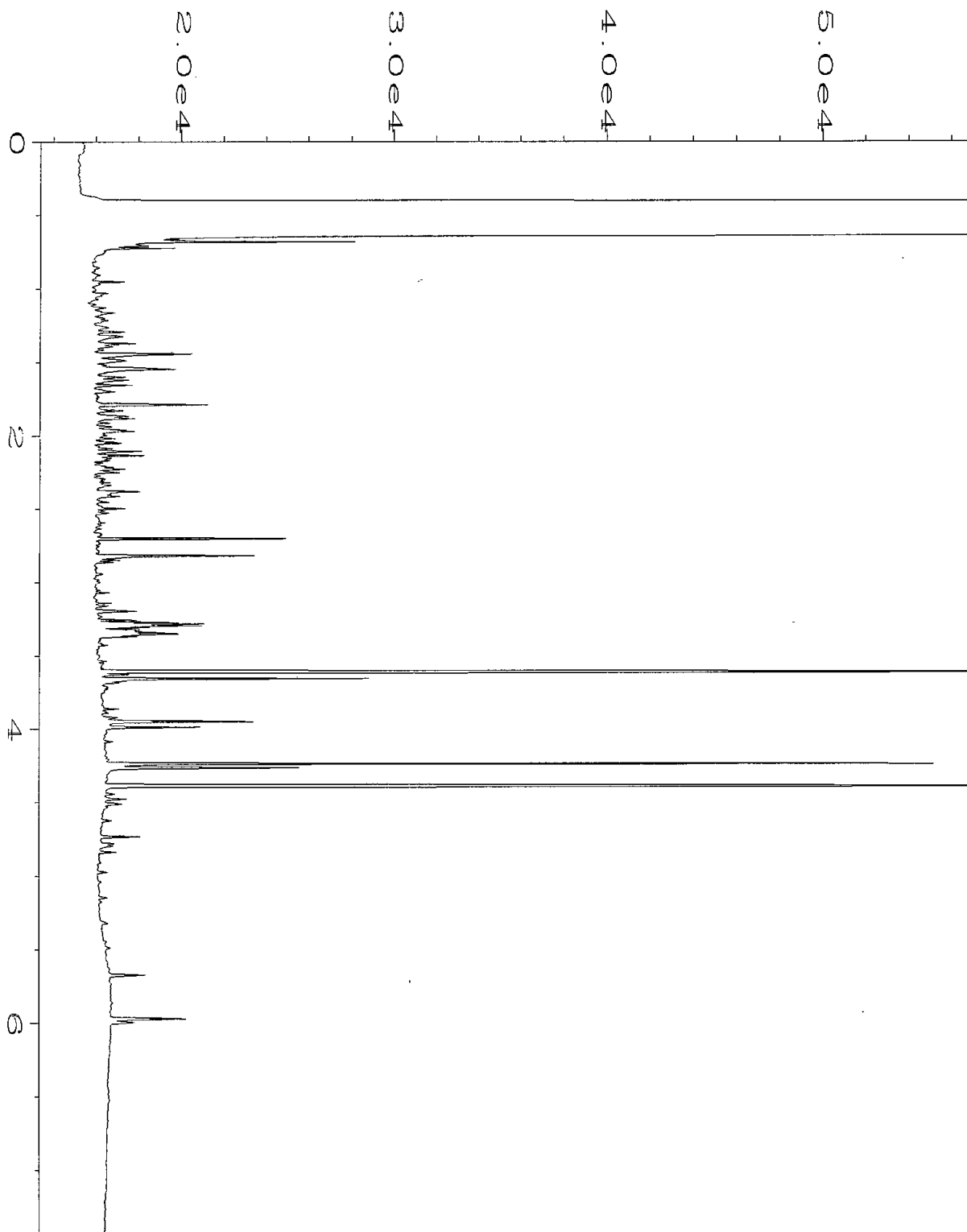
Data File Name	: C:\HPCHEM\1\DATA\03-09-20\016F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 16
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003138-02	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 09 Mar 20 01:08 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:41 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-09-20\013F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 13
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-589 mb	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 09 Mar 20 12:36 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:42 AM		

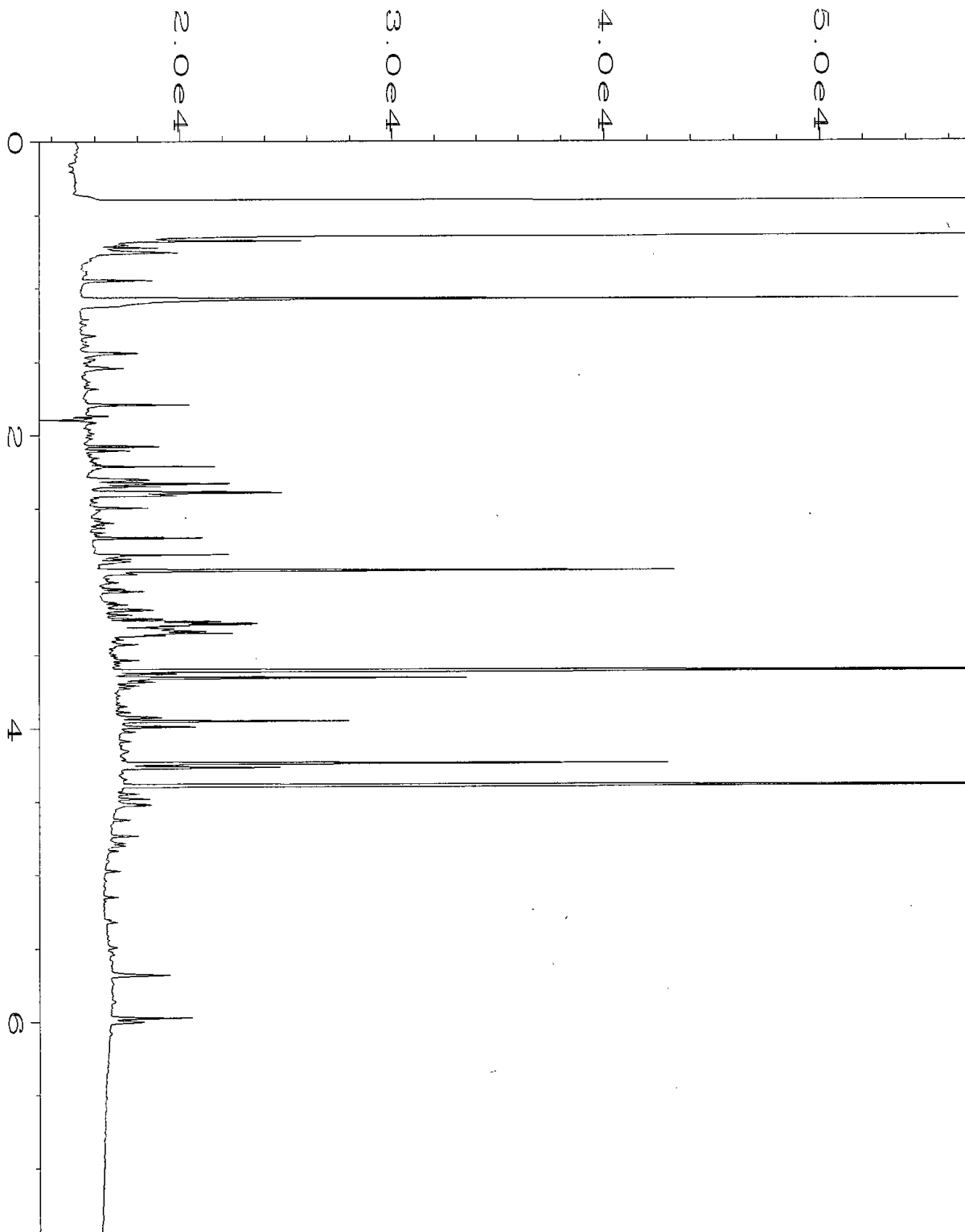


Data File Name	: C:\HPCHEM\1\DATA\03-09-20\005F0501.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 5
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 09 Mar 20 02:15 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 09:41 AM		

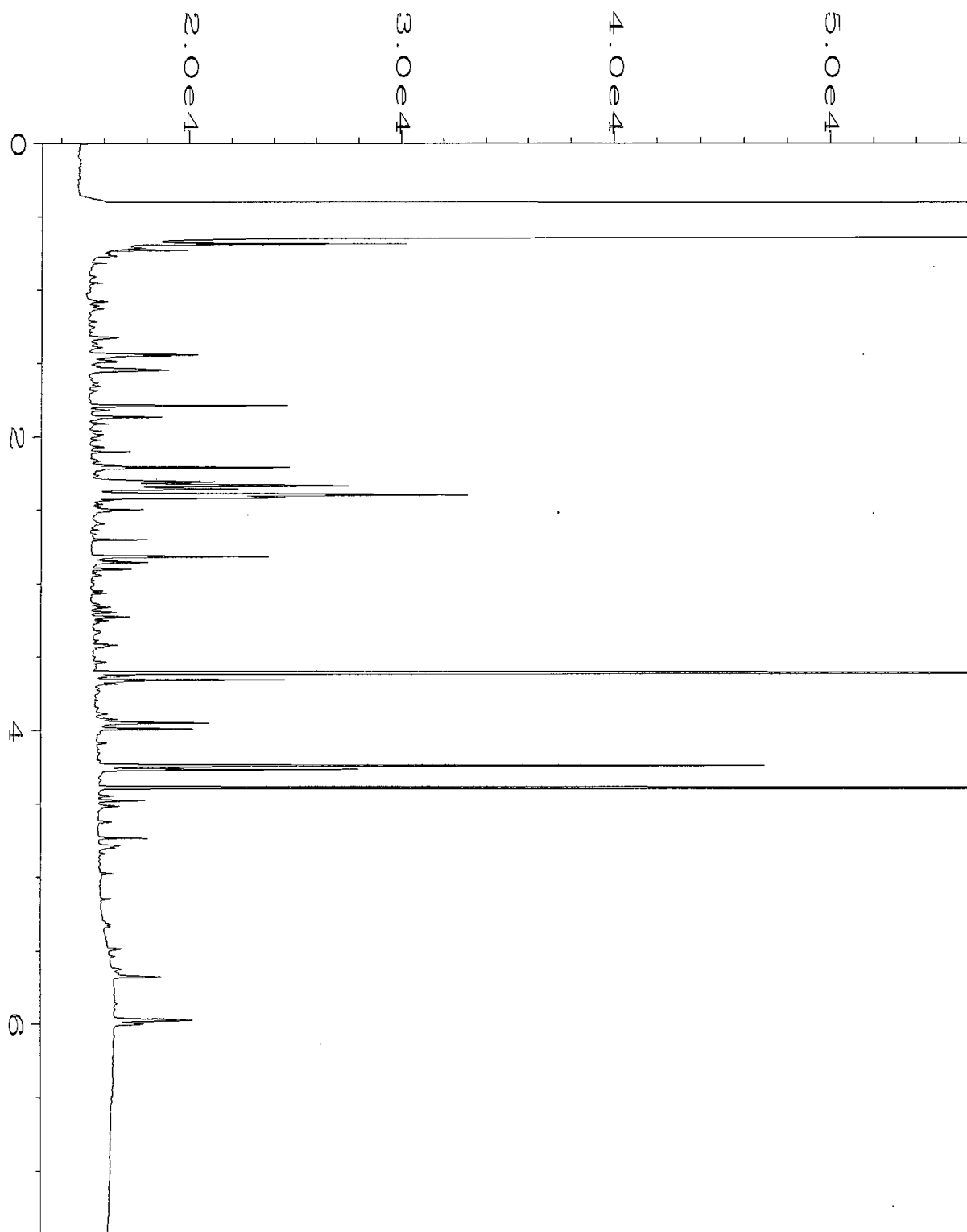


MBB-4-GW

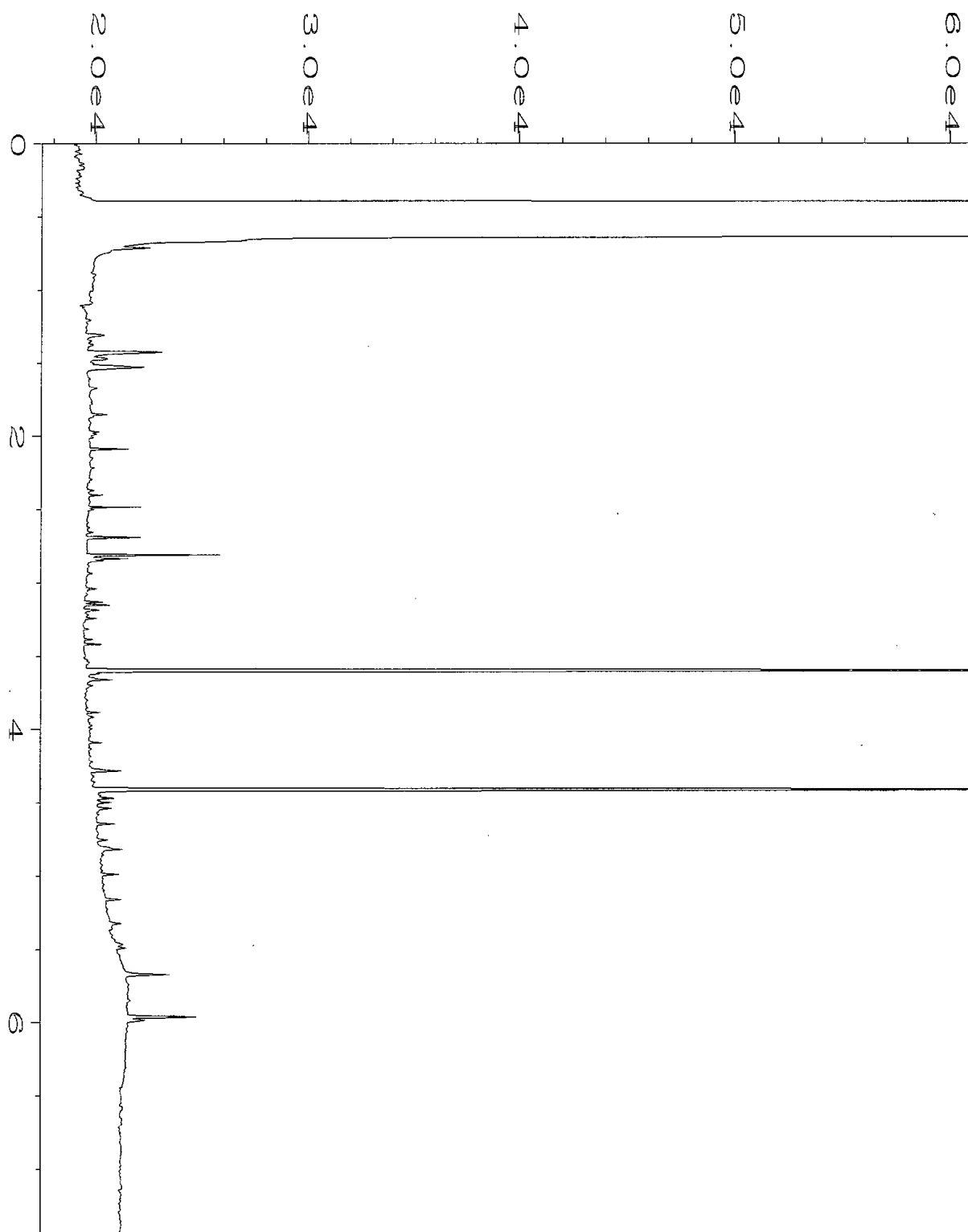
Data File Name	: C:\HPCHEM\1\DATA\03-09-20\037F0801.D	Page Number	: 1
Operator	: TL	Vial Number	: 37
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003120-01	Sequence Line	: 8
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 09 Mar 20 06:10 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:40 AM		



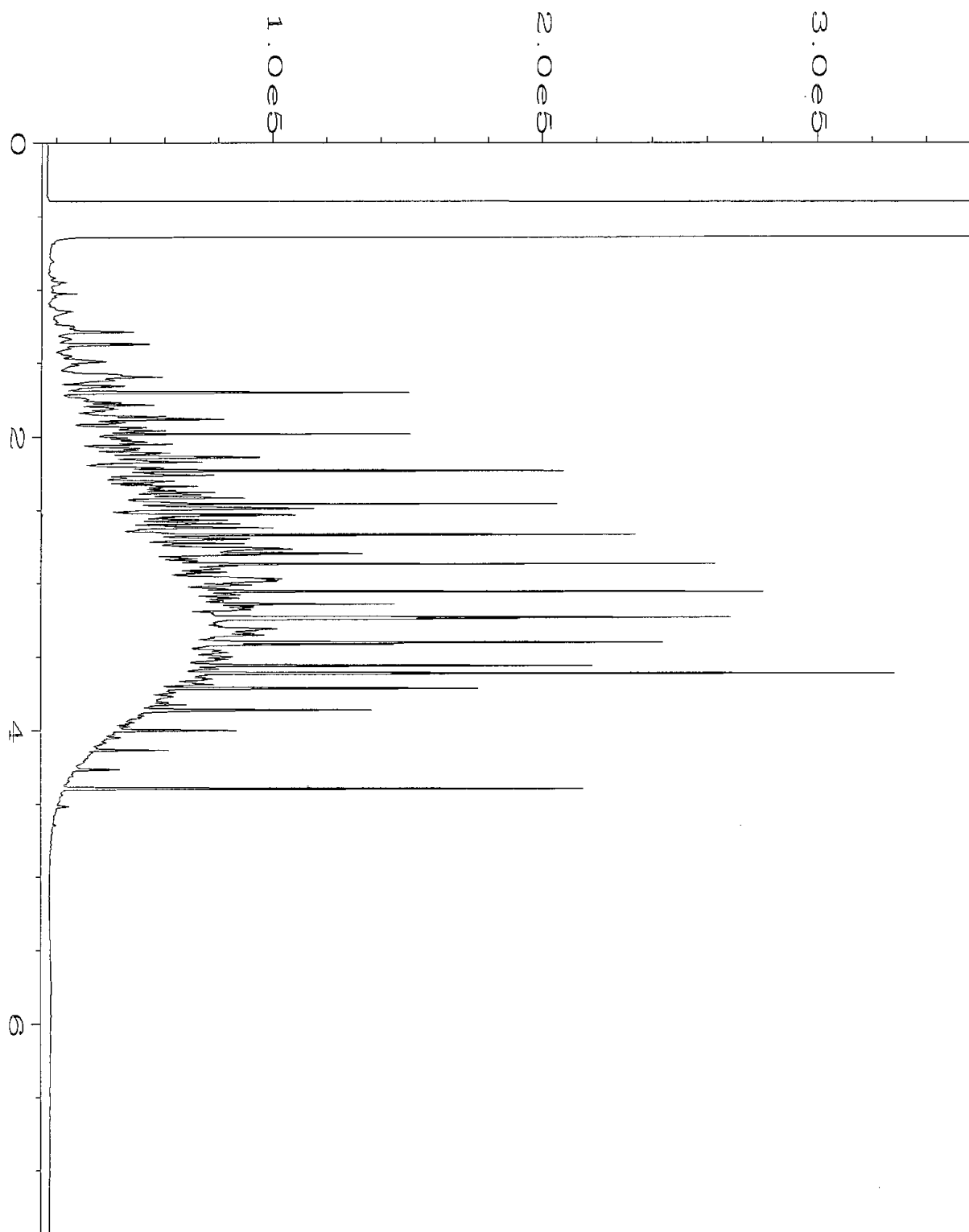
Data File Name	: C:\HPCHEM\1\DATA\03-09-20\038F0801.D	Page Number	: 1
Operator	: TL	Vial Number	: 38
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003120-02	Sequence Line	: 8
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 09 Mar 20 06:21 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:41 AM		



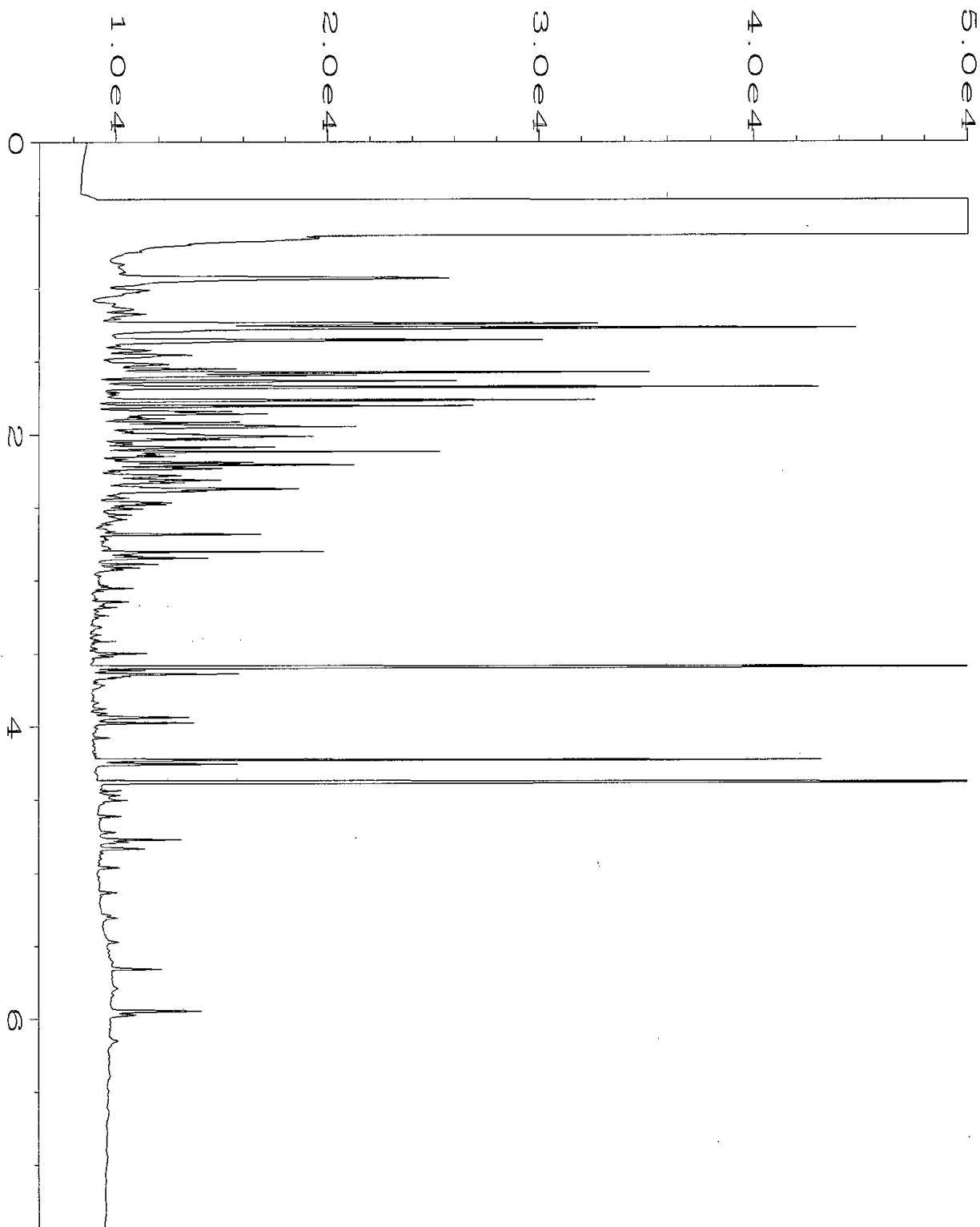
Data File Name	: C:\HPCHEM\1\DATA\03-09-20\039F0801.D	Page Number	: 1
Operator	: TL	Vial Number	: 39
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003120-03	Sequence Line	: 8
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 09 Mar 20 06:32 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:41 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-09-20\006F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-590 mb	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 09 Mar 20 10:25 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:41 AM		

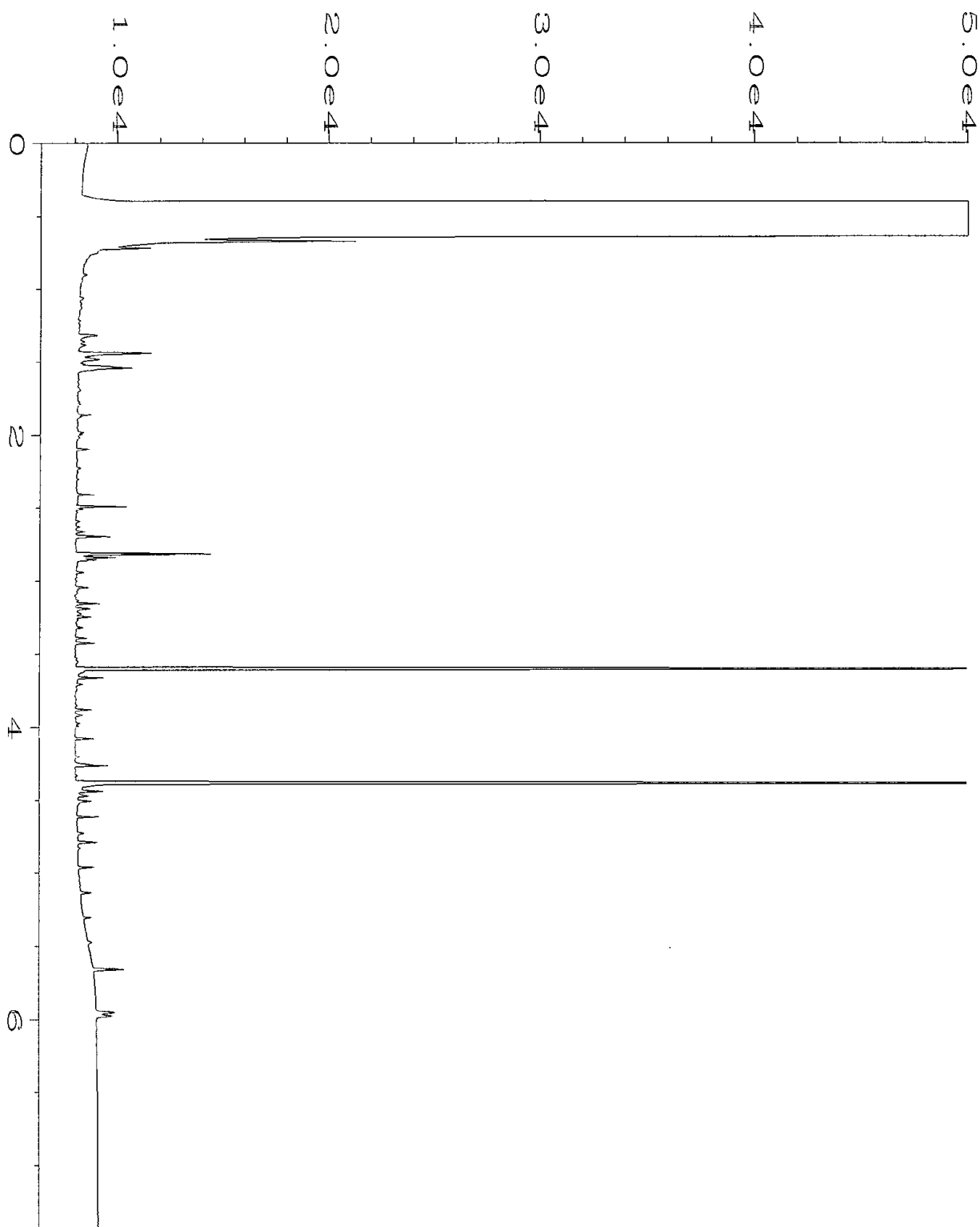


Data File Name	: C:\HPCHEM\1\DATA\03-09-20\005F0501.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 09 Mar 20 02:15 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:41 AM		

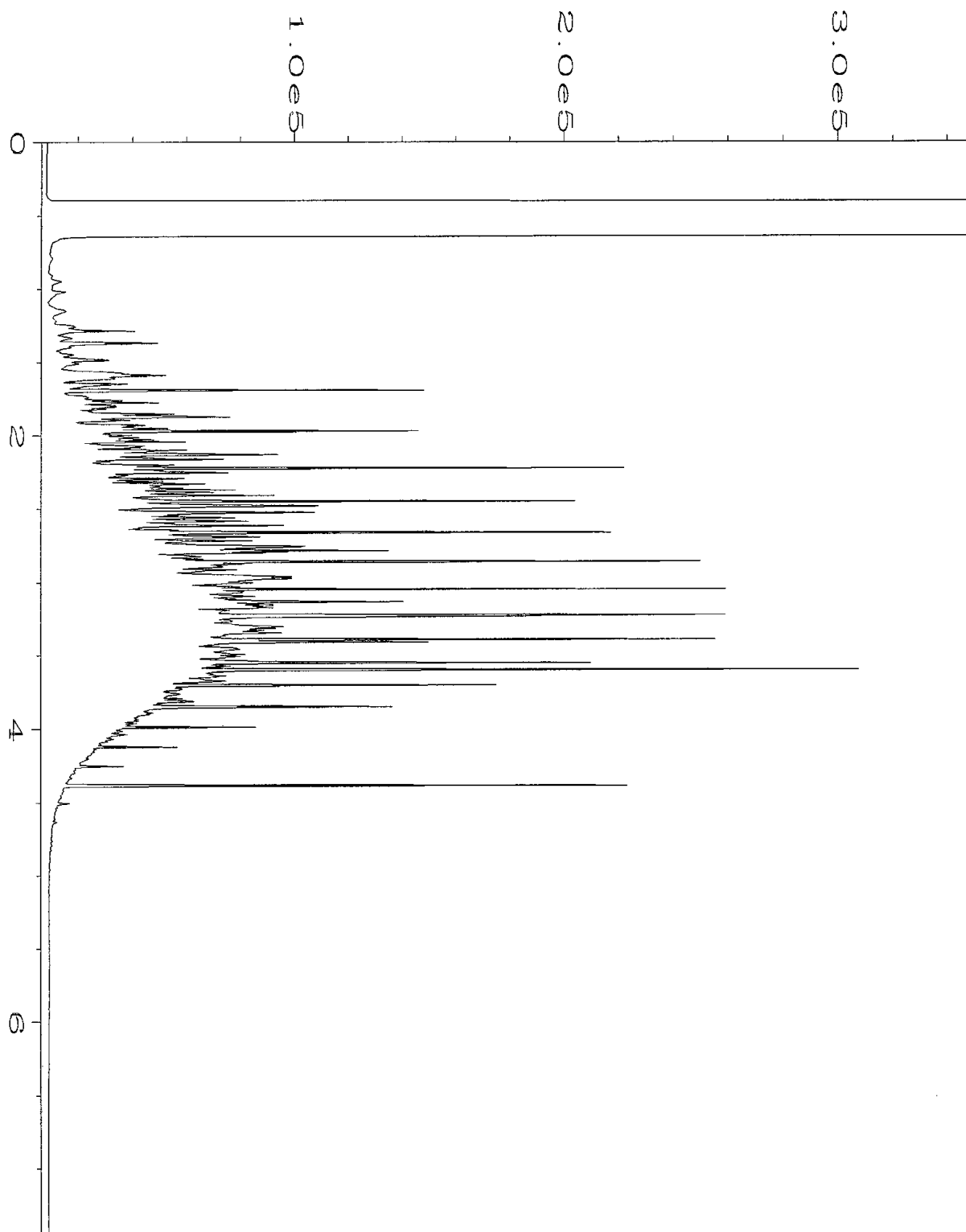


MBB-3-GW

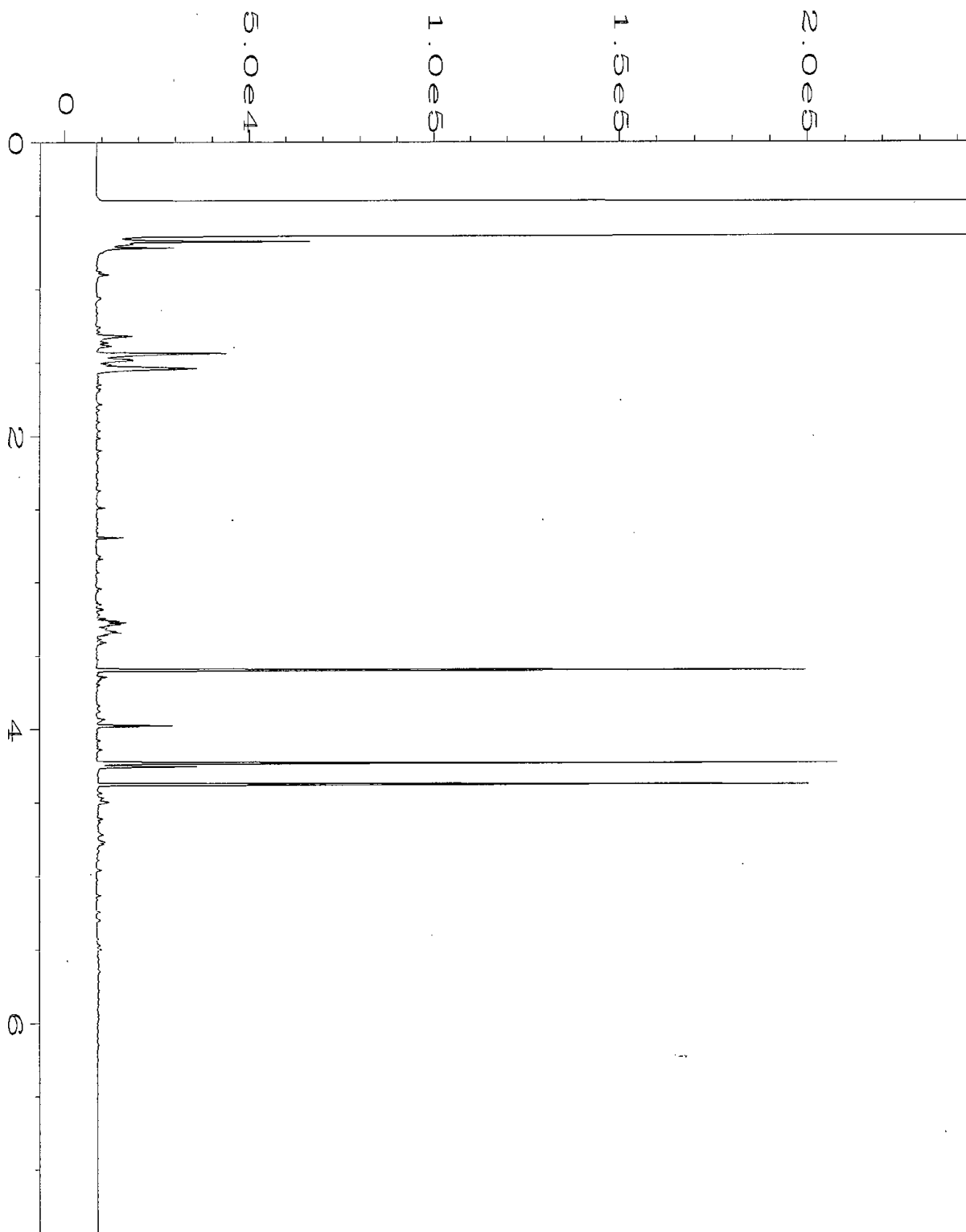
Data File Name	: C:\HPCHEM\1\DATA\03-06-20\032F0701.D	Page Number	: 1
Operator	: TL	Vial Number	: 32
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003079-01	Sequence Line	: 7
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Mar 20 03:01 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:39 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-06-20\025F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 25
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-582 mb	Sequence Line	: 3
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Mar 20 12:20 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:39 AM		

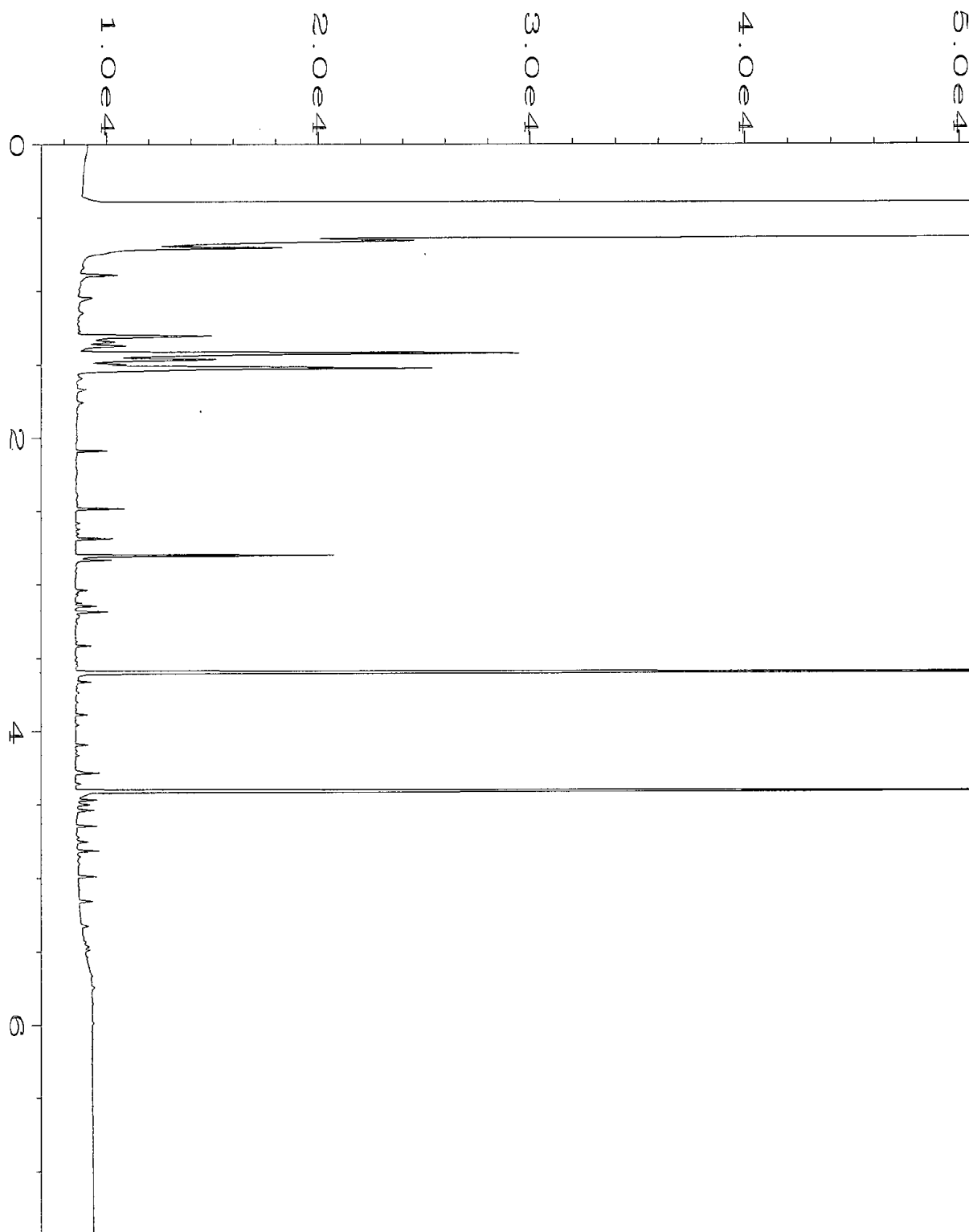


Data File Name	: C:\HPCHEM\1\DATA\03-06-20\005F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 4
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 06 Mar 20 01:57 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:40 AM		

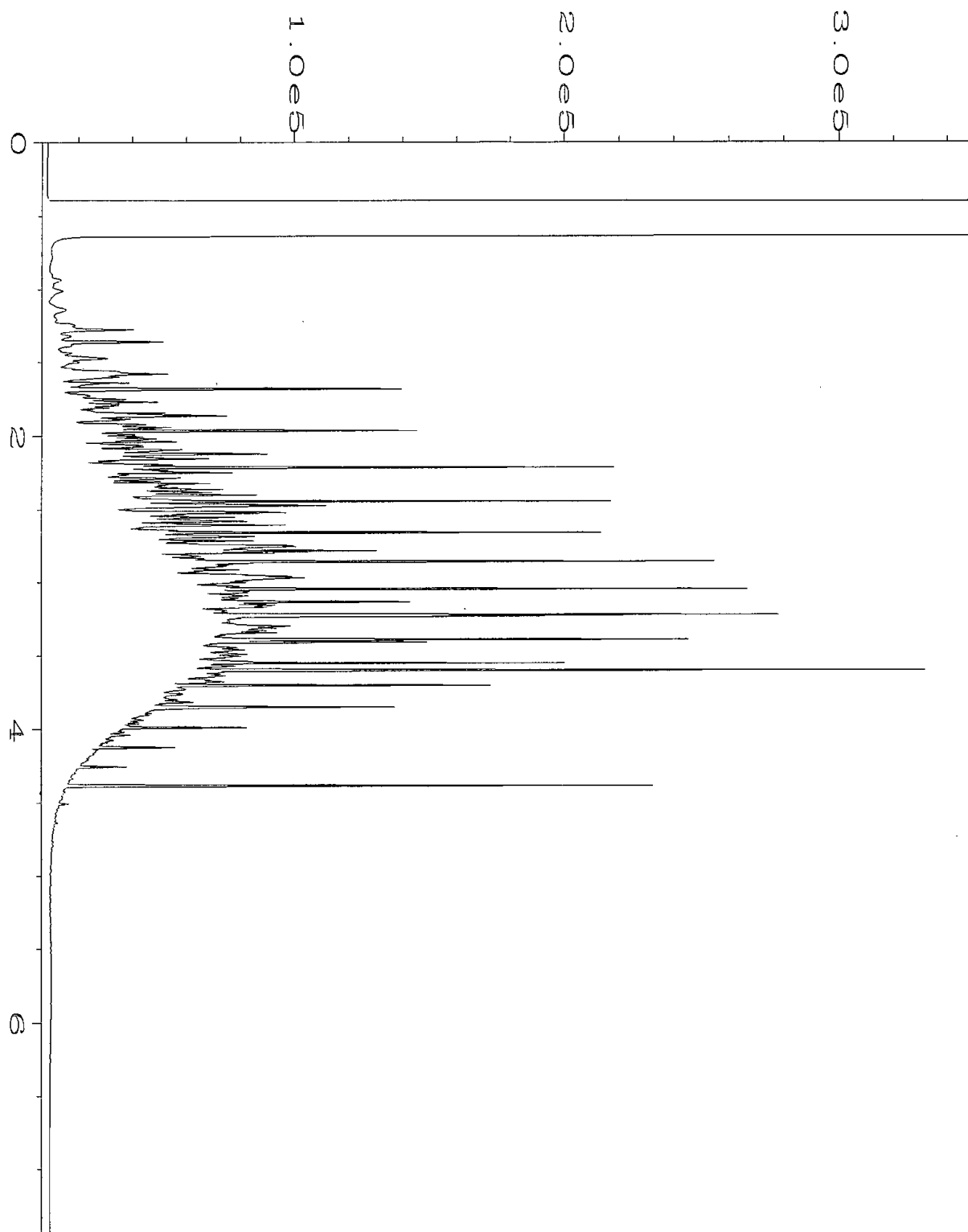


MBB-2-GW

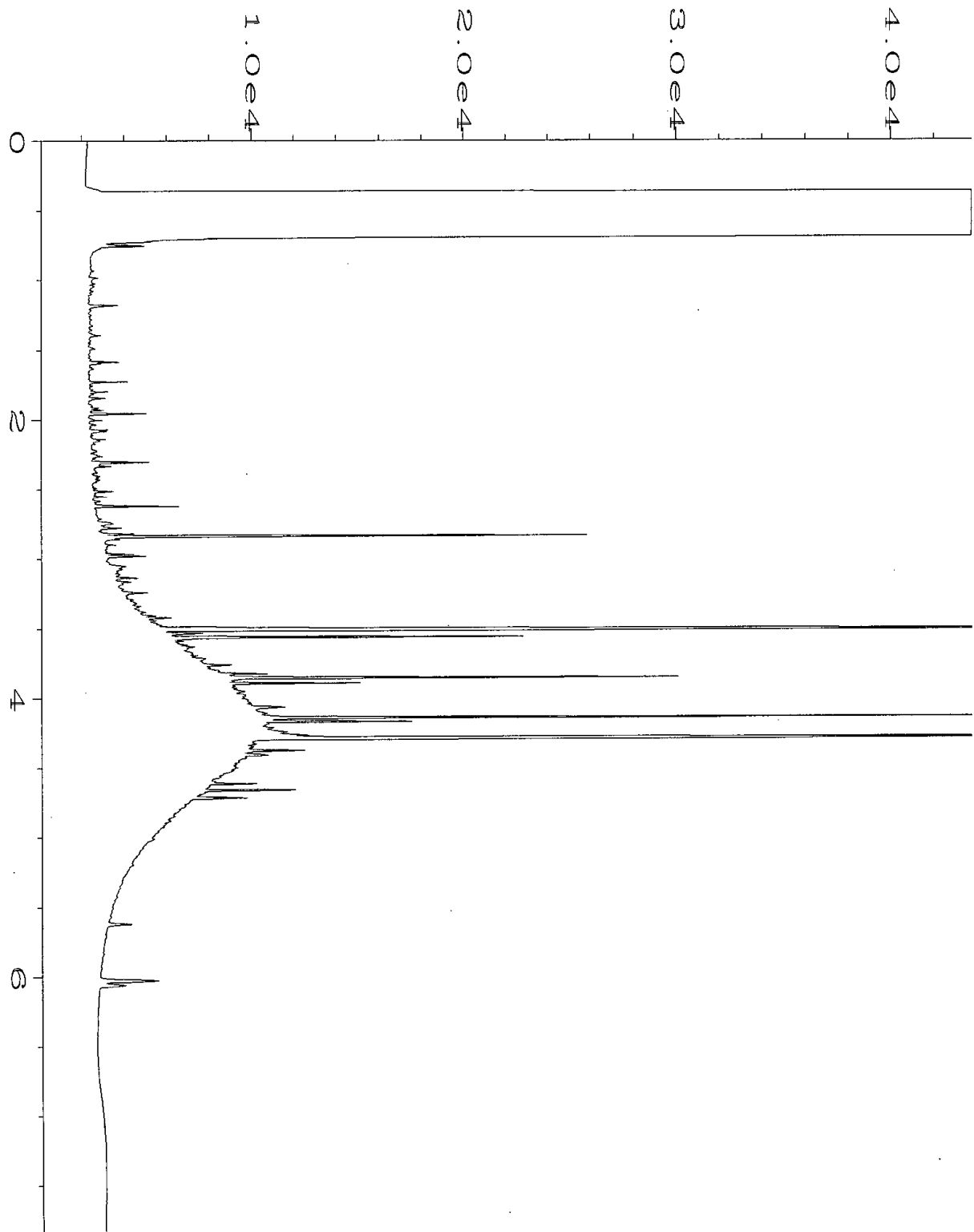
Data File Name	: C:\HPCHEM\1\DATA\03-05-20\009F0501.D	Page Number	: 1
Operator	: TL	Vial Number	: 9
Instrument	: GC1	Injection Number	: 1
Sample Name	: 003038-27	Sequence Line	: 5
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 05 Mar 20 10:29 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:38 AM		



Data File Name	: C:\HPCHEM\1\DATA\03-05-20\006F0301.D	Page Number	: 1
Operator	: TL	Vial Number	: 6
Instrument	: GC1	Injection Number	: 1
Sample Name	: 00-530 mb2	Sequence Line	: 3
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 05 Mar 20 09:34 AM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 09:39 AM		

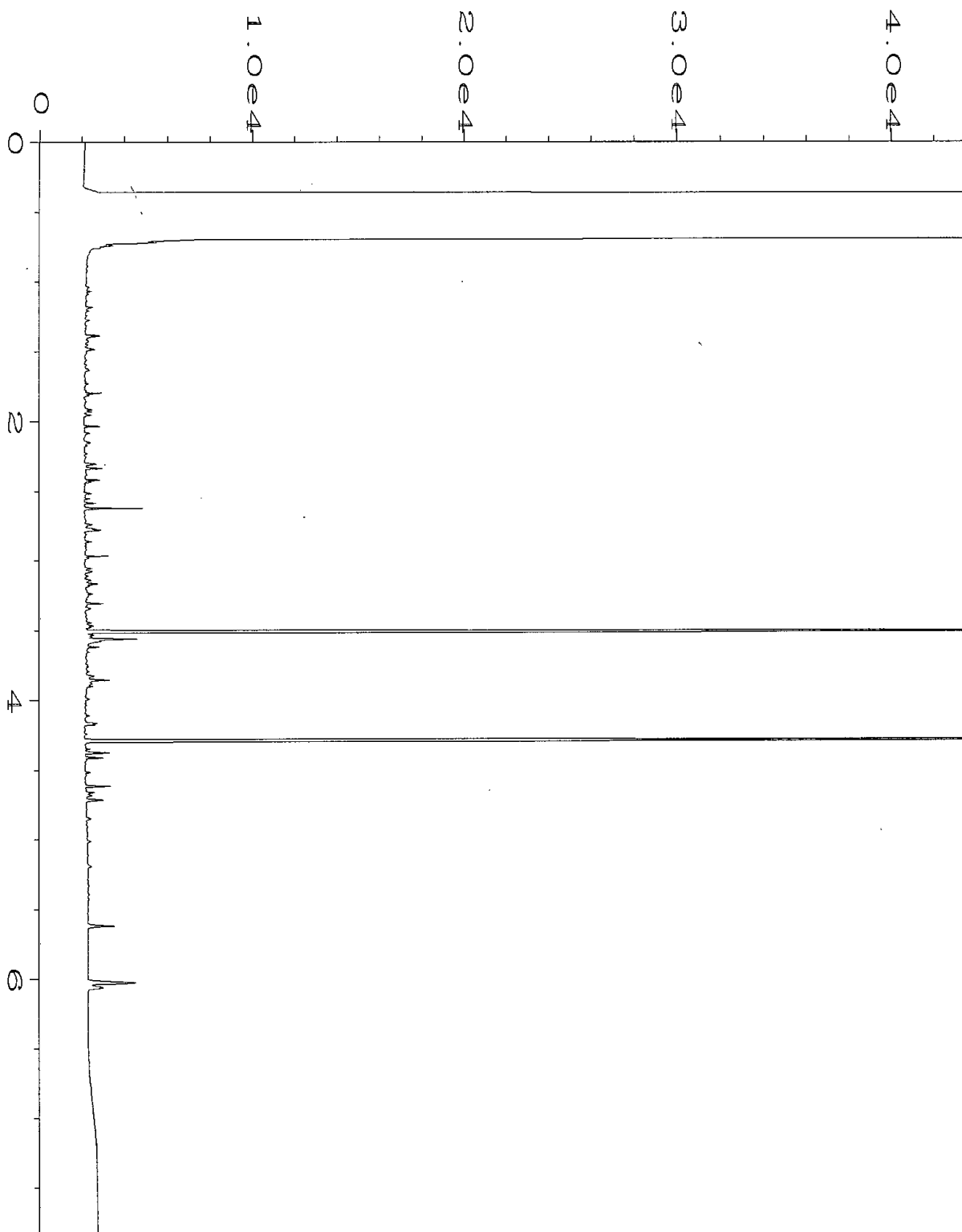


Data File Name	: C:\HPCHEM\1\DATA\03-05-20\005F1001.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC1	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 10
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 05 Mar 20 02:50 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:39 AM		

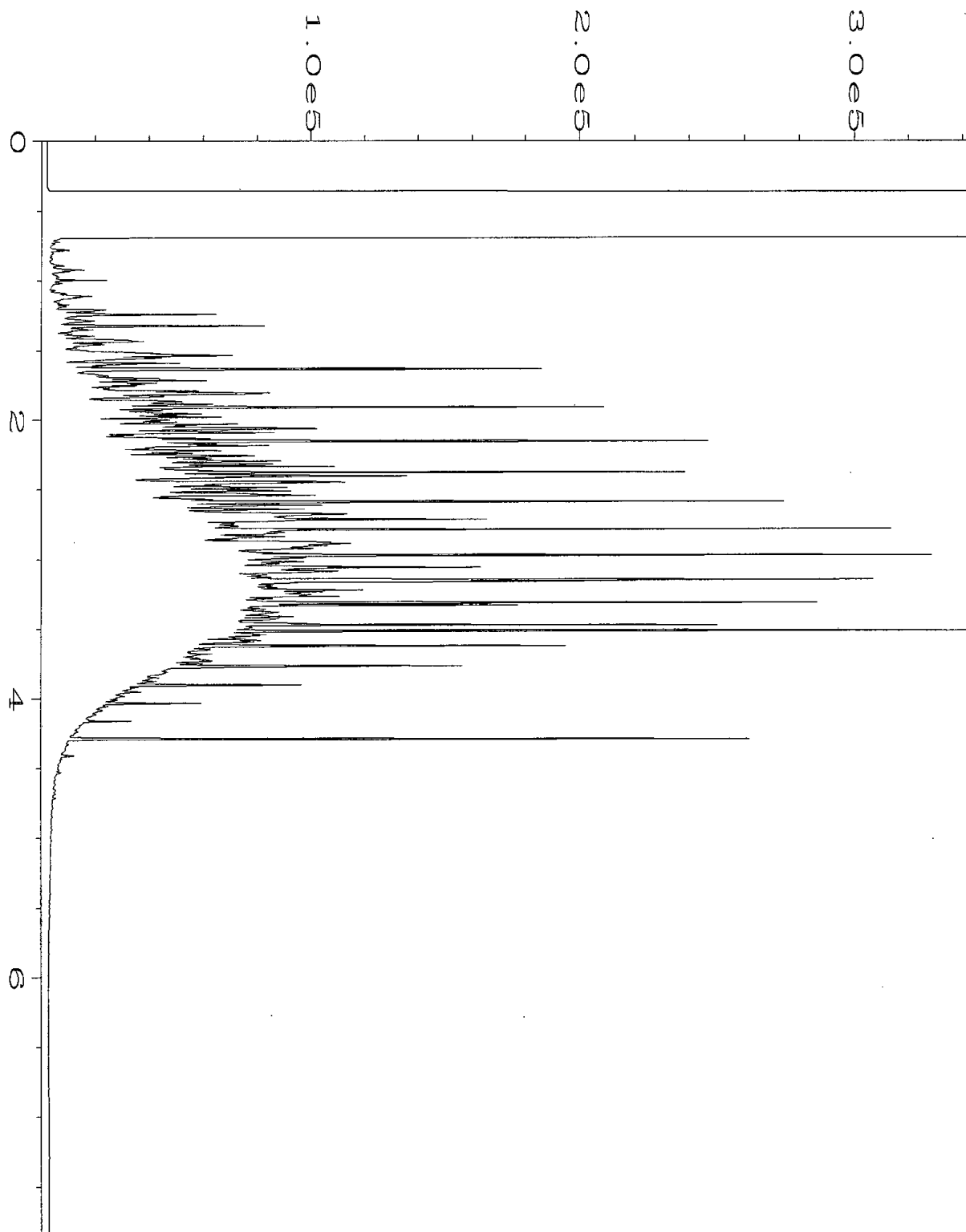


MIBB-9-GW

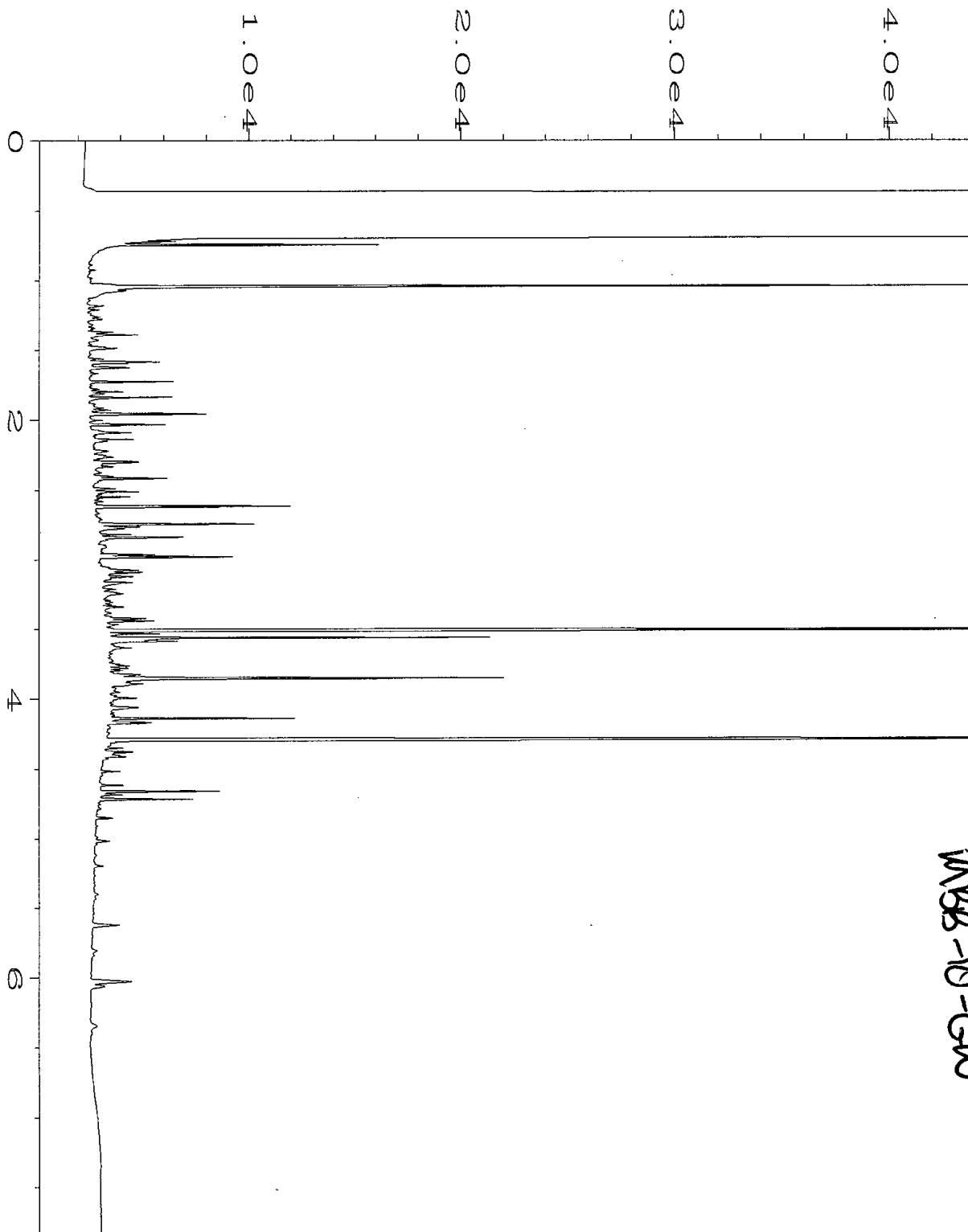
Data File Name	: C:\HPCHEM\4\DATA\03-02-20\031F0701.D	Page Number	: 1
Operator	: TL	Vial Number	: 31
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 002468-30	Sequence Line	: 7
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 02 Mar 20 04:57 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:26 AM		



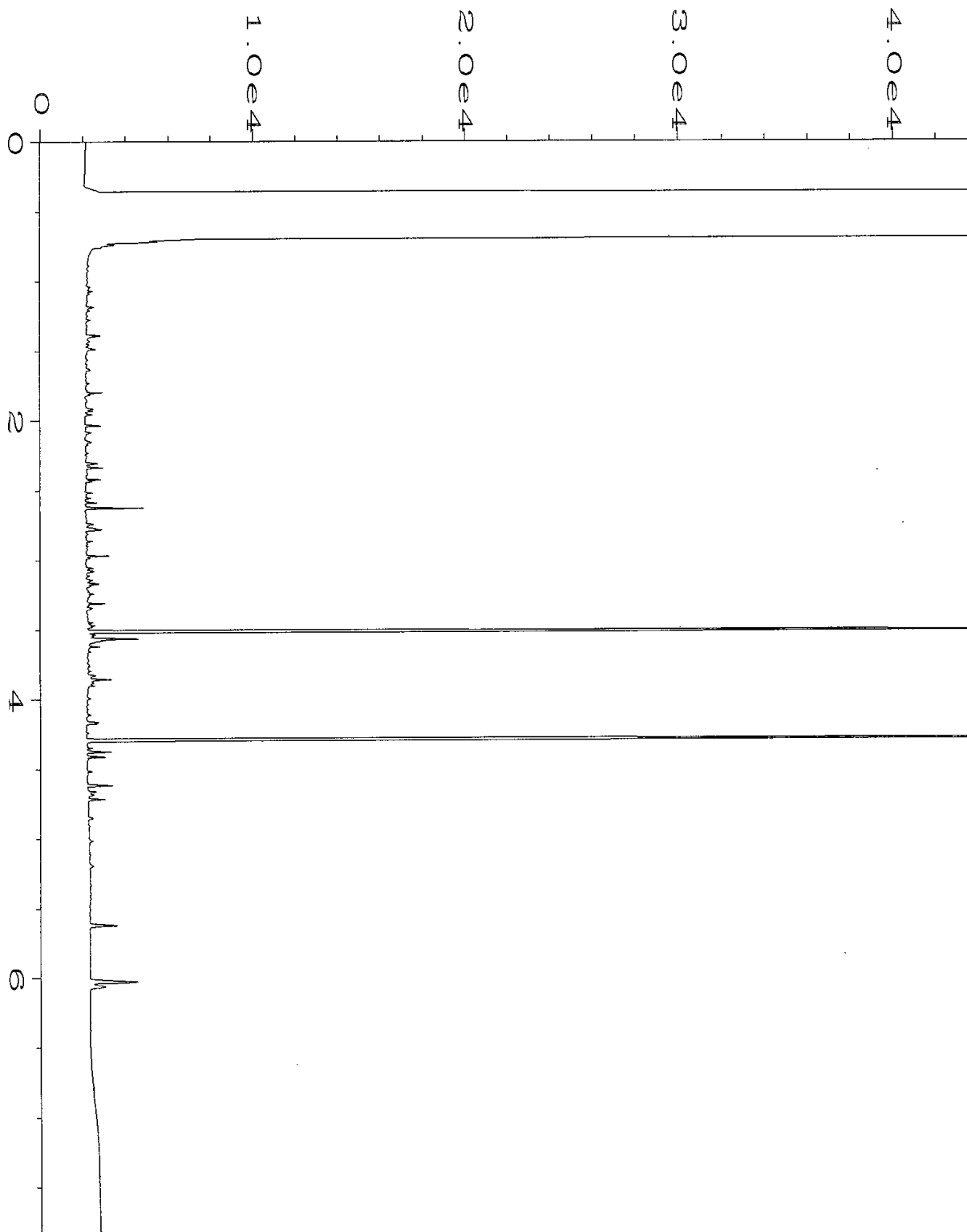
Data File Name	: C:\HPCHEM\4\DATA\03-02-20\084F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 84
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 00-518 mb	Sequence Line	: 4
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 02 Mar 20 01:02 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:26 AM		



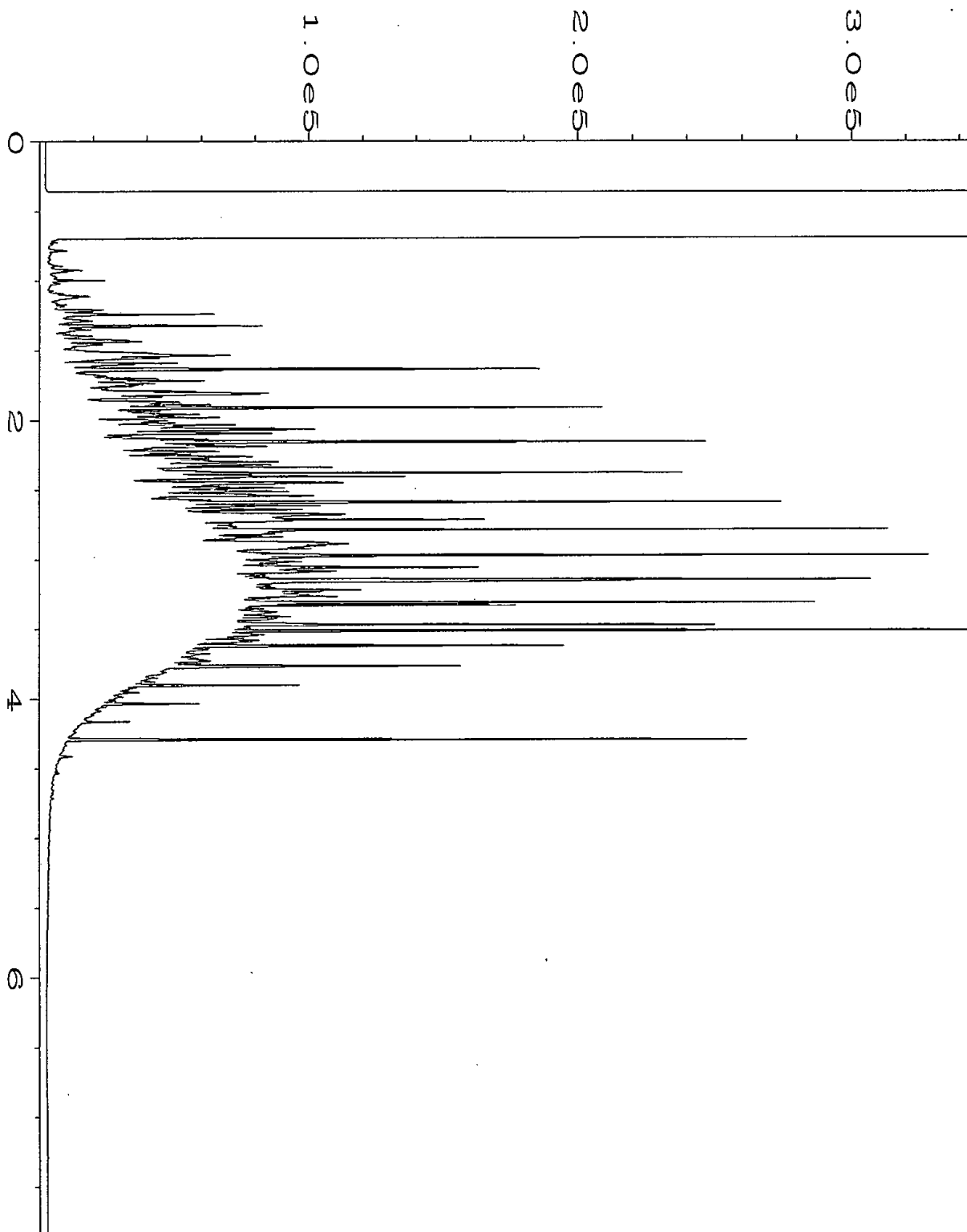
Data File Name	: C:\HPCHEM\4\DATA\03-02-20\005F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 6
Run Time Bar Code:		Instrument Method:	DX.MTH
Acquired on	: 02 Mar 20 02:57 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	15 Oct 20 09:26 AM		



Data File Name	: C:\HPCHEM\4\DATA\03-02-20\022F0701.D	Page Number	: 1
Operator	: TL	Vial Number	: 22
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 002445-36	Sequence Line	: 7
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 02 Mar 20 03:09 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 03:03 PM		



Data File Name	: C:\HPCHEM\4\DATA\03-02-20\084F0401.D	Page Number	: 1
Operator	: TL	Vial Number	: 84
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 00-518 mb	Sequence Line	: 4
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 02 Mar 20 01:02 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 03:03 PM		



Data File Name	: C:\HPCHEM\4\DATA\03-02-20\005F0601.D	Page Number	: 1
Operator	: TL	Vial Number	: 5
Instrument	: GC#4	Injection Number	: 1
Sample Name	: 1000 Dx 59-162B	Sequence Line	: 6
Run Time Bar Code:		Instrument Method	: DX.MTH
Acquired on	: 02 Mar 20 02:57 PM	Analysis Method	: DEFAULT.MTH
Report Created on:	: 15 Oct 20 03:03 PM		